

BRICS

Trade Policies, Institutions
and Areas of Deepening Cooperation



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Centre for WTO Studies

Indian Institute of Foreign Trade
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Trade Policies, Institutions and Areas for Deepening Cooperation

Edited by

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Foreword

Since 2001, when Goldman Sachs coined the term “BRIC” (Brazil, Russia, India, China), the acronym has come into widespread use and potentially marks a shift in global economic power away from the developed G7 economies towards the developing world. Goldman Sachs highlighted that the four BRIC countries were developing rapidly and by 2050 their combined GDP could eclipse the combined economies of the current richest countries of the world. These four countries, combined, account for more than a quarter of the world’s land area, 40% of the world’s population, and have a combined GDP (PPP) of US\$ 20.39 trillion in 2011. On almost every scale, they are in line to be the largest grouping on the global stage.

The BRIC countries have been engaged with one another to enhance cooperation in various economic and financial areas. The bloc has been enlarged as South Africa joined the group during the BRICS Summit held in Sanya, China in April 2011.

Trade between BRICS can be highly complementary. Brazil and Russia are strong in the commodity and natural resources sectors while China and India are net importers in these areas. India and China have cheap labour. China dominates the manufacturing sector. India’s strength lies in generic pharmaceuticals, software engineering, textiles and business process outsourcing. Intra-BRICS trade was to the tune of US\$ 230 billion in 2011. The BRICS countries have set themselves a target of increasing their bilateral trade to US\$ 500 billion by 2015.

The contribution of BRICS to global value added in manufacturing has increased from 2.6 % in 1971 to 16.5% in 2008. BRICS have become increasingly dependent on manufacturing for economic growth. However, there may be variations among BRICS members. Nevertheless, as a group BRICS have the natural resources, finances and consumers to impart further momentum to manufacturing. However, lack of cutting edge technology can prove to be an impediment to their aspirations for manufacturing growth. Innovative models need to be explored for creating a common pool of technology for benefit to the BRICS members.

High GDP growth combined with a large population base in BRICS has the potential to generate high aggregate demand. Thus, sustained GDP growth of BRICS members has the potential of these countries collectively acting as the drivers of the global economy. However, for this potential to be realized it is necessary that the global financial and economic architecture is supportive of their aspirations. The BRICS Development Bank is a case in point and an initiative whose time has come following the Delhi Summit in 2012.

It may also be in the BRICS interest to identify specific developments in multilateral institutions that might be supportive of their development aspirations and their economic growth, and to coordinate their responses to any challenges faced in the global economy. Climate change negotiations and WTO NAMA

sectoral negotiations are two illustrations where there is scope for collaboration among some BRICS members. BRICS may also consider taking a leadership role for concluding international agreements in areas of their interest. A step in this direction could be agreements among BRICS members in areas of interest in which international instruments already exist, such as technology transfer, or control of restrictive business practices.

Some of the BRICS members are likely to face demographic challenges in the near future. In China and Russia, benefits of the demographic dividend may not be fully realized as the population will start ageing much earlier than in other BRICS members. This has the potential to pose problems in terms of shortage of labour, increasing labour costs and higher expenditure on health care. However, if properly managed, these challenges also provide opportunities for other BRICS members to provide the required human resources and health care services.

This book is a compilation of studies prepared by or commissioned by the Centre for WTO Studies, in advance of the Fourth Annual BRICS Summit hosted by India.

Part A of this publication on the Trade Policies and Institutions of BRICS has been prepared by Prof. Sajal Mathur, Meghna Dasgupta and Pallavi Sirohi at the Centre for WTO Studies, Indian Institute of Foreign Trade, New Delhi. With the WTO accession of Russia last year, all the BRICS are now members of the WTO and at the baseline level there are WTO consistent trade policies, institutions and enforcement mechanisms in the BRICS. The WTO's trade policy reviews or accession documents of the BRICS have been collated and summarized in a user-friendly format for trade policy practitioners or researchers alike. As highlighted in the compilation, the trade policies and institutions of BRICS have evolved over the years. Tariffs have been lowered and several import restrictions in the form of prohibitions and quotas have been phased out. Besides goods, specific commitments have been made by the BRICS countries under the GATS. Of the 12 service sectors, specific commitments have been made by Brazil in 7, Russia in 11, India in 6, China in 9 and South Africa in 8 service sectors. Intellectual property regimes have also been strengthened in the BRICS to safeguard the interests of right holders. There are points of convergence in the trade policies of the BRICS. The BRICS, for example, have a number of trade agreements with each other either on a bilateral basis or as a part of a larger grouping (e.g., Brazil as a part of MERCOSUR). Some of the BRICS economies also have MOUs on standards, conformity assessment and accreditation procedures with each other along with being co-signatories in a number of mutual recognition agreements.

Part B of this compilation focuses on India and BRICS: Issues of Trade and Technology, by Professor Manoj Pant, Centre for International Trade and Development, School of International Studies, Jawaharlal Nehru University, New Delhi. The study covers three issues: Firstly, the extent to which growth of intra-BRICS trade is sustainable. Intra-BRICS trade has been classified by its technology content using UNIDO definition. The study has found intra-BRICS trade in technology intensive products to be insignificant as growth appears to have been driven mainly by trade in natural resources. For sustainability, this must change. Secondly, the substitutability, and complementarity of the exports of BRICS in third country markets has been examined. The revealed comparative advantage has been used as a measure of substitutability and complementarity in product trade. The results indicate that there is little substitutability and hence competition between BRICS as they are by and large exporting to different markets. However, industries where technical cooperation is feasible are vegetable oils (Brazil, China and Russia), chemicals products (Brazil, India, Russia and South Africa), plastics (Brazil and China) and iron and steel (all BRICS countries). Finally, the study examines the main issues relating to technological cooperation between BRICS countries. FDI could potentially play a part. There is also scope to enhance technical cooperation and develop technology nodes in the BRICS, although there is, as yet, no institutional mechanism for Intra-BRICS coordination and technological partnerships.

Part C of this compilation has been prepared by Professor Rupa Chanda, Indian Institute of Management, Bangalore and examines the scope for Deepening Cooperation in Services among BRICS members. As Prof. Chanda points out, the services sector is one area where the BRICS could potentially engage with each other through investments, trade, and collaborative ventures, and also learn from each other's experiences. The growing importance of services in the economies of all the BRICS members is evident. Services today accounts for over 50 percent of GDP in Brazil, India, Russia, and South Africa. Further, services trade has also grown in Brazil, India, and China. There are specific service subsectors where the BRICS are competitive. For instance, India is competitive in IT-ITeS services, China in transportation and logistics services, South Africa in tourism and financial services, Russia in energy services, and Brazil in retail services. This suggests possible complementarities among BRICS in services. In light of the considerable liberalization undertaken by some of the BRICS economies in their service sectors over the past decade and the growing internationalization of their firms, there is scope for increased cross border investment among the BRICS in the service sector. This would not only supply services to each other's markets but also help leverage each other as bases for exports to third countries. Furthermore, given the demographic complementarity among the BRICS, with some members likely to face demographic challenges and some with the potential to reap demographic dividends, there are also opportunities for these countries to benefit from each other's human resources. This has ramifications for cooperation in labour-intensive and knowledge-based services. Thus there are many possible sources for synergies among these countries in the services sector. To date, however, there has been little or no analysis of the prospects for deepening cooperation among the BRICS, particularly in services. Analysis of their prospects in specific services sectors and their prospects in each other's markets has been limited. This study by Prof. Chanda attempts to fill this gap. The study aims to understand the possible synergies in services trade among the BRICS members and to identify the ways in which these synergies could be realized.

We hope that this book contributes to discussion on trade policies and areas of cooperation among BRICS.

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March 2013

PART A

Trade Policies and Institutions of BRICS



From BRIC to BRICS: An Overview

by Sajal Mathur and Meghna Dasgupta¹

1. Introduction

This chapter gives an overview of the country, economic and trade profiles of the BRICS² with some basic sectoral and trade policy framework analysis to highlight the potential for collaboration amongst these five emerging economies. Selected trade-related excerpts of the Delhi Declaration and Action Plan of March 2012 are reproduced in the concluding section.³

The significance of BRICS lies in their potential dynamism in an otherwise gloomy global economy fraught with concerns over the near term and future prospects of the Euro Zone and the United States. Europe and the United States were drivers of economic and trade growth in the 19th and 20th centuries, respectively. The 21st century potentially belongs to BRICS and other emerging economies.

2. Country Profiles

To understand and analyze BRICS as a group, it is necessary to understand how these five emerging giants spread across four continents are situated in the global context. The BRICS together accounted for over a quarter of the world's GDP (in PPP terms) and over 40% of the global population in 2011. In terms of landmass, Russia is by far the largest in the group (it is also the largest country in the world). In terms of demographics, China closely followed by India, are the two most populous nations in the world. Together these two countries account for over one third of the world's population.

BRICS, as a group, account for over 40% of the world's labour force. While India, South Africa and Brazil may reap a demographic dividend in the coming decades, China has seen a sharp deceleration in its population growth rate while Russia has had no growth in its population in the last decade. According

1 Sajal Mathur is a Counsellor at the World Trade Organization, Geneva and currently Professor, at the Centre for WTO Studies (CWS), Indian Institute of Foreign Trade (IIFT). Meghna Dasgupta has worked as a Research Associate, CWS, IIFT and is now pursuing further studies at the Jawaharlal Nehru University. This chapter is an update of the lead article appearing in the CWS Newsletter "India, WTO and Trade Issues", Volume 1, January-March 2012 (accessible on http://wtocentre.iift.ac.in/NewsLetters/NewsLetter_17.pdf).

2 In April 2011, South Africa joined Brazil, Russia, India and China in the "BRICS" grouping.

3 The Centre for WTO Studies put together a collection of studies in advance of the Fourth Annual BRICS Summit hosted by India in March 2012. The BRICS studies' undertaken or commissioned by the CWS are: "Trade Policies and Institutions of Brazil, Russian Federation, India, China and South Africa" compiled by Prof. Sajal Mathur, Pallavi Sirohi and Meghna Dasgupta, CWS, IIFT reproduced in Part A; "India and the BRICS countries: Issues of Trade and Technology", Prof. Manoj Pant, CITD, SIS, JNU reproduced in Part B; and "Deepening Co-operation in services among BRICS Members", Prof. Rupa Chanda, IIM-B reproduced in Part C of this book.

to UN projections, by 2020, the working age population is expected to rise by 240 million in India and by 20 million in Brazil. China's demographic projections suggest that its labour force will peak by 2015 and decline thereafter. In Russia, the working population is projected to decline sharply by 20 million in the next decade. The divergent population trends and labour force projections tell only part of the story. A growing population will yield a demographic dividend only if there is a matching increase in the available jobs. Improvements in total factor productivity are also critical for growth.

The unemployment rate is nearly 25% in South Africa, 7.5% or more in Brazil, Russia and India, and about 4% in China. With a large informal sector and a significant proportion of the workforce still underemployed, there is an ever growing need for skill and human resource development. More and better jobs require investment in education, healthcare and soft skills to train the workforce for employment in the 21st century. The literacy rate in Brazil, China, Russia, and South Africa ranges from 89% to 100%. In India, however, the literacy rate is just 63%.

The UNDP's Human Development Index (HDI) also highlights that the BRICS are still emerging nations with some distance to traverse in the path of development. Of the BRICS, only Russia and Brazil were listed among the top 100 countries in the HDI 2011. Income inequality, as measured by the Gini-coefficient, remains a concern in all the BRICS. Brazil, South Africa and India still have over 20% of their sizable population under the poverty line. Russia has also seen a sharp rise in poverty and inequality since the 1990s. Only China has seen a sharp fall in its absolute poverty numbers.

TABLE 1: COUNTRY PROFILE

	Area (km ²)	Popula- tion (million)	Annual Popu- lation Growth Rate(%) (2005-11)	Unem- ploy- ment Rate	Pov- erty Rate	Income Inequal- ity (Gini Coeff.)	Life Expec- tancy	Lit- eracy Rate	HDI rank- ing (2011)
Brazil	8,514,877	196.65	0.96	8.3	21.4	53.9	73	90	84
Russia	17,098,242	141.93	-0.2	7.5	11.1	42.3	69	100	66
India	3,287,263	1,241.5	1.43	9.3	29.8	36.8	65	63	134
China	9,596,961	1,344.13	0.52	4.1	2.8	41.5	73	94	101
South Africa	1,221,037	50.59	1.15	24.9	23	57.8	52	89	123

Source: World Bank data, <http://data.worldbank.org>; ILO statistics, <http://www.ilo.org/global/statistics-and-databases/lang-en/index.htm>; UNDP Human Development Indicators, <http://hdrstats.undp.org/en/indicators/default.html> (as accessed on 27/1/2013)

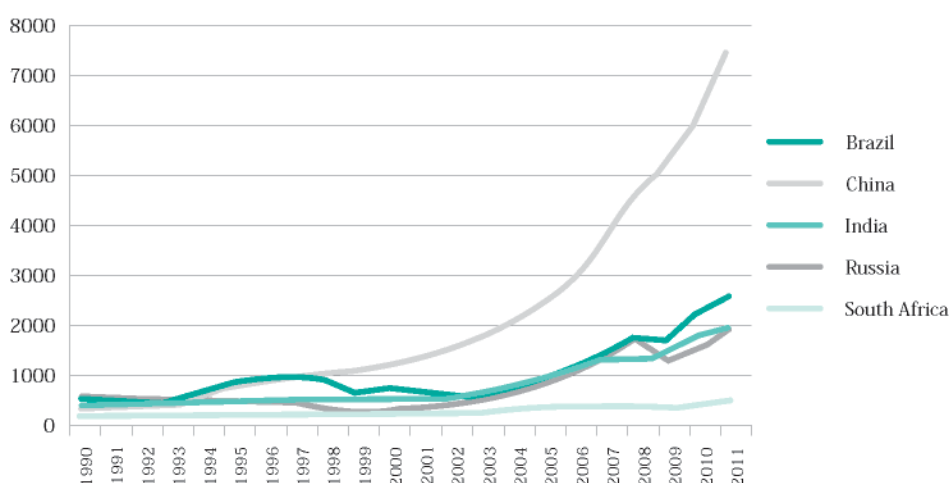
3. Economic Profiles

Goldman Sachs coined the phrase "BRICS" in 2001 and tracked the phenomenal GDP growth in Brazil, Russia, India and China over the past decade. These four emerging economies, as a grouping, contributed 36.3% of the growth in world GDP in PPP terms during the first decade of the century (2000-2010). Together, Brazil, Russia, India and China accounted for about a quarter of the global GDP. This trend is set to continue over the coming decades. By 2020, the BRIC grouping is projected to account for a third of the global economy (in PPP terms) and contribute about 49% of global GDP growth. By 2050, Brazil,

Russia, India and China will displace most of the current G-7 countries. Only the United States and Japan are expected to be counted amongst the largest economies of the world. The BRICs are clearly moving from the bantam-weight to the heavy-weight category.

South Africa was added to the BRICs grouping in 2011. BRICS (including South Africa) as a group accounted for 19.88% of the world GDP in nominal terms and 26.78% of the world GDP in PPP terms in 2011. Figure 1 maps the GDP and cumulative year-on-year growth in each of the BRICS economies over the period 1990-2011. The results are striking. China's GDP increased twenty-fold from \$350 billion in 1990 to more than \$7 trillion in 2011. India has also outpaced global GDP growth and has grown almost seven-fold from \$300 billion in 1990 to nearly \$2 trillion in 2011. Brazil clocked robust growth over the last 20 years and is now a \$2 trillion plus economy. Russia's year-on-year growth trajectory has been more erratic, but on the coat-tails of high energy prices it has also grown more than three-fold during the same period.

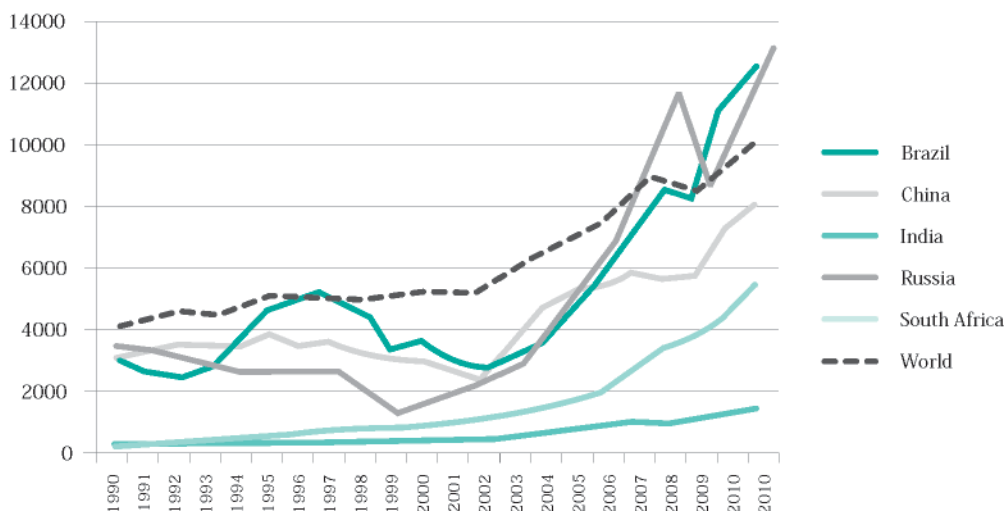
FIGURE 1: GDP (CURRENT PRICES \$ BILLION)



Source: Based on World Bank data, <http://data.worldbank.org> (as accessed on 27/1/2013)

In terms of per-capita income (Figure 2), the BRICS are starting from a relatively low baseline. In 2011, only Brazil and Russia had per capita income levels higher than the global average. The other BRICS economies, however, are catching up fast. Over the past two decades, the rate of growth of per capita GDP in the BRICS has outpaced the global trend.

FIGURE 2: GDP PER CAPITA (CURRENT PRICES \$)



Source: Based on World Bank data, <http://data.worldbank.org> (as accessed on 27/1/2013)

Table 2 sets out the economic profile and some key macroeconomic indicators in 2011. The investment and savings numbers are impressive. In China, the gross saving and investment rates as a percentage of GDP hover around the 50% mark. In India, the numbers are in the early to mid-30s range and in Russia the gross saving and investment rates are in the mid-20s. South Africa has a gross investment rate of 19.7% and its gross saving is pegged at 16.4% of the GDP. Brazil has gross saving and investment rates of 18.4% and 20.6%, respectively.

TABLE 2: ECONOMIC PROFILE (2011)

	GDP				Inflation rate p.a. (2005 -11)	Interest Rate (2005 -11)	Savings (% of GDP)	Investment (% of GDP)	Public Debt (% of GDP)	Fiscal deficit/surplus (% of GDP)	Current account deficit/surplus (US\$ bn)	FDI, net inflow (US\$ bn)	Forex reserves (US\$ bn)
	Nominal (US\$ bn)	PPP (US\$ bn)	Growth rate p.a. (2005 -11)	Per capita (US\$)									
Brazil	2476.6	2289	4	12593.9	5.3	46.5	18.4	20.6	64.9	-2.6	-52.5	71.5	350.4
Russia	1857.8	3015.4	4.2	13089.3	10.3	11.1	28.5	23.2	12	1.6	98.8	52.9	453.9
India	1848	4503.1	8.1	1488.5	8.1	11.3	31.6	35	67	-9.0	-51.8	32.2	271.3
China	7318.5	11290.9	11	5444.8	3.1	6	51.3	48.6	25.8	-1.2	201.7	220.1	3202.8
South Africa	408.2	554.4	3.5	8070	6.1	11.5	16.4	19.7	38.8	-4.6	-13.7	5.7	42.6

(All figures are for 2011 unless stated otherwise.)

Sources: <http://data.worldbank.org>, <https://www.imf.org/external/data.htm>, <https://www.cia.gov/library/publications/the-world-factbook/> (as accessed on 27/1/2013)

In terms of FDI inflows, the BRICS as a group accounted for about \$375 billion of FDI which is about 20% of the global FDI flows in 2011. China is the biggest recipient of FDI followed by Brazil, Russia and India in that order. FDI flows to South Africa are small in comparison with the other BRICS countries.

Foreign exchange reserves (total reserves minus gold) of the BRICS amounted to \$4.32 trillion or about 40% of global foreign exchange reserves in 2011. China alone accounted for over \$3 trillion of reserves. With the exception of India and Russia, the BRICS had a surplus on the capital account in 2011. The situation on the current account is also mixed with only China and Russia running a surplus. This trend is also reflected in the balance of trade numbers.

BRICS have largely maintained macroeconomic stability. There are, however, some concerns. Inflation is 5% or more in most BRICS countries. Interest rates have also been in double digits for BRICS minus China over the period 2005-2011. The fiscal deficit is 9% in India and over 4.5% in South Africa. Brazil and China too run a deficit of around 2.6% and 1.2% of GDP respectively. On the other hand, Russia has surplus of 1.6% on account of buoyant global energy prices. Public debt (Gross Government Debt) as a percentage of GDP is around 65% in both Brazil and India. These numbers suggest the scope and need to handle public finances prudently.

4. Trade Profile

The share of BRICS in global trade has increased significantly over the last two decades. In 1990, BRICS accounted for only 3% of global trade. This share doubled by the turn of the century. In 2011, BRICS accounted for 19% of global exports and 16% of global imports of goods and services.

The year-on-year double digit growth in merchandise trade made China the largest exporter and the second largest importer of merchandise goods in 2011. Russia and India have also entered into the list of top 20 world merchandise exporters and importers. In merchandise export trade, Brazil falls in the top 20 list. China, Russia and Brazil have surplus on merchandise trade balance; India and South Africa have deficits (Table 3).

TABLE 3: TRADE PROFILE (2011)

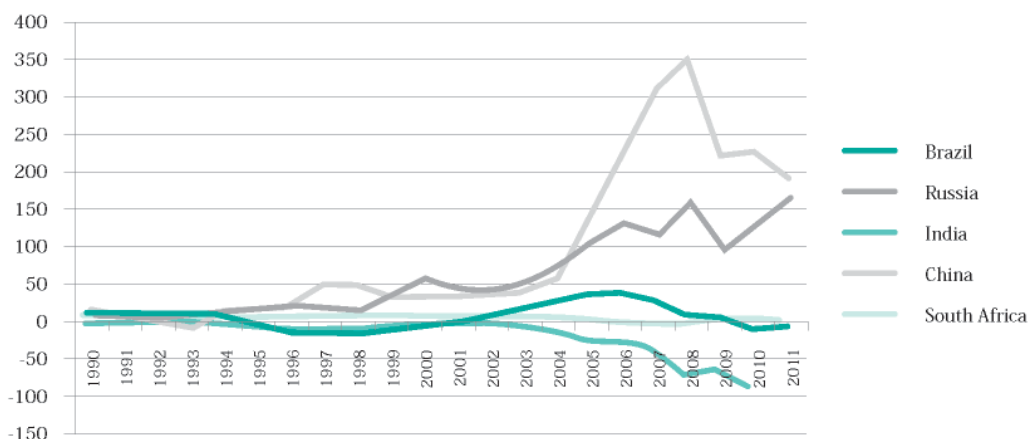
	Merchandise								Services							
	Export				Import				Export				Import			
	Total (US\$ bn)	% change p.a. (2005-11)	World Share	World Rank	Total (US\$ bn)	% change p.a. (2005-11)	World Share	World Rank	Total (US\$ bn)	% change p.a. (2005-11)	World Rank	World Share	Total (US\$ bn)	% change p.a. (2005-11)	World Share	World Rank
Brazil	256	14	1.4	22	236.9	20	1.3	21	36.7	16	31	0.9	73.1	22	1.8	17
Russia	522	14	2.9	9	323.8	17	1.8	17	53.3	14	22	1.3	87.9	15	2.2	15
India	304.5	20	1.7	19	462.6	22	2.5	12	136.5	17	8	3.3	123.7	18	3.1	7
China	1898.4	16	10.4	1	1743.5	18	9.5	2	182.4	16	4	4.4	236.5	19	6	3
South Africa	96.9	11	0.5	41	121.6	12	0.7	32	14.4	5	44	0.3	19.2	8	0.5	40

(All figures are for 2011 unless stated otherwise.)

Source: Based on WTO data, <http://stat.wto.org/Home/WSDBHome.aspx?Language=E>, (as accessed on 27/01/13).

On the trade in services side, all the BRICS economies, barring South Africa have recorded robust double digit growth in export and import. China and India are in the top 10 world rankings for trade in services. While India has a trade surplus in services, it is not enough to offset its merchandise trade deficit. Other BRICS economies have a deficit in the trade balance for services. The trade balance (merchandise plus services) of the BRICS has been mapped in Figure 3. China and Russia have a sizable trade surplus, in excess of \$100 billion. India, on the other hand, is running a trade deficit of the same magnitude.

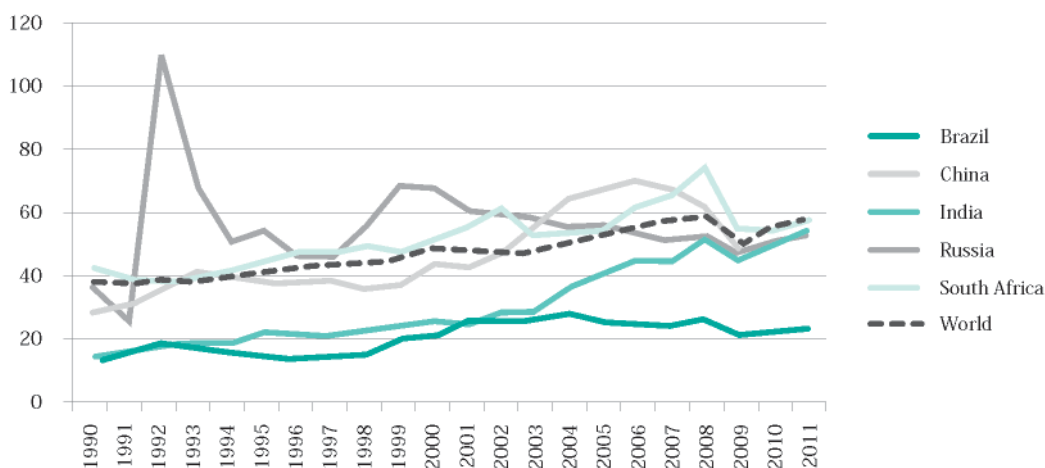
FIGURE 3: TRADE BALANCE (\$ BILLION)



Source: Based on World Bank data, <http://data.worldbank.org> (as accessed on 27/01/13)

Notwithstanding trade balance statistics, the trade to GDP ratio illustrates the growing importance of trade in BRICS. Since the 1990s, the trade to GDP ratio in every BRICS economy has shown an upward trend (Figure 4). There are year-on-year fluctuations, most marked in the case of Russia. By 2011, the trade to GDP ratio was over 45% in each of the BRICS except Brazil. This trend was most pronounced in India where the trade to GDP ratio more than doubled from under 20% in 1990 to over 50% by 2011.

FIGURE 4: TRADE (% OF GDP)

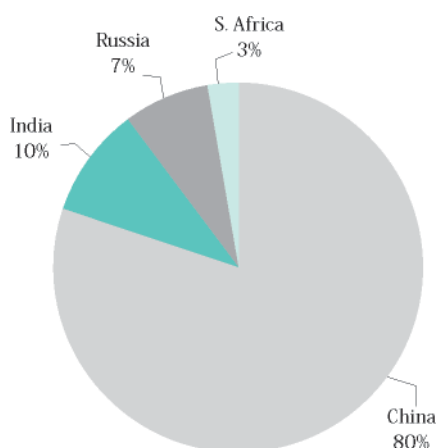


Source: Based on World Bank data, <http://data.worldbank.org> (as accessed on 27/1/2013)

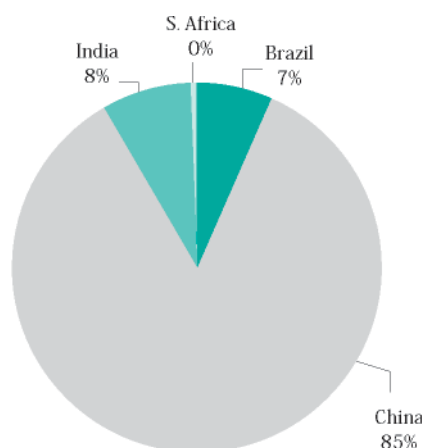
Moving from the global trade numbers to the intra-BRICS trade scenario, Figure 5 captures intra-BRICS trade by destination. China is the largest trade partner for each of the other BRICS with a trade share ranging between 72% and 85% in intra-BRICS trade. India has a share ranging between 8% and 26% in intra-BRICS trade. Brazil's trade share is in single digits except with China where its share is 30%. Russia too has a small slice of the intra-BRICS trade pie in all markets barring China where its share is 28%. South Africa's share is the smallest in each of the other BRICS markets.

FIGURE 5: INTRA-BRICS TRADE (BY DESTINATION)

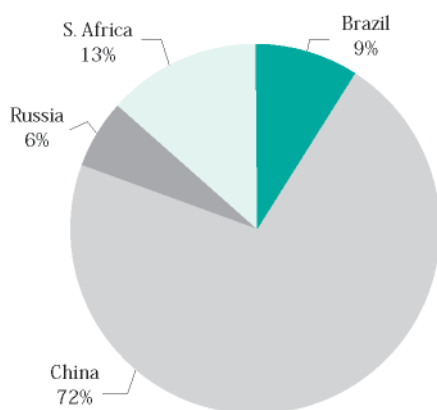
(a) Trade between Brazil and rest of the BRICS



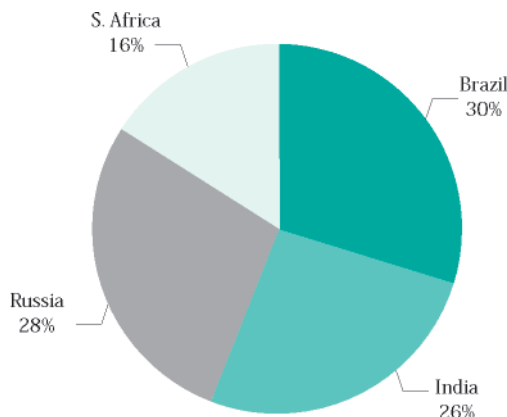
(b) Trade between Russia and rest of the BRICS



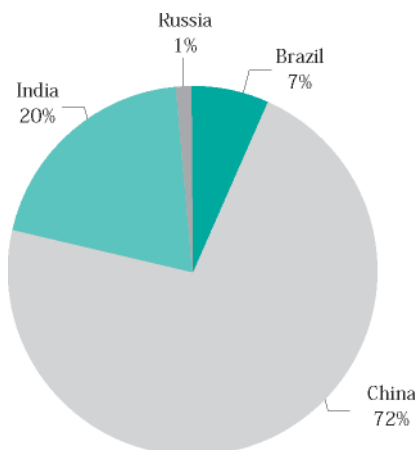
(c) Trade between India and rest of the BRICS



(d) Trade between China and rest of the BRICS



(e) Trade between South Africa and rest of the BRICS



Source: Based on UN COMTRADE and <http://wits.worldbank.org/wits/> (as accessed on 28/01/2013)

5. Sectoral Analysis

The BRICS are clearly a heterogeneous group. This is apparent when we decompose output, employment and trade in our sectoral analysis of the BRICS (Table 4).

Brazil is active in the agriculture sector. While its agriculture sector accounted for over 30% of total exports, it employed only 17% of the workforce and contributed 6% of the GDP in 2010. The domestic economy is dominated by the services sector which accounts for over two thirds of the country's GDP and more than 60% of employment. Trade in services, however, does not match the GDP and employment numbers with services amounting to around 15% of total exports and 27% of total imports. In comparison, the industrial sector accounted for over 50% of total exports and nearly 70% of total imports. The industrial sector's contribution to GDP was 27% and the sector employed over 20% of the workforce.

The energy sector is a major driver of the Russian economy. Industry, which includes mining, manufacturing, energy production and construction, accounted for over 80% of Russia's export earnings and nearly 60% of its total imports in 2010. The sector employed more than a quarter of the workforce and contributed 37% of the GDP. Services are the main contributor to GDP and the largest employer in Russia having a share of about 60%. However, its share of total exports was only 12% though that of imports was 27%. Agriculture has a relatively small share (less than 5%) of GDP and employs 10% of the workforce. Its share in total exports and imports is also marginal (about 5% and 13% respectively).

The agriculture sector continues to be the mainstay in rural India, employing over half the workforce. Its contribution to GDP, however, is declining and the sector accounted for just 19% of the GDP in 2010. Agricultural production is geared primarily for the domestic market and only a small part of the produce is exported. On the other hand, the services sector has been increasing in importance. It employs about a third of the workforce and contributes over 50% to the GDP. Trade in services accounts for over 34% of total exports and 20% of imports. The share of industry in GDP and employment is 26% and 14% respectively. India has been expanding and diversifying its manufacturing base and this is reflected in its foreign trade statistics.

The industrial sector in China accounted for nearly half of the country's rapidly expanding GDP in 2010. Its manufacturing sector accounted for over 87% of total exports and nearly 80% of total imports. The services sector has also grown rapidly and contributed over 40% to the GDP and employed over 30% of the workforce. Services exports and imports, however, only accounted for around 10% of total trade. The main source of employment in China continues to be agriculture which accounted for 40% of the workforce. The share of agriculture as a percentage of GDP, however, has been declining and now stands at only 10%. Trade in agricultural goods is marginal as agriculture production caters mainly to the domestic market.

In South Africa, the agriculture sector accounted for only 3% of GDP and employed 5% of the workforce in 2010. However, South Africa is a major agricultural exporter and 10% of its exports are sourced from this sector. The services sector is important and accounted for two-thirds of the GDP and 70% of the workforce. The share of services in total exports and imports stood at around 18%. The industrial sector is dominated by mining industries and accounted for over 30% of GDP, 25% of the workforce, more than 70% of exports and 75% of imports in 2010.

TABLE 4: SECTORAL ANALYSIS

	Agriculture				Industry				Services			
	Share of GDP (%)	Share of employment (%)	Exports (% of total exports)	Imports (% of total imports)	Share of GDP (%)	Share of Employment (%)	Exports (% of total exports)	Imports (% of total imports)	Share of GDP (%)	Share of employment (%)	Exports (% of total exports)*	Imports (% of total imports)
Brazil	6	17	31.92	4.75	27	22	52.74	68.35	67	61	15.34	26.90
Russia	4	10	5.54	12.94	37	28	82.37	59.35	59	62	12.09	27.71
India	19	52	6.14	4.38	26	14	59.85	73.79	55	34	34.01	21.83
China	10	40	3.07	6.56	47	27	87.2	79.79	43	33	9.73	13.65
South Africa	3	5	10.14	6.01	31	25	71.63	75.19	66	70	18.23	18.80

Sources: UNCTAD Handbook of Statistics -2010, <http://data.worldbank.org/> and <https://www.cia.gov/library/publications/the-world-factbook/> (as accessed on 09/02/12)

6. Trade Policy: Scope for Intra-BRICS Co-operation?

The share of BRICS in global trade has more than doubled over the past decade. This can be partly attributed to a shift in the countries' trade policies. Tariff rates have been cut significantly over the past few years in the BRICS economies and average tariff rates currently range from 8% to 12% (Table 5). Moreover, the BRICS as WTO members are required to bind their tariffs, in other words to put ceilings beyond which they cannot increase their tariff rates. Russia, which has recently acceded to the WTO, bound its tariffs from the date of WTO membership.

Spurred by domestic concerns, both bound and applied rates have been kept higher for agricultural goods as compared to non-agricultural goods in the BRICS economies. The only exception is Brazil, which has a marginally higher applied tariff average on non-agricultural goods.

TABLE 5: TARIFF PROFILES

	Tariff Binding Coverage	Simple Average Bound Rate			Simple Average Applied Rate			Range (%)		Coefficient of variation (Applied Rate)	Non-ad valorem tariffs (% of all tariff lines)	Duty free tariffs (% of all tariff lines)
		Agri.	Non-Agri.	All	Agri.	Non-Agri.	All	Bound Rate	Applied Rate			
Brazil	100	35.2	29.6	30.2	10.1	11.6	11.5	0-55	0-35	0.7	0	8.3
Russia	100	10.8	7.3	7.8	13.5	8.9	9.5				12.6	
India	75.6	118.3	32	46.4	33.2	8.9	12	0-300	0-150	1.2	6.1	3.2
China	100	15.3	9	9.9	15.2	8.6	9.5	0-65	0-65	0.8	0.7	9.4
South Africa	95	39.2	15.8	19	10.1	7.8	8.1	0.597	0-96	1.4	3.2	54.4

**Final bound rates for Russia to be implemented over a period of 8 years from the date of accession.*

Sources: WTO TPR Brazil (2009), India (2011), China (2008 & 2010), SACU (2009); WTO tariff profile-Russia, <http://stat.wto.org/TariffProfile/WSDBTariffPFHome.aspx?Language=E> (as accessed on 10/2/12); WTO statistics database, <http://stat.wto.org/Home/WSDBHome.aspx?Language=E>; (accessed on 27/1/2013)

Besides cuts in tariff rates, a large number of import restrictions in the form of prohibitions and quotas have also been done away with. Licenses, however, continue to be important means for regulating imports in the BRICS.

There has also been a rise in the incidence of technical barriers to trade (TBT) and sanitary and phytosanitary measures (SPS) applied by the BRICS. All BRICS economies are members of international standard setting organizations, including International Plant Protection Convention (IPPC), Organisation International des Epizooties (OIE) and the Codex Alimentarius Commission and steps have been taken to bring about greater harmonization in the standards adopted based on guidelines and recommendations of the OIE, IPPC and Codex. All BRICS countries also have memorandum of understanding on standards, conformity assessment and accreditation procedures with several third countries and are signatories to a number of multilateral and bilateral mutual recognition agreements. There are a number of such arrangements amongst the BRICS themselves. For example, INMETRO, the standardisation body of Brazil has a memorandum of understanding with India and a co-operation agreement with Russia on quality management systems. Similarly BIS, the standardisation body of India has a memorandum of understanding with South Africa.

Burgeoning trade volumes in the BRICS economies has been accompanied with an increase in the use of trade remedies. Trade remedies include anti-dumping measures, countervailing duties and safeguards. India has emerged as one of the most frequent users of anti-dumping measures while China has remained the most frequent target of anti-dumping duties.

Besides merchandise trade, there has also been a sharp rise in trade in services for the BRICS economies. As mentioned above, almost all the BRICS countries clocked double-digit growth in the export and import of services. Of the 12 services sectors covered under the WTO's General Agreement on Trade in Services (GATS), specific commitments have been made by Brazil in 7, Russia in 11, India in 6, China in 9 and South Africa in 8 service sectors (Table 6).

TABLE 6: SERVICES COMMITMENTS UNDER GATS

Country	Number of Service Sectors	Service Sectors
Brazil	7	Business, communication, construction and engineering, distribution, financial, tourism and travel, and transportation.
Russia	11	Business, communication, construction and engineering, distribution, education, energy, environment, financial, health, tourism and travel, and transportation.
India	6	Business, communication, construction and engineering, financial, health, tourism and travel, and transportation.
China	9	Business, communication, construction and engineering, distribution, education, environment, financial, tourism and travel, and transportation.
South Africa	8	Business, communication, construction and engineering, distribution, environment, financial, tourism and travel, and transportation.

Sources: WTO Trade Policy Review of Brazil (2009), India (2011), China (2008 & 2010), SACU (2009); Schedule of Specific Commitments in Services of the Russian Federation (WT/ACC/RUS/70/Add. 2); WTO services database, <http://tsdb.wto.org/default.aspx> (as accessed on 10/2/12).

Another area which has seen rapid growth in trade in the BRICS economies is intellectual property rights. Each of the BRICS countries is party to World Intellectual Property Organisation (WIPO), the Berne Convention for Protection of Literary and Artistic Works, Paris Convention for the Protection of Industrial Property and is a signatory to the WTO's TRIPS Agreement. For enforcement of intellectual property, a number of measures have been adopted to check infringements and counterfeit goods.

While progressive trade policies have resulted in an increasing volume of trade in the BRICS economies, intra-BRICS trade itself continues to be low. Increasing trade imbalance within BRICS nations is also a major concern with China being the largest trade partner for each of the other BRICS (see also Figure 5 (a) – (e)).

A number of trade arrangements have emerged amongst the BRICS over the past few years, either on a bilateral basis or as a part of a larger grouping (e.g. South Africa as part of SACU). Brazil, as a member of MERCOSUR, has signed a limited scope preferential trade agreement with India in 2004 and with SACU in 2008. A number of trade agreements are also in the pipeline, with the launching of negotiations between China and SACU and subsequently India and SACU. In addition, both India and China are members of Asia Pacific Trade Agreement (APTA), a preferential trade agreement seeking to promote trade among developing countries in the Asia-Pacific region. Negotiations on a Regional Comprehensive Economic Partnership Agreement (RCEP) are also on the anvil. India and Brazil are party to the Agreement on Global System of Trade Preferences among Developing Countries (GSTP) which seeks to promote trade amongst the G 77 countries while China and Russia being Pacific Rim Countries are members of the Asia Pacific Economic Co-operation (APEC).

Evidently, there are several areas of convergence and a few points of divergence in the trade policies of the BRICS. Efforts have been recently focused on increasing intra-BRICS trade and expanding the areas of possible collaboration. BRICS Trade Ministers at their New Delhi meeting in March 2012, resolved to more than double the trade among BRICS from US \$230 billion in 2011 to US \$500 billion by 2015. The Delhi Action Plan was endorsed at the Summit to encourage intra-BRICS cooperation in other key areas. Concrete suggestions are being put forward on setting up a development bank and enabling credit and trade finance facilities in local currencies. There is also scope for coordinating positions at the WTO and in other multilateral fora.

7. Fourth BRICS Summit: Delhi Declaration and Action Plan

The full text of the Delhi Declaration released at the conclusion of the Fourth Annual BRICS Summit held in New Delhi on 29 March 2012 can be accessed at the Government of India, Ministry of External Affairs website (<http://www.mea.gov.in/mystart.php?id=190019162>). The Delhi Action Plan and select paragraphs of the Delhi Declaration relating to international trade, UNCTAD and the WTO are reproduced below.

FOURTH BRICS SUMMIT - DELHI DECLARATION (MARCH 29, 2012)

1. We, the leaders of the Federative Republic of Brazil, the Russian Federation, the Republic of India, the People's Republic of China and the Republic of South Africa, met in New Delhi, India, on 29 March 2012 at the Fourth BRICS Summit. Our discussions, under the overarching theme, "BRICS Partnership for Global Stability, Security and Prosperity", were conducted in an atmosphere of cordiality and warmth and inspired by a shared desire to further strengthen our partnership for common development and take our cooperation forward on the basis of openness, solidarity, mutual understanding and trust.
2. We met against the backdrop of developments and changes of contemporary global and regional importance - a faltering global recovery made more complex by the situation in the euro zone; concerns of sustainable development and climate change which take on greater relevance as we approach the UN Conference on Sustainable Development (Rio+20) and the Conference of Parties to the Convention on Biological Diversity being hosted in Brazil and India respectively later this year; the upcoming G20 Summit in Mexico and the recent 8th WTO Ministerial Conference in Geneva; and the developing political scenario in the Middle East and North Africa that we view with increasing concern. Our deliberations today reflected our consensus to remain engaged with the world community as we address these challenges to global well-being and stability in a responsible and constructive manner.
- ...
15. Brazil, India, China and South Africa congratulate the Russian Federation on its accession to the WTO. This makes the WTO more representative and strengthens the rule-based multilateral trading system. We commit to working together to safeguard this system and urge other countries to resist all forms of trade protectionism and disguised restrictions on trade.
16. We will continue our efforts for the successful conclusion of the Doha Round, based on the progress made and in keeping with its mandate. Towards this end, we will explore outcomes in specific areas where progress is possible while preserving the centrality of development and within the overall framework of the single undertaking. We do not support plurilateral initiatives that go against the fundamental principles of transparency, inclusiveness and multilateralism. We believe that such initiatives not only distract members from striving for a collective outcome but also fail to address the development deficit inherited from previous negotiating rounds. Once the ratification process is completed, Russia intends to participate in an active and constructive manner for a balanced outcome of the Doha Round that will help strengthen and develop the multilateral trade system.
17. Considering UNCTAD to be the focal point in the UN system for the treatment of trade and development issues, we intend to invest in improving its traditional activities of consensus-building, technical cooperation and research on issues of economic development and trade. We reiterate our willingness to actively contribute to the achievement of a successful UNCTAD XIII, in April 2012.

18. We agree to build upon our synergies and to work together to intensify trade and investment flows among our countries to advance our respective industrial development and employment objectives. We welcome the outcomes of the second Meeting of BRICS Trade Ministers held in New Delhi on 28 March 2012. We support the regular consultations amongst our Trade Ministers and consider taking suitable measures to facilitate further consolidation of our trade and economic ties. We welcome the conclusion of the Master Agreement on Extending Credit Facility in Local Currency under BRICS Interbank Cooperation Mechanism and the Multilateral Letter of Credit Confirmation Facility Agreement between our EXIM/Development Banks. We believe that these Agreements will serve as useful enabling instruments for enhancing intra-BRICS trade in coming years.

.....

40. We have taken note of the substantive efforts made in taking intra-BRICS cooperation forward in a number of sectors so far. We are convinced that there is a storehouse of knowledge, know-how, capacities and best practices available in our countries that we can share and on which we can build meaningful cooperation for the benefit of our peoples. We have endorsed an Action Plan for the coming year with this objective.

.....

DELHI ACTION PLAN

1. Meeting of BRICS Foreign Ministers on sidelines of UNGA.
2. Meetings of Finance Ministers and Central Bank Governors on sidelines of G20 meetings/other multilateral (WB/IMF) meetings.
3. Meeting of financial and fiscal authorities on the sidelines of WB/IMF meetings as well as stand-alone meetings, as required.
4. Meetings of BRICS Trade Ministers on the margins of multilateral events, or stand-alone meetings, as required.
5. The Third Meeting of BRICS Ministers of Agriculture, preceded by a preparatory meeting of experts on agro-products and food security issues and the second Meeting of Agriculture Expert Working Group.
6. Meeting of BRICS High Representatives responsible for national security.
7. The Second BRICS Senior Officials' Meeting on Science & Technology.
8. The First meeting of the BRICS Urbanisation Forum and the second BRICS Friendship Cities and Local Governments Cooperation Forum in 2012 in India.
9. The Second Meeting of BRICS Health Ministers.
10. Mid-term meeting of Sous-Sherpas and Sherpas.
11. Mid-term meeting of CGETI (Contact Group on Economic and Trade Issues).
12. The Third Meeting of BRICS Competition Authorities in 2013.
13. Meeting of experts on a new Development Bank.
14. Meeting of financial authorities to follow up on the findings of the BRICS Report.
15. Consultations amongst BRICS Permanent Missions in New York, Vienna and Geneva, as required.
16. Consultative meeting of BRICS Senior Officials on the margins of relevant environment and climate related international fora, as necessary.
17. New Areas of Cooperation to explore:
 - (i) Multilateral energy cooperation within BRICS framework.
 - (ii) A general academic evaluation and future long-term strategy for BRICS.
 - (iii) BRICS Youth Policy Dialogue.
 - (iv) Co-operation in Population related issues.

*New Delhi
March 29, 2012*

Brazil¹

1. Institutions

1.1 Institutional framework for Trade Policies

In Brazil, the formulation, adoption, coordination, and implementation of trade policy in goods and services are the responsibility of the Chamber of Foreign Trade (CAMEX), created in 1995. The CAMEX is a part of the Government Council of the Presidency of the Republic. Its main decision-making body is the Council of Ministers, comprising of the Minister of Development, Industry and Foreign Trade, who chairs it, and the Ministers of the Civil House; Foreign Affairs; Finance; Planning, Budget and Administration; Agriculture and Supply; and Agrarian Development. The CAMEX coordinates the implementation of its decisions, but each ministry remains responsible for implementing matters within its competence. Other public bodies must consult the CAMEX on decisions related to trade policy issues, except financial market issues which lie within the jurisdiction of the National Monetary Council and the Central Bank.

According to the guidelines devised by the CAMEX, the Ministry of Development, Industry and Foreign Trade (MDIC) is in charge of implementing trade policy through the Secretariat of Foreign Trade (SECEX), which is divided into four departments - Foreign Trade Operations (DECEX), Trade Remedies (DECOM), International Trade Negotiations (DEINT), and Planning and Development of Foreign Trade Policies (DEPLA). The Ministry of External Relations assists CAMEX in formulating foreign policy on, inter alia, regional integration and trade, and is the representative to the WTO in Geneva. The Ministry of Finance formulates and implements economic policy. It is in charge of customs and tax policy and administration, inspection, and revenue collection.

Private-sector participation in trade policy formulation is institutionalized by means of periodic meetings of the CONEX (CAMEX Private Sector Advisory Council), and through several sectoral fora on competitiveness.

1.2 Executive, Legislative and Judicial Branches of the Government

Brazil is formed by a union of 26 states, the municipalities, and the Federal District (which together form “the Union”).

Executive: Executive power is exercised by the President, aided by the Cabinet of Ministers. The President holds office for four years and may be re-elected for an additional four-year term. The Cabinet of Ministers is appointed by the President.

1 This chapter has been compiled by Prof. Sajal Mathur, Meghna Dasgupta and Pallavi Sirohi at the Centre for WTO Studies, Indian Institute of Foreign Trade, New Delhi. Material for the chapter has been mainly drawn from the 2009 WTO Trade Policy Review of Brazil (WT/TPR/S/212 and WT/TPR/G/212).

Legislature: Legislative power at the federal level is vested in and exercised by the National Congress, composed of the Chamber of Deputies and the Federal Senate. Deputies are elected in states, territories, and the Federal District for a period of four years. Each state and the Federal District elect three Senators for a term of office of eight years. One third of the representation of each state and two thirds of the Federal District representatives are renewed every four years, alternately.

Under the Constitution, legislation in a number of areas must be drafted and passed at the federal level. These areas include foreign trade, telecommunications, insurance, maritime and air transport, credit policy, monetary issues, and utilities. On the other hand, federal and state laws may be issued concurrently on education, health, and social security. Municipalities may only issue legislation on matters of local interest and to supplement federal and state legislation wherever pertinent. The legislative process includes preparation of amendments to the Constitution, supplementary laws, ordinary laws, delegated laws, provisional measures, legislative decrees and resolutions.

Judiciary: The judiciary comprises of the Supreme Federal Court, the Superior Court of Justice, the Federal Regional Courts and Federal Judges, and other special courts and judges.

2. Trade Policies

2.1 Trade in Goods

2.1.1 Import Policy

A) TARIFFS

Structure: Brazil is a member of the South American Common Market (MERCOSUR) (comprising Argentina, Brazil, Paraguay and Uruguay) and so applies the MERCOSUR Common External Tariff (CET).

CAMEX is responsible for the formulation of and changes in the tariff and for its approval. Brazil grants at least MFN treatment to all its trading partners. It does not impose seasonal, temporary, or variable import levies.

The average applied MFN tariff was 11.5% in 2008 with the average tariff on agricultural products (WTO definition) at 10.1%, and the average tariff on non-agricultural products at 11.6%. All tariffs are applied on ad valorem basis, ranging from zero to 35% duty. Duty-free tariff lines represent 8.3% of the total tariff schedule. Brazil's tariff structure shows low dispersion as measured by a coefficient of variation of 0.7. More than one third of tariff lines range between 1 and 10%. The highest average rate applies to the textile and clothing products (25.1% in 2008), followed by dairy products and transport equipment.

Brazil bound all its tariff lines in the context of the Uruguay Round. The average bound tariffs are 30.2% for all products (35.2% for agricultural and 29.6% for non-agricultural goods). Bindings for agricultural products (WTO definition), range from zero to 55%, with the highest averages applying to dairy products, grains and tobacco. Bound rates for non-agricultural products range from zero to 35% with the highest averages applying to textile and clothing, transport equipment, leather, rubber, footwear and travel goods.

Tariff- quotas: In the case of shortages within MERCOSUR, its members are allowed to temporarily reduce the CET applied rate on up to 20 products at a time. The reduction must be coupled with quantitative restrictions in the form of tariff quotas, and must not cause an intra-MERCOSUR trade reduction nor

alter competitiveness conditions in the region. In any case, other MERCOSUR members must always be consulted before a reduction is enacted. In 2008, Brazil applied CET reductions in the form of tariff quotas to 12 tariff lines.

Preferences: Brazil has extended its preferential regime to the countries of the Andean Community (Colombia, Ecuador, and Venezuela), Cuba and Peru via preferential agreements, and Surinam via a partial scope agreement. In addition to MERCOSUR members, Brazil extends tariff preferences to imports from Bolivia, Chile, and Mexico through MERCOSUR's free-trade agreements; and to Guyana via the partial scope agreement under the framework of LAIA.

Exemptions: Each MERCOSUR member was allowed a List of Exceptions to the CET, comprising of capital goods (BK list), informatics and telecommunication equipment (BIT list), and a basic list of national exemptions. These exceptions could result in applied tariffs above or below the CET, but no breaches to individual WTO tariff binding commitments are permitted. Brazil has been able to eliminate its BK list, its BIT list contains 376 tariff lines and the basic list of national exemptions includes upto 100 tariff headings of products for which the application of the CET may pose difficulties in the near term. The deadline for elimination of the basic exception list for Brazil was 31 December 2010.

B) INTERNAL TAXES

Internal taxes levied on imports are - the industrial products tax (IPI), the tax on the circulation of merchandise and on the supply of interstate transportation and communication services (ICMS), contributions to the social integration programme (PIS), and finance social security (COFINS). All four taxes follow value-added tax principles.

The IPI, a federal value-added tax, is levied on a wide range of manufactured products. It is levied at the point of sale for domestic products and at the point of customs clearance for imports. For imports, it is based on the c.i.f. value plus the import duty and other fees or foreign exchange charges levied. The same rates apply on domestically produced and imported goods. IPI rates are changed periodically through decrees. Products such as chemicals, food items, some textiles and clothing, pharmaceuticals, steel, and iron wires are subject to a zero percent rate. Mineral products, skins, fertilizers, fuels, and some other textiles are not subject to IPI.

The ICMS is a value-added tax levied by Brazil's federal states on all merchandise transactions that take place domestically (both intra-state and inter-state) as well as on imports. In case of import, the ICMS is paid by the importer at the time of entry of the good into the country and is calculated using c.i.f. value, plus duties, IPI, and any "other customs costs".

Domestic and imported goods are subject to the same general rates - 1.65% for PIS and 7.6% for COFINS. These rates are higher for motor vehicles and their parts, pharmaceuticals, and cosmetic products. Specific rates apply on beverages and on fuels. For imports, the tax is calculated using c.i.f. value, plus duties, IPI, and ICMS. Certain commodities, semi-manufactures, and equipment by companies established in the Manaus Free Trade Zone, are exempted from IPI, ICMS, PIS and/or COFINS.

Brazil applies two special charges on transportation, including imports - the additional airport tax (ATAERO) and the additional tax for the renovation of the merchant marine (AFRMM).

C) QUANTITATIVE RESTRICTIONS

Prohibitions: Import bans are in place mainly for environmental and safety reasons. Brazil is a signatory to the Basel Convention. So, it controls all cross-border movements of hazardous wastes. As a signatory to the Montreal Protocol, it prohibits import of substances that deplete the ozone layer. Brazil restricts the importation of certain pharmaceutical products, narcotics, psychotropic substances and precursors, products and equipment for health and diagnosis, tobacco products, cosmetics, foodstuff, and other products to protect animal and human life and health. In addition, Brazil imposes import prohibitions on all used consumer goods, including motor vehicles, as well as on certain grapes and grape juices to be used in the production of wine, and wine transported in containers larger than five litres.

Licenses: SECEX is the administrative authority responsible for licensing. Brazil applies both automatic and non-automatic licences to imports of various products. The purpose of the automatic licensing regime is to collect statistical information. Towards the end of 2008, automatic licensing was applied to products imported under the duty drawback regime. Almost 3,500 eight-digit level lines in the common external tariff (CET), or some 35.8% of all lines, are subject to non-automatic licensing. The majority of products, subject to non-automatic licensing, are products that may cause damage to human, plant or animal health; products capable of causing environmental damage; and products subject to tariff quotas. The list of products subject to non-automatic licensing include most used goods, weapons and products made for warlike purposes, goods restricted by a UN resolution and Scheduled chemicals controlled under the Chemical Weapons Convention. In fact the list spans parts of all HS headings, except headings 47, 51, 57, 66, 68, 77, 86 and 91. Non-automatic licences for used machinery, equipment, and cargo containers are granted only if it is proven that the products are not produced in Brazil and cannot be substituted by a similar product currently produced in Brazil. Exceptions to this requirement are: factory's production lines related to specific projects, and parts and equipment used for maintenance and repair of telecommunication and informatics goods.

Quotas: As from January 2005, the only imports subject to quotas are coconuts, as a result of a safeguard measure.

D) STANDARDS

- TECHNICAL BARRIERS TO TRADE

Legal and Institutional framework: The legislative basis is provided by MERCOSUR Decision 05/96 and Legislative Decree No. 30 of 15 December 1994 incorporates the TBT Agreement into domestic legislation.

MERCOSUR technical regulations are issued by the MERCOSUR's main executive body, the Common Market Group (GMC).

Within Brazil, the National System of Metrology, Standardization and Industrial Quality (SINMETRO) is a federal body responsible for ensuring coordination in the formulation and adoption of standards and technical regulations, both at the federal and at the sub-federal level. SINMETRO comprises a number of bodies, including CONMETRO and its technical committees; INMETRO and a number of certification, inspection, and training bodies; a proficiency testing body; calibration and testing laboratories; the Brazilian Association for Technical Standardization (ABNT); IPEMs; and state metrological networks. The work of SINMETRO is established at the sub-federal level by standardizing bodies, metrology laboratories and institutes in the different states.

The National Council of Metrology, Standardization and Industrial Quality (CONMETRO) is the standardization body of the SINMETRO. It is presided over by the Minister of Development, Industry and Foreign Trade (MDIC) and is responsible for formulating, coordinating, and supervising policy on metrology, standardization, and certification. The Executive Secretariat of CONMETRO is the National Institute of Metrology, Normalization and Industrial Quality (INMETRO). INMETRO coordinates the Brazilian Network of Legal Metrology and Quality comprising of the institutes for weights and measurements (IPEMs) of all the Brazilian states. INMETRO along with ANVISA is responsible for adopting conformity assessment procedures and is also the national accreditation body. In addition, INMETRO is the national enquiry point under the TBT Agreement and is responsible for the notification of proposed (mandatory) technical regulations, including by sub-federal bodies, to the WTO. Responsibility for developing standards and accrediting sectoral standardization bodies (ONSSs) had been ascribed to the ABNT. The ABNT represents Brazil at the regional (mostly in Latin America) and international levels.

Technical Regulations: A majority of Brazil's technical regulations are based on international standards. Only in some cases they are based on performance criteria. Brazil does not accept technical regulations adopted by any trading partner as equivalent. It does, however, accept equivalence in test results. Technical regulations are applicable in the areas of health and pharmaceutical products. Other significant product groups are consumer goods, agricultural products, foodstuffs, electrical and electronics, chemicals, machinery and beverages.

The GMC issues MERCOSUR technical regulations in the form of Resolutions. Working groups within the GMC were responsible for drafting the measure, incorporating comments resulting from the process of domestic consultation, and submitting the final draft for approval by the GMC. The measure was notified to the WTO after domestic consultations, but before it was adopted by MERCOSUR or internalized into the domestic legal system.

Technical regulations within Brazil, take the form of laws, decrees or resolutions, as deemed appropriate, and are published in the Official Journal, and in some cases, in the ministry's website. Brazil normally allows a period of six months between the publication of the measure and its entry into force. All ministries and agencies follow similar general procedures to adopt technical regulations. The elaboration of a technical regulation is initiated *ex officio*, or at the request of a third party. If the competent authority deems it necessary, a draft technical regulation is prepared and published in the Official Journal for comments. In parallel, if the proposed technical regulation is considered to have trade effects, the draft is sent to the WTO to allow Members to present comments. INMETRO is in charge of handling international comments. After all comments and suggestions are taken into consideration, the ministry or agency decides whether to adopt the technical regulation, with or without modification.

There is no legal provision that requires regulatory bodies to review regularly the content of technical regulations, nor a specific rule for their elimination. Nevertheless, this is covered in CONMETRO's Good Regulatory Practice Guide. The Guide provided recommendations on how to elaborate, revise, revoke, and disseminate technical regulations.

Standards: Brazil has developed a large number of standards, a number of which are adoptions of ISO or IEC standards without any change. The remainders were either purely domestic initiatives or adaptations of international standards.

The process of adopting standards starts with a demand for a standard received by ABNT from a government body, a private producer, a consumer or any other interested party. The demand is sent to the appropriate technical committee, which formulates the standard or finds a suitable international

standard that already exists. Consultations are carried out on the draft. In case of consensus, the standard is adopted and notified to ISO. According to the authorities, in order to guarantee that the content of the standards is up to date, standards older than five years are reviewed every year. The review process must follow international guidelines.

Conformity assessment and accreditation: The steps followed for the adoption of conformity assessment are similar to those for technical regulations. Depending on the specific characteristics of the product, conformity assessment may be through certification, labelling, inspection, sampling, and/or a conformity declaration by the supplier. Certification is mainly carried out by accredited third parties and is generally voluntary. Products and services subject to mandatory certification are those that may affect consumer health, safety or the environment. Conformity declaration by the supplier is only applied to products or services of low to medium risk to human health and safety. In October 2008, 59 products were subject to mandatory certification, including baby bottles, buses, electrical cables, electrical appliances, fuel tanks, gas containers, matches, parts for vehicles, preservatives, steel tubes, toys, and tyres. Certification is also mandatory for eight types of services, mostly linked to motor-vehicle and gas distribution, and for the process of manufacturing food baskets. Foreign suppliers must have a legal representative in Brazil responsible for the issuance of the declaration of conformity.

Certification and labelling processes are defined according to the conformity assessment procedure. Procedures applied during inspections (e.g. sampling and testing) also vary according to the conformity assessment. Conformity assessment procedures that differ from international standards, or have considerable economic importance or impact on health, are notified to the WTO through INMETRO.

Brazil has notified five mutual recognition agreements (MRAs) on conformity assessment between INMETRO and agencies of the EU, Canada, United States, and Mexico, and two other agreements with 30 countries each. In general, under these agreements, each signatory recognizes the operation of the other signatories' quality management systems within the programmes defined as equivalent to its own. INMETRO has memoranda of understanding with Argentina, Cuba, France, Germany, India, Paraguay, Ukraine, the United Kingdom, and LAIA countries; and cooperation agreements with Bolivia, Costa Rica, Guatemala, Mozambique, Russia, and Uruguay. Additionally, INMETRO has signed various mutual recognition agreements on certification and accreditation.

As regards accreditation, INMETRO is advised by CONMETRO's technical committees in its accreditation activities, and accredits bodies engaging in certification, inspection, training, calibration, and testing, including agri-toxic laboratories and clinical analysis laboratories. As a general rule, accreditation must be formally requested, followed by supporting documentation, and an in situ inspection must be carried out. To maintain accreditation, a body is subject to periodic evaluations. Where conformity assessment is mandatory, certification bodies must have a regular office in Brazil in order to be accredited. Otherwise, Brazil grants national treatment to foreign laboratories or certification bodies.

As of 2009, there are 33 certification bodies accredited for quality systems, of which 29 are Brazilian and four foreign (from Italy, the United States, Uruguay, and Venezuela); 48 bodies are accredited for product certification (of which only three are foreign, from Argentina, Costa Rica, and Venezuela); and 17 environmental systems management and four forest accreditation bodies (two are foreign, from Italy and the United States).

Institutional and legal framework: Decree No. 1355 of 30 December 1994 incorporates the SPS Agreement into domestic legislation. Ministerial Act No. 183 of 9 October 1998 remains the main legislation with respect to the sanitary requirements for imports of animal products while Resolution RDC ANVISA No. 181/08 of 2008 establishes the rules for sanitary surveillance of imported goods, including processed foodstuffs. With regard to plant products, several regulations apply to each specific type or family of plant.

The administration of regulations on animal and plant health for domestic goods, imports, and exports is the responsibility of the Ministry of Agriculture, Livestock and Supply (MAPA), through the Secretariat of Agricultural Protection (SDA). The SDA is responsible for controlling the sanitary and phytosanitary (SPS) aspects of production and trade of all livestock, fruits, vegetables, grains, plants, veterinary drugs, pesticides, and their components, including, inspecting their manufacture, import, and storage, administration and application of SPS regulations, and the implementation of actions agreed upon with international agencies and foreign governments. The SDA is also responsible for issuing safety certification for food exports. The Brazilian Health Surveillance Agency (ANVISA) is an autonomous government body related to the Ministry of Health. It is responsible for administering sanitary regulations designed to protect human health and related to imported and locally produced foodstuffs, tobacco, cosmetics, pesticides, and pharmaceutical products; and to avoid or reduce the risk of entry, establishment or spread of epidemics of human diseases. ANVISA and the SDA are the only Brazilian authorities that can issue and adopt SPS measures. Both issue directives, when necessary, that list the products subject to sanitary requirements, as well as non-automatic import licences in their respective area of competence. The Secretariat for International Relations of Agribusiness of the MAPA, and the Office of International Affairs (formerly the Assistance Unit for International Issues) of ANVISA are the Brazilian enquiry points. The Ministry of Foreign Relations is Brazil's notification authority for SPS matters.

Brazil is a member of the Codex Alimentarius Commission (Codex), the World Organisation for Animal Health (Office International des Epizooties or OIE) and the International Plant Protection Convention (IPPC). Brazil is also a signatory to the Convention on Biological Diversity.

Brazil has memoranda of understanding and/or partial agreements on SPS issues with various countries, and it is negotiating agreements for the recognition of equivalence of SPS measures with Argentina and Peru. Brazil conducts periodic bilateral discussions on agriculture issues, such as SPS measures, in the context of Consulting Committees on Agriculture with Canada, Chile, China, Korea, and the United States, and is negotiating similar arrangements with India and South Africa. At the sub-regional level, Brazil participates in the Southern Cone Phytosanitary Committee (COSAVE).

Implementation: Proposed SPS measures are published in Brazil's Official Journal and notified regularly to the WTO. Most of the measures notified are equivalent to international standards and/or used for trade facilitation.

Risk assessment, including recognition of inspection systems, certification of foreign establishments, import licenses, re-inspection procedures, and transit controls of animals and their products are conducted by MAPA. Risk assessment process takes into consideration technical information received from third countries and, therefore, its duration depends primarily on how fast this information is exchanged and evaluated. Pest risk assessment is required when the vegetal product concerned has never been imported into Brazil or the product has never been used inside Brazil or comes from a country that has never exported the product to Brazil. The risk assessment is carried out by the Department of Vegetal Health

of the MAPA. Costs are borne by the interested party. Where pests are detected during re-inspection at the port of entry, Brazilian authorities will inform the SPS authorities of the country of origin and may suspend imports of the good concerned from that country.

Brazil prohibits the importation of hormone-treated meat and poultry. Trade and commercialization of substances, natural or artificial, with anabolic characteristics are also banned, unless intended for therapeutic and research use. Any product containing GMOs (Genetically Modified Organisms) may only be imported with prior authorization from the National Technical Commission of Bio Security (CTNBio), which is responsible for formulating and implementing the national bio-security policy.

All imports of products subject to SPS requirements must obtain a non-automatic licence (via SISCOMEX), in most cases before departure from the country of origin. Where the good is already at the border, ANVISA takes no longer than 72 hours to issue the licence. Both importers and domestic manufacturers of foodstuffs, cosmetics, and pharmaceutical products subject to sanitary requirements must obtain a licence to operate, from the state or municipal sanitary authority, as well as authorization to operate from ANVISA. The licence results in authorization from the National Sanitary Surveillance System, and is valid throughout the Brazilian territory. Brazilian SPS regulations require all companies exporting products of animal origin to Brazil to be registered with the Animal Origin Products Inspection Department (DIPOA). At the MAPA, all products must also be registered. Importers are also required to register certain foodstuff, cosmetics and pharmaceutical products with ANVISA. Brazil accepts phytosanitary and zoosanitary certificates issued by official sanitary services in countries that follow the guidelines of Codex, IPPC, OIE, and other international scientific organisations.

All imports of animal products and their sub-products that are subject to SPS requirements must be inspected at the port of entry. In principle, physical inspection should be carried out on 1% of packages that constitute the tariff line, from a minimum of two to a maximum of ten packages. For products in bulk, five samples should be collected separately for inspection. Samples from the packages that were physically inspected may also be used for laboratory testing. Testing should be made by MAPA laboratories, but if necessary, laboratories officially accredited by MAPA may also be used. Any testing costs are to be paid by the owner of the products.

Recognition of pest or disease free areas or of areas of non-dangerous pest and disease prevalence is subject to an on-site inspection, as well as an analysis of the exporting country's relevant procedures. Based on questionnaires sent to the SPS authorities of the exporting country, Brazilian authorities evaluate whether the inspections systems, accrediting procedures, and product/label approval mechanisms are equivalent to those applied in Brazil. On-site inspections of the exporters' establishments are undertaken at the cost of the interested party

Labelling: Product labelling must provide the consumer with correct, clear, precise, and easily readable information about the products' quality, quantity, composition, price, guarantee, shelf life, origin, and risks to consumers' health and safety. Imported products must bear this information in Portuguese, and indicate the country of origin. In addition, all labels must contain the brand or name of the manufacturer. Medicines, textiles, pharmaceutical specialties, and certain foodstuffs are subject to specific labelling regulations. Labels for a group of processed food products, including all products of animal origin, require approval by the Ministry of Agriculture. In addition, ten groups of electrical products are subject to mandatory labelling as part of a government energy-saving programme. Importers, exporters or manufactures of pharmaceuticals, cosmetics, and foodstuffs must be authorized by, and registered with the Brazilian Health Surveillance Agency (ANVISA).

E) CUSTOMS MEASURES

Custom Valuation: Brazil applies the WTO Customs Valuation Agreement (CVA). The transaction value is the main valuation method used. In 2007, it was used for 99% of all imports by value. If application of this method is impossible, the value is established in accordance with the alternative methods provided for in the CVA. Brazil does not use reference prices but, whenever needed, the authorities compare the price of imports with international prices of the respective product.

Importers are required to keep all import documents for up to five years, during which they may be requested to prove the customs value of the imported goods. Information requested may include the correspondence used for the commercial transaction, information on the persons involved, and on the process of price determination of the merchandise. The verification of the declared customs value takes place after the merchandise has been cleared by Customs.

Rules of Origin: Brazil does not apply non-preferential rules of origin. Preferential rules of origin apply to imports from MERCOSUR and in the context of MERCOSUR's free-trade agreements with third countries. MERCOSUR origin is determined using general or specific rules. Under the general MERCOSUR rules, products must fulfil at least one of the following requirements to be conferred MERCOSUR origin - (a) they must be wholly obtained or produced in MERCOSUR; (b) if non-originating materials are used in the production of the good, a change of tariff heading must take place, or the c.i.f. value of inputs from third countries must not exceed 40% of the f.o.b. value of the final product; or (c) in cases of assembly operations, the c.i.f. value of inputs from third countries must not exceed 40% of the f.o.b. value of the final product. Specific rules apply to, inter alia, foodstuffs, pharmaceuticals, textiles, steel, telecommunications, and informatics products.

Pre-shipment Inspection and other customs formalities: The Secretariat of Foreign Trade (SECEX) in the Ministry of Development, Industry and Foreign Trade (MDIC), is responsible for formulating regulations to implement import measures. The Secretariat of Federal Revenue of Brazil (RFB, previously the SRF) in the Ministry of Finance is responsible for customs administration, including duty collection.

All individuals and legal entities engaging in foreign trade must be registered with the SECEX in the single Register of Importers and Exporters (REI). Since 1999, registration with SECEX is automatic at the time of the first import operation, but may be denied in cases of abuse of economic power or for breach of tax, exchange rate, or trade regulations. With few exceptions, all trade operations must be registered in the Integrated Foreign Trade System (SISCOMEX), a computerized system that processes all customs procedures. SISCOMEX operations may be performed by the importer or through the accredited representatives (e.g. custom broker). Only Brazilian citizens are allowed to act as customs brokers in Brazil. Brazilian legislation requires importers to be responsible for all customs formalities and duties. So, import contracts known as delivered duty paid (DDP) are not allowed.

Customs administration decisions may be appealed in the first instance to the Federal Revenue Courts of the Ministry of Finance, and to the Taxpayers' Council in the second instance. The customs cooperation agreement is in force between Brazil and Argentina, Bolivia, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Portugal, Spain, the United States, Uruguay, and Venezuela. Additionally, Brazil has bilateral agreements on customs issues with France, the Netherlands, and Russia.

F) TRADE REMEDIES AND CONTINGENCY MEASURES

The SECEX, through its Department of Trade Remedies (DECOM), is responsible for carrying out anti-dumping (AD), countervailing duty (CD) or safeguards investigations and all other related procedures. The Chamber of Foreign Trade (CAMEX) is responsible for making the final decision, including the use of the “national interest” clause, on the application of provisional AD and CV measures and definitive duties, and for altering or terminating definitive duties as a result of a review, and accepting or terminating undertakings.

Brazil continues to be an active user of AD measures. As in October 2008, it had 63 AD measures in force, affecting the exports of 23 trading partners. The average duration of an AD measure is some six and a half years. China remains, by far, the most affected trading partner, followed by the United States and India. AD measures have been applied more frequently to semi-processed products.

Brazil has applied only two new CV duties, both of which are still in force (October 2008). The measures concern two products exported from India - stainless steel bars and PET film.

Under Brazilian legislation, an AD or CV duty must not exceed the margin of dumping or the amount of the subsidy. Brazil also follows, in the majority of cases, the lesser duty rule, i.e. duties are applied to the extent necessary to remove the injury to the domestic industry, even if that implies a duty lower than the dumping margin. AD and CV duties must be terminated not later than five years from imposition or from the date of the most recent review. AD investigations may be suspended if the exporters voluntarily agree to an undertaking to revise prices or to cease exporting to Brazil at dumped prices. CV investigations may be suspended if the government of the exporting country undertakes to eliminate or reduce the subsidies it applies or to take other measures with similar effect, or if the exporter voluntarily undertakes to revise prices on exports destined for Brazil. In an AD procedure, provisional measures may take the form of a provisional duty or a security (a cash deposit or bank guarantee), while in a CV procedure they must take the form of a security. If the SECEX concludes that there is no dumping or countervailable subsidy, or that dumping or a countervailable subsidy does exist but does not cause or threaten injury to the domestic industry, any provisional anti-dumping duty or cash deposit or bank guarantee is returned.

CAMEX is responsible for determining safeguard measures, which can take the form of tariff surcharges or quantitative restrictions and can be applied for a maximum of four years, renewable for six years. Since 2002, Brazil has applied one safeguard measure, on coconuts, which was extended in 2006 by four years.

2.1.2 Export Policy

A) EXPORT DUTIES AND TAXES

Brazilian legislation allows for the application of an export tax of 30%, which can be decreased or increased (to up to 150%) by the CAMEX. The export tax can be applied, in principle, to all exports, but in practice, with the exception of a few products, the tax is zero-rated. Export taxes are levied only on three product categories - leather and skins, arms and munitions and cigars. In case of leather and skins, levies are charged on all exports, while in the cases of cigars and arms and munitions, taxes are levied only on exports to certain markets.

The export tax is assessed on the f.o.b. value or the price of the goods in the international market at the time of exportation. This price may not be lower than the cost of production, as defined by the law, augmented by taxes and other contributions and a mark-up of 15% on the sum of the costs and taxes.

B) EXPORT RESTRICTIONS

Exports of potentially sensitive goods are analysed by the Inter-ministerial Commission for the Export Control of Sensitive Goods (CIBES). The Commission is in charge of preparing the regulations, criteria, proceedings and control mechanism for exportation of sensitive commodities and their related services.

Prohibitions: In compliance with United Nations resolutions, Brazil restricts exports of weapons and military equipment to Iraq, Ivory Coast, Liberia, Sierra Leone, and Somalia, and material and technology that could lead to the development of nuclear weapons to Iran. Exports of some organic chemicals included in HS Chapter 29 are prohibited to non-signatories of the Montreal Protocol. Exports of wood in the rough (HS 4403) have generally been suspended, and are subject to prior approval of the IBAMA.

Licenses: Prior authorization is required from various agencies for exports of a relatively large number of products for safety, health, security or environmental reasons, or when they are subject to export quotas. The list included some 663 tariff headings at the HS eight-digit level in April 2008, representing nearly 6.8% of all tariff headings and comprising mostly live animals, live plants, some oils and resins, hides and skins from wild animals, types of wood, chemical products, medicines, uranium and some other metals, weapons, and some vehicles and aircraft. Various agencies are responsible for issuing the licences. Some products require authorization by more than one agency.

Quotas: Brazilian exports of certain bovine meat and poultry products are subject to country specific tariff quotas in the EU. Quotas are administered through an export licensing procedure in which producers accredited by the Ministry of Agriculture (MAPA) and accepted by the EU may participate as safe exporters of bovine meat/poultry.

C) EXPORT SUBSIDIES

Establishing tax neutrality for exports remains a key element of trade policy. Brazil considers this objective served by implementation of schemes such as the drawback system, export-processing zones, no indirect taxation on exports, and a Special System of Industrial Depots subject to Standardized Control.

Brazil implements a number of schemes to encourage exports, including export financing, insurance, and guarantee programmes. One of the main schemes, the Export Financing Programme (PROEX), was challenged in the WTO and consequently modified. In 2003, Brazil notified WTO Members that it did not grant export subsidies to agricultural products.

The Export Financing Programme (PROEX) is a federal government programme aimed at financing Brazilian exports of goods and services at conditions similar to those obtainable in international markets. The PROEX allows for exports to be grouped in a “package” containing ineligible goods such as pieces and parts for maintenance of machinery and equipment to a value of up to 20% of the value of eligible goods. The PROEX has two modalities - direct financing (PROEX Financing) and interest rate equalization support (PROEX Equalization).

PROEX Financing is managed by the Banco do Brasil with resources from the Treasury supplied directly to the exporter or to the importer for payment to the exporter. Micro, small or medium-size enterprises, having annual turnover of up to R\$150 million (around US\$95 million), are eligible under the programme. Exceptions are made for large enterprises in certain cases such as when the credit is required for the fulfilment of Government engagements resulting from bilateral negotiations or from export operations that may not access other financing.

PROEX Equalization assumes part of the cost of export credit provided by Brazilian and foreign banks (commercial and development) to make it equivalent to that in the international market. The percentage financed can be up to 100% of the value of exports, but the percentage eligible for credit equalization is limited to 85% of the value of exports. However, the financing conditions (period, financing percentage, interest rate, and guarantees) may be negotiated by the banks with the exporter, and do not need to coincide with the equalization conditions.

2.1.3 Policies by Sector

A) AGRICULTURE

The share of agriculture (including fishery and forestry) in GDP at basic prices was 5.5% in 2007. The main cereals produced in 2007 were soy (41.3% of the total, in volume terms), maize (40.2%), rice (8.2%), and wheat (4%). Brazil is a major exporter of agricultural products. Agriculture exports accounted for 30% of the total exports in 2007. In value terms, soybeans are the largest export (US\$6.7 billion in 2007), followed by poultry meat (US\$4.4 billion), wood and derived products (US\$3.6 billion), coffee (US\$4.1 billion), sugar (US\$5.1 billion), and orange juice (US\$2.3 billion). Brazil is the world's largest exporter of coffee, sugar, tobacco, soybeans, and orange juice.

Agricultural policy formulation and implementation is the responsibility of the Ministry of Agriculture, Livestock and Food Supply (MAPA), and of the Ministry of Agrarian Development (MDA). The Secretariat of Agribusiness International Relations (SRI/MAPA) in the MAPA is responsible for notifications to the WTO, and for advising the CAMEX on trade policy issues linked to agriculture. The MDA is responsible for policies aimed at sustainable rural development, land reform the strengthening of small-scale household agriculture, promoting domestic food production and food security. The National Food Supply Company (CONAB), a state trading company linked to the MAPA, is in charge of implementing certain agricultural policies, including those related to minimum prices and storage.

Brazil has been actively engaging in WTO negotiations on agriculture over the years. In the DDA, Brazil has pressed for the elimination or drastic reduction of all forms of distorting subsidies, as well as for greater market access. Brazil has also made recourse to WTO dispute settlement procedures to guard its agricultural interests in world markets.

The average tariff on agricultural products is lower than that on other goods but a number of internal measures are in place to support agriculture. Brazil's domestic support measures for agriculture include credit availability at concessional terms, price support and stabilization mechanisms, and option contracts. Banks are required to reserve 25% of their demand deposits for agriculture. The provision of credit at concessional terms is one of the main policy instruments to promote agriculture. Price support schemes mainly concern commodities such as coffee, corn, cotton, milk, rice, rubber, sorghum and soybeans. Since 2004, enterprises investing in biofuel crops are eligible for reduced tax rates and preferential credit.

B) INDUSTRY/MANUFACTURING

The manufacturing sector's contribution to GDP has stayed fairly constant at around 21.9%. In 2007, civil construction represented 23% of the manufacturing sector, while the processing industries represented the rest. Among processing industries, the most important are food and beverages, metallurgy, machinery and equipment, pulp and paper, motor vehicles, chemicals, and plastic products. Manufactured goods (excluding food and beverages) represented 47.2% of Brazil's merchandise exports in 2007 (equivalent to US\$76 billion) and imports of manufacturing goods represented 70.6% of total imports.

Support to the manufacturing sector is provided through long-term financing as well as assistance through border measures, such as tariff peaks and tariff escalation, and internal instruments like tax concessions. An enhanced support strategy for 2008-10, launched in 2008, includes total credit lines worth about US\$116 billion in addition to US\$3.3 billion in tax exemptions.

The Industrial, Technological and Foreign Trade Policy (PITCE) document, issued by the Government in 2003, represents Brazil's main policy framework for the manufacturing sector. The policy aims to promote innovation, technological upgradation, and exports, and to reduce the fiscal burden on the sector. Pursuant to this policy, four new laws were passed - Innovation Law, Informatics Law, Biosecurity Law and a Law aimed at simplifying tax collection procedures.

In May 2008, the Government launched the Productive Development Policy as an enhancement to the PITCE. The new policy establishes four macroeconomic goals to be met by 2010 - increase general fixed investment, private investment in R&D, Brazil's participation in world exports, and the number of small and medium-size enterprises engaged in exports. The Government is implementing measures to reduce the cost of credit and simplify export and import procedures. The policy also encompasses the granting of various new tax exemptions.

C) MINING AND ENERGY

Mining: Brazil has abundant mineral resources, with large reserves of niobium, tantalite, graphite, bauxite, and iron ore. The contribution of mining activities (excluding metallurgy, construction materials, and hydrocarbons) to GDP was 1.1% in 2007. In 2007, mining exports were valued at US\$18.9 billion while imports totalled US\$5.8 billion.

State participation in the mining sector is limited. Nevertheless, the Federal Government maintains a strategic presence in the sector through BNDES and Previ, pension fund of the Bank of Brazil. BNDES has played a fundamental role in the development of mining activities, as a provider of credit

The Ministry of Mines and Energy (MME), through its Secretariat of Geology, Mining and Mineral Processing, formulates policy for the mining sector and grants concessions and licences for mining activities. The National Department of Mining Production (DNPM), an autonomous government body linked to the MME, is responsible for the supervision of mining activities and for the implementation and enforcement of policy for the sector. The DNPM is also responsible for issuing authorizations and permission, and for giving advice on concessions and licences required for the exploitation of mineral resources. Small-scale mining cooperatives are given priority for the exploration and exploitation of small reserves and deposits in areas where they are already established and in those determined (Reservas Garimpeiras) by the Federal Government. In practice, this is limited to small cooperatives (garimpeiros) benefiting from simplified procedures when applying for authorizations, licences, and permits.

Mining activities are subject to corporate taxation. In addition, there is a "financial compensation" charge for the exploitation of mineral resources (CFEM), and an annual fee per hectare during the mineral exploration phase for up to three years.

Energy: In 2007, the energy sector (including distribution of electricity, gas, and water) contributed approximately 4% to Brazil's GDP and 13.3% to total merchandise trade. In 2007, the output of energy products amounted to 1.8 billion barrels of oil equivalent (boe), of which 52% was petroleum, natural gas, and coal, 16% sugar cane (ethanol and bio-electricity), 15% hydroelectric power, and 17% other sources of energy such as uranium and biomass. Brazil is the world's largest exporter and the second largest producer of ethanol.

The Minister of Mines and Energy presides over the National Energy Policy Council (CNPE) and, in CNPE deliberations, defines the general policy for the sector. In the case of the ethanol (and sugar) industry, complementary to CNPE's general directives, policy is also formulated by the Inter-ministerial Council for Sugar and Alcohol. Regulatory agencies in the energy sector are organized as autonomous entities linked to the Ministry of Mines and Energy (MME). The National Agency for Petroleum, Natural Gas and Biofuels (ANP) implements public policy and regulates all matters concerning hydrocarbons and biofuels. Regulation of natural gas supply through low-pressure distribution pipelines is carried out at state level. The National Electric Energy Agency (ANEEL) is responsible for regulation and supervision of the electricity sector.

According to the Constitution, all minerals (including petroleum and gas) and hydro energy resources belong to the Brazilian State, irrespective of ownership of the land in which they are located. Private companies established in Brazil may be involved, through concessions, in the petroleum and gas sector. State-controlled PETROBRAS has a dominant position in the sector, holding virtually all of Brazil's refining capacity and acts as a key price setter for petroleum-based fuels in the domestic market. The granting of exploration and extraction concessions, and the construction of PETROBRAS' new oil platforms are subject to local-content requirements. The State also has a dominant presence in the electricity sector; although a crisis in 2001 resulted in extensive regulatory changes in 2004.

In January 2007, the Federal Government unveiled a programme aimed at increasing investment in infrastructure through public/private partnerships, the so-called PAC. The PAC foresaw investment in the energy sector totalling Brazilian Real R\$275 billion (some US\$152 billion) during 2007-10.

2.2 Trade in Services

Services contributed to some 65.8% of GDP at basic prices in 2007. The most important subsectors were government services (15% of GDP), distribution (11%), real estate (8.8%), finance (7.6%), and transportation services (5.5%). Brazil is a net importer of services and runs a traditional deficit in the services account.

Brazil's specific commitments under the GATS cover only 38 of the 160 services subsectors or seven of the 12 broad areas defined in the WTO Services Sectoral Classification List (MTN.GNS/W/120). The sectors or subsectors covered include business services, communication services, construction and related engineering services, distribution services, financial services, tourism and travel related services, and transport services.

Brazil scheduled horizontal market access limitations on the movement of natural persons, investment, commercial presence and subsidies. With respect to the movement of natural persons, market access is guaranteed only to specialized technicians, highly qualified professionals, and managers and directors working under temporary contracts. Special conditions apply to the appointment of managers to affiliates of foreign companies. Brazil has also retained the right to require foreign companies wishing to supply a service to be established as a legal entity as foreseen by Brazilian law.

The MERCOSUR Protocol of Montevideo on Trade in Services entered into force on 7 December 2005, and was notified to the Council for Trade in Services (CTS) on 5 December 2006. The Protocol establishes a programme for the liberalization of intra-trade in services within an overall implementation period of ten years from the date of entry into force, i.e. by December 2015.

2.2.1 Financial services

Financial services accounted for 7.6% of GDP in 2007. In that year, excluding insurance services, exports totalled US\$1.09 billion and imports were US\$807 million, while exports and imports of insurance services were US\$543 million and US\$1.31 billion respectively. The number of institutions in the Brazilian financial system has declined. This reduction reflects mainly mergers and acquisitions, as banks expanded operations, liquidations, cancellations of operating authorizations, and transformation into other financial institutions. A total of 2,417 institutions comprised the Financial System (SFN) in September 2008.

The SFN is regulated primarily by the National Monetary Council (CMN), and also by the Central Bank of Brazil, the Securities Exchange Commission (CVM) and the Private Insurance Superintendence (SUSEP). Pensions are supervised by the State Secretariat for Pension Funds (SPC) under the Ministry of Social Security. The CMN presided over by the Minister of Finance is the highest regulatory entity within the SFN. The CMN sets policies and regulations for financial institutions and markets based on recommendations from the Central Bank and other regulators. All SFN members, including the Central Bank and the CVM, must comply with CMN Resolutions. The Central Bank executes the CMN policies. It authorizes and supervises financial institutions, financial intermediaries, and auxiliary institutions. The Central Bank and the CVM jointly supervise investment banks, securities brokers and dealers, the clearing and settlement system and foreign investor portfolios. The Central Bank supervises prudential aspects and financial operations and CVM capital market operations. Stock and futures exchanges, mutual funds, securities issuers, broker/dealers, portfolio managers, and individuals acting in the securities business are supervised by the CVM.

Brazil participated in the WTO negotiations on financial services but had not yet ratified the Fifth Protocol on Financial Services.

Commercial presence restrictions apply to financial services. The Temporary Constitutional Provisions Act prohibits the establishment of new branches of financial institutions domiciled abroad until conditions for participation of foreign capital in financial institutions are determined. The installation of new foreign financial institutions is subject to approval by Presidential Decree, which gives way to Central Bank authorizations. This does not apply to authorizations resulting from international agreements, reciprocity, or as a matter of national interest. In practice, the establishment of new foreign financial institutions has been allowed, and 23% of assets are in the hands of foreign banks. Banks incorporated in Brazil may be 100% foreign owned. Foreign banks may engage only in the same activities as domestic banks.

With regard to insurance, Brazilian legislation was amended in 2007 to allow for the insurance to be taken out abroad under certain conditions.

2.2.2 Telecommunication

The sector's contribution to GDP was 3.3% in 2007. The total number of fixed telephone lines in service has remained fairly constant. In March 2008, fixed teledensity was 21.5 lines per 100 inhabitants. In contrast, the mobile telephony market has continued to grow rapidly. The number of mobile lines increased and penetration reached 69.5 mobile lines per 100 inhabitants in June 2008. In 2007, the number of internet users was estimated to be 45 million, and there were 7.7 million broadband connections (equivalent to 4.2 connections per 100 inhabitants).

Policy for the sector is formulated by the Secretary of Telecommunications in the Ministry of Communications (MC). The main policy objectives are - to provide telecom services at affordable tariffs

and prices, to implement universal services, to foster competition, and to promote the sector's development in accordance with the country's social development goals. The sector's main regulatory agency is the National Telecommunications Agency (ANATEL), which regulates and enforces all aspects of telecom services in Brazil. ANATEL is an administratively independent and financially autonomous regulatory agency, with a fixed mandate to implement the national policies set by the MC. The legislation establishes that ANATEL has the authority to deal with competition breaches that are not under the responsibility of the Administrative Council for Economic Defence (CADE).

Brazil's telecom sector was privatized in 1998 and further liberalized in 2001-02. In order to promote competition, the Brazilian territory was divided into geographical regions according to the type of service provided. In each region, the legislation established a duopoly between the privatized state monopoly and a "mirror" company in the case of fixed telephony, and between two licensed operators in the case of mobile telephony.

Brazil participated in the WTO negotiations on basic telecommunications, but it did not ratify the Fourth Protocol and has no GATS specific commitments in this area. Brazil has the right to limit new foreign participation in the telecom sector. However, in practice, any company established in Brazil, regardless of the origin of capital, has been able to participate in the sector. Foreign participation in paid cable television services is limited to 49% of voting shares. In certain cases, the use of Brazilian satellites is given priority over foreign satellites. Brazil's telecom regulatory structure follows international best practice, and the authorities aimed to improve it by introducing changes in areas like billing and pricing, interconnection fees, number portability, and universal service targets. Strengthening the regulatory agency would consolidate this enhancement process.

2.2.3 Transport

Civil Aviation: Just over 12.7% of Brazilian trade, by value, was moved via air cargo in 2007. Foreign companies had 62% of the international air cargo market and Brazilian companies the remainder. Market concentration remains high, with two companies controlling 92% of the domestic passenger market in 2007. There are 2,498 airports and airstrips in Brazil of which 1,759 are private and 739 state-owned.

The Ministry of Defence is responsible for the implementation of civil aviation policy. The Civil Aviation Council (CONAC), chaired by the Minister of Defence, is in charge of advising the President in matters of civil aviation policy formulation. It also establishes directives for Brazilian participation in international civil aviation conventions, agreements and treaties. The National Agency for Civil Aviation (Anac) is an independent body responsible for regulating and supervising civil aviation activities, granting authorization to construct and operate airports, and providing auxiliary services. The Brazilian Enterprise for Airport Infrastructure (INFRAERO) is responsible for the operation and administration of the 67 largest airports that provide public services and 80 air navigation support stations. The airports administered by INFRAERO are owned by the federal government solely or in association with the states and municipalities. The Airspace Control Department (DECEA), subordinated to the Aeronautics Command and the Ministry of Defence, has a *de jure* monopoly over navigation and air traffic control services.

Brazil has not scheduled any GATS specific commitments on air transport activities listed in the GATS Air Transport Annex. However, it scheduled specific commitments on auxiliary services to all modes of transport. These include cargo handling and storage and warehousing services, for which Brazil committed to allow commercial presence without restrictions. Concessions to provide passenger and merchandise transportation services within Brazil are granted only to companies with headquarters in Brazil, managed

exclusively by Brazilians, and in which four fifths of voting rights are in Brazilian hands. Non-voting shares can be issued to a maximum of twice the number of voting shares. Foreign airlines are automatically authorized to provide auxiliary services to their own aircraft as long as Brazilian airlines receive reciprocal treatment in their countries. Other operators, domestic or foreign, are required to establish company in Brazil in order to provide auxiliary services. Domestic and foreign companies may also provide aircraft maintenance services in Brazil. Companies require Brazilian maintenance-shop certification, for which they must meet a number of requirements, as well as a Certification of Approval of the Company issued by Anac. Brazilian airlines may also contract maintenance services abroad.

Sixty-eight bilateral agreements and four memoranda of understanding have been signed by Brazil, of which 49 are in force (end 2008). Most of these agreements are with Latin American and European countries. None of the bilateral agreements signed or in force can be considered an open skies agreement. However, the authorities note that the Government has been proposing more flexible agreements to its trading partners, particularly in South America. Brazil is also part of the Fortaleza Agreement on regional air transport services together with Argentina, Bolivia, Chile, Paraguay, Peru, and Uruguay. The parties are trying to extend the agreement to all South American countries.

Maritime Transport: The Brazilian sea and support navigation fleet comprises of some 1,100 vessels, with a total carriage capacity of 3.0 million deadweight tons (TPB). In 2007, Brazil's exports and imports of maritime transport services reached US\$3.3 billion and US\$5.6 billion respectively.

The National Waterways Transport Agency (ANTAQ), a public-law independent agency linked to the Ministry of Transport, is the regulatory agency for maritime services in Brazil. ANTAQ regulates the Port Authority (SPO), the federal waterway infrastructure, private-use terminals and shipping companies. ANTAQ establishes the rules for the use of shipping services, bestows grants for shipping companies, inspects shipping companies operating in Brazil, and authorizes contracts to charter foreign vessels, as well as government cargo.

In principle, only Brazilian flag vessels may engage in cabotage activities or in the transportation of public entities' cargoes, of goods benefiting from official fiscal or credit programmes, and of imports and exports of crude oil and of derivatives produced in Brazil. Brazilian flag vessels must be owned by Brazilian residents or by firms established in Brazil. Brazil requires reciprocity in international maritime transportation services.

Brazil listed exemptions to MFN treatment under the Annex on Article II Exemptions to the GATS Agreement regarding maritime transport agreements on cargo sharing and cargo reservations, and measures providing for access to cargo on a reciprocal basis. Brazil has bilateral agreements on cargo sharing or allocation preferences (including on government cargoes) with Argentina, Bulgaria, Chile, China, France, Germany, Poland, Portugal, Romania, Russia and Uruguay. With the exception of bilateral agreements and certain Brazilian-flag reservations for government-controlled cargoes, there are no institutional arrangements for cargo allocation. Brazil has an agreement with Argentina and Uruguay to facilitate cargo transportation. Brazil's bilateral agreements generally grant national treatment for ships from the other party with respect to port service prices and conditions. It also has a Multilateral Agreement for Inland Waterway Transportation in the Paraguay-Parana Rivers with Argentina, Bolivia, Paraguay and Uruguay.

Brazil is a signatory of, but not a party to, the UN Convention on a Code of Conduct on Liner Conferences. It has ratified a number of conventions through the International Maritime Organization (IMO).

Ports: There are 34 public ports in Brazil. The busiest in terms of cargo are Tubarão (Espírito Santo), Itaquí (Maranhão), Santos (São Paulo) and Itaguaí (Rio de Janeiro), which together account for over 56% of total cargo movements in Brazilian ports. Of the 34 public ports, 12 are managed by public enterprises, one by private enterprise, 15 by states and 5 by municipalities. There are also 134 private-use terminals. Private-use terminals accounted for some two thirds of cargo movements. Long-haul transportation represented 74% of cargo movement from public ports in 2007.

The system of port administration is decentralized, with ports operating under federal, state, municipal and private administration, and allows granting of concessions, even to foreign service providers. The Port Authority Council (CAP) regulates port operations together with various port authorities and participates in the determination of port service prices. Firms supplying auxiliary port services (container and depot services, maritime agencies, forwarding services, cargo handling, storage and warehousing, customs clearance, and vessel maintenance) must be established as legal entities in Brazil. Foreign capital may participate and receive national treatment in the provision of these services. Similarly, port services are available on a non-discriminatory basis. Since 2004, Brazil has been implementing federal security measures in Brazilian ports and terminals to comply with the IMO's International Ship and Port Facility Security Code (ISPS Code).

2.3 Trade in Intellectual Property

The Inter-ministerial Group on Intellectual Property (GIPI), under CAMEX created in August 2001, is responsible for promoting inter-ministerial coordination on matters concerning IP policy, for providing technical inputs on IP issues arising in bilateral, regional or multilateral negotiations, and for analysing proposals for IP laws and regulations.

The National Industrial Property Institute (INPI), an autonomous federal agency under MDIC, is responsible for implementing rules regulating industrial property in Brazil. INPI is also mandated to offer comments regarding the advisability of signing, ratifying and terminating conventions, treaties, accords and agreements on industrial property. It is responsible for granting or registering patents (inventions and utility models), industrial designs, marks, geographical indications, computer programs, technology transfer or franchise contracts. In 2007, INPI was appointed as International Searching Authority (ISA) and International Preliminary Examining Authority (IPEA) under the Patent Cooperation Treaty (PCT).

Brazil's legislation covers all the major aspects mentioned in the TRIPS Agreement. In some cases, including copyright and patents, Brazil grants rights that exceed the minimum terms laid down in the Agreement. Brazil is a member of the World Intellectual Property Organization (WIPO) and a signatory to a number of intellectual property rights (IPRs) agreements including the Berne Convention for the Protection of Literary and Artistic Works, the Paris Convention for the Protection of Industrial Property, the Patent Cooperation Treaty (PCT), the Patent Law Treaty (PLT), the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, the Geneva Convention for the Protection of Producers of Phonograms against Unauthorized Duplication of their Phonograms, the International Convention for the Protection of New Varieties of Plants (UPOV), the Madrid Agreement for the Repression of False or Deceptive Indications of Source on Goods, the Nairobi Treaty on the Protection of the Olympic Symbol, and the Strasbourg Agreement Concerning the International Patent Classification. Brazil has also made IPR commitments under bilateral or regional agreements entered into as a part of MERCOSUR. Brazil is a net importer of IP-intensive goods. Its royalties and license fee deficit was US\$1.94 billion in 2007.

2.3.1 Patents

Patents are granted in Brazil for any invention that is new, involves an inventive step, and is capable of industrial application. The term of protection is 20 years from the date of filing. Substances, matters, mixtures, and processes for their modification, biological processes and natural living materials are excluded from patenting. Compulsory licenses may be granted in cases of national emergency or in the public interest.

2.3.2 Copyright and Related Rights

Copyright and related rights cover text of literary, scientific or artistic works; musical compositions, audiovisual works; drawings, paintings; and photographic works. A copyright generally lasts for the life of the author plus 70 years as the general term of protection. However, terms may vary according to the type or nature of the work. Software copyright may be protected for 50 years from 1 January of the year following its publication or, if unavailable, its creation. Copyright Laws in Brazil also protect the work of foreigners residing outside Brazil.

2.3.3 Trademarks

Trademarks are visually perceptible sign that distinguishes or certifies a good or service. Trademarks are protected for 10 years, renewable for equal successive periods.

2.3.4 Industrial Designs

Protection of Industrial designs under the relevant Brazilian legislation last for 10 years from the date of filing. It can be extended for 3 successive 5-year periods. Industrial designs cannot be registered if they are considered to be contrary to morals and good customs or if it is an ordinary shape of an object determined essentially by technical or functional considerations.

2.3.5 Plant Varieties

New Plant Varieties are protected for 15 years from the grant of the certificate except for vines, fruit trees, forest trees and ornamental trees, including the mother graft thereof for which the term is 18 years. They may be subject to compulsory licences for three-year periods, subject to renewal.

2.3.6 Geographical Indications

The industrial Property Law and Act No. 75 of 2005 provide the legal basis for protection of geographical indications in Brazil.

2.3.7 Other IPs

Integrated Circuits: Layout of integrated circuits may be protected for 10 years from application. No protection may be provided for concepts, processes, systems or techniques on which the layout is based or of any information stored.

Trade Secrets: Undisclosed information related to pharmaceutical products for veterinary use, fertilizers, pesticides, their components and related products may be protected for up to 10 years. They may be subject to compulsory licences.

2.3.8 Enforcement of IPRs

The Industrial Property Law establishes civil and criminal offences and procedures for violation of patents, trademarks, industrial designs, geographical indications and unfair competition. Criminal procedures and penalties are available for infringements of all categories of intellectual property rights, except plant varieties protection. Patent law violation may constitute civil and criminal offences. Penalties of imprisonment generally vary from three months to a year, but may be increased in some cases. Amendments to the Criminal Code allowed for stiffer sanctions for copyright violations and to improve criminal procedures. The authorities note that because IPRs are private rights, they are not obliged to act ex-officio.

Enforcement activities have also been strengthened with the establishment of the National Council on Combating Piracy and Intellectual Property Crime (CNCP) in the Ministry of Justice in 2004 and the Contraband and Customs Evasion Repression Division (DIREP) in the Secretariat of Fiscal Revenue (SRF) in February 2005. A National Plan on Combating Piracy, consisting of 99 specific initiatives, was introduced in 2005.

2.4 Economic Policies affecting Trade

2.4.1 Monetary and Fiscal Policy

Monetary Policy: The National Monetary Council (CMN) has ultimate responsibility for formulating and conducting monetary policy. The Central Bank of Brazil (BCB), an autonomous federal institution, is in charge of implementing monetary policy and executing CMN policies by issuing Resolutions. The Monetary Policy Committee is responsible for setting the monetary policy stance, and establishing the target for the overnight inter-bank loans collateralized by government bonds (SELIC) interest rate, the BCB's principal monetary policy instrument.

The Central Bank of Brazil has defined controlling inflation and price stability as its main objectives. As such Brazil has been implementing an inflation-targeting framework for monetary policy since June 1999. Under this framework, annual inflation targets for the Broad Consumer Price Index (IPCA) are set by the CMN and announced by the Minister of Finance. Monetary policy decisions are based on inflation forecasts, conditional on alternative interest rate paths, and taking into account the state of the economy and the probable future development of exogenous variables.

Inflation estimates above the midpoint of the targeted range have prompted a tightening of monetary policy. Following a cumulative reduction of 850 bps in the policy interest rate from late 2005 to October 2007, the Central Bank (BCB) began tightening the monetary policy to rein in rising inflation and keep medium-term market inflation expectations well anchored to the target. Since April 2008, the interest rate has been raised by 250 basis points to 13.75% and market inflation expectations have begun to improve.

Fiscal Policy: Fiscal policy is implemented under the umbrella of the Fiscal Responsibility Law of 2000 which sets the rules for the management of public resources and establishes limits to federal, regional and local government expenditure.

The Government seeks to maintain fiscal discipline by setting annual targets for the primary surplus of the public sector. Targets are set in monetary terms taking into account existing macroeconomic conditions as well as medium-term prospects and debt dynamics. Strong revenue growth has resulted

in primary fiscal surpluses, which have somewhat exceeded primary targets, while current spending has also grown rapidly.

The authorities consider tax reform a priority and have identified a number of problems to be addressed, including high compliance costs, improving tax neutrality, reducing tax complexity, eliminating distortions and fiscal competition, abolishing cumulative taxes, harmonizing levels of different state value-added taxation, and reducing excessive taxation on payrolls. The authorities consider that Brazil currently has the fiscal space for tax reform. To this end, as on October 2008, a tax reform Bill was under examination by Congress.

2.4.2 Foreign Exchange and Balance of Payments

Foreign Exchange: Brazil has maintained a floating exchange rate regime since 1999. The Brazilian “Real” appreciated sharply (by over 60% in nominal terms) between 2004 and mid 2008 which contributed to keeping inflation under control. However, as a result of the effects of the financial crisis of autumn 2008, and despite strong macroeconomic and financial indicators, the Real depreciated since by some 30% with respect to the dollar and other major currencies in September-October 2008.

Foreign exchange regulations have been liberalized although the reforms have run short of achieving full convertibility of the Real. In March 2005, the foreign exchange markets were unified and the requirement for residents transferring foreign exchange abroad to do so through non-resident financial institutions accounts was done away with. Moreover, limits and restrictions for the purchase and sale of foreign exchange and for international transfers in Reais (R\$) were eliminated in August 2006. Foreign currency controls at the Central Bank on export proceeds and import payments were abolished. Exporters were allowed to keep up to 30% of their export proceeds abroad. This limit was increased to 100% in March 2008. In April 2007, regulations on investments abroad by investment funds were liberalized further.

Balance of Payments: Brazil posted a surplus in the current account of the balance of payments throughout 2003-07. The current account balance, however, deteriorated in the first half of 2008, when a deficit of US \$17 billion was posted corresponding to the continued increase in imports of goods and services not matched by the increase in exports. The current account surplus posted between 2003 and 2007, combined with a surplus in the capital and financial account since 2005, has allowed a sizeable accumulation of foreign exchange reserves, which exceeded US\$200 billion (12 months of imports of goods and services) in early 2008.

Brazil’s total external debt declined substantially between 2003 and 2005, but has grown, albeit moderately, thereafter. Most of the new debt, however, is private-sector debt. The share of public sector external debt has fallen from over half to a third of the total. The external debt/GDP ratio fell to an estimated 14.1% in the first half of 2008 from 38.8% in 2003, reflecting the appreciation of the Real and the resulting increase in the nominal value of GDP in terms of US dollars. Reduction in the debt and a significant increase in exports have also allowed the debt service/exports of goods and services ratio to fall considerably.

2.4.3 Foreign Investment Regime

FDI inflows have been particularly strong in financial services, commerce, and public utilities (electricity, gas, and water). Investments in industry have been mainly in the foods and beverages sector, as well as in basic metallurgy. The Netherlands was Brazil’s biggest investor with 21.3% of total FDI, followed by the United States (19.2%), the Cayman Islands, Spain, Germany, France and Luxembourg.

Foreign investment in Brazil is regulated by Foreign Capital Law, as amended. Constitutional amendments passed in 1995 eliminated the distinction between foreign and national capital. The Constitution now mandates the same legal treatment for national and foreign capital invested in Brazil under the same circumstances and prohibits all forms of discrimination not explicitly foreseen in the law.

The Federal Government has established programmes and mechanisms to facilitate foreign investment, especially in sectors that are seen as helping to improve Brazil's international competitiveness, spur long-term growth and achieve objectives of the Government's accelerated growth programme under the latest Multiyear Plan. Foreign and Brazilian investors receive the same treatment unless restrictions are imposed on foreign investment by a specific law. Currently, foreign participation is restricted in areas such as rural property, health, telecommunications, mass media, nuclear energy, hydraulic power generation, posts and telegraph, maritime and air transport.

Foreign investments are not subject to preliminary review or verification by the Central Bank. However, registration of FDI with the Central Bank continues to be mandatory through the Electronic Statement of Registration – Foreign Direct Investment Module (RDE-IED) of the Central Bank's Information System. Registration is required for remittances abroad, to repatriate invested capital, and to reinvest profits. Foreign capital in national currency must also be registered with the Central Bank of Brazil. No preliminary authorization is needed to invest in national currency, if registered in the RDE-IED. Foreign investors in financial institutions must obtain authorization, through a Presidential Decree, prior to registration in the RDE-IED. Foreign currency investments must be registered in the currency in which they were made. Foreign exchange regulations for financial institutions were unified in 2005.

Brazil has signed bilateral investment agreements with several countries, including MERCOSUR countries. However, none of these agreements are in force due to concerns expressed in Congress with respect to their constitutionality. Brazil is a signatory to the Multilateral Investment Guarantee Agency (MIGA) convention (since 1992) and joined the OECD Investment Committee in 1998 as an observer.

2.4.4 Pricing Policy

Brazil has no legislation empowering the Government to introduce price controls except in the case of medicines. Although, in general, prices are market-determined, minimum prices are used for a few agricultural products. Utilities' tariffs are generally regulated by the corresponding supervisory body. Intervention is generally limited to the fixing of maximum tariffs, especially for smaller consumers. Prices charged for some services, such as rail and road transport, are regulated, as are domestic air fares and electricity rates. Special provisions apply for medicines and almost 90% of medicines are subject to administered pricing. Brazil's Health Ministry has recently adopted a policy for setting mandatory minimum discount on high cost medicines used to treat chronic diseases.

2.4.5 Competition Policy

Legislation in Brazil prohibits any practice aimed at restricting, limiting or harming free competition; dominating the relevant market of goods or services; arbitrarily increasing profits; or abusing dominant market position. Horizontal and vertical practices are not prohibited per se, but due to their effect they are considered illegal only if they have anti-competitive effects or the potential for causing them. Anti-competitive practices are examined case-by-case, using a rule-of-reason approach.

Administration of competition policy is the responsibility of the three agencies that constitute the Brazilian Competition Policy System (BCPS) - the Administrative Council for Economic Defence (CADE), the Secretariat of Economic Law (SDE), and the Secretariat for Economic Monitoring (SEAE).

The SDE is the main investigative body with respect to competition policy issues. The SEAE, under the Ministry of Finance, may also start investigations ex officio or by request of a third party. Both bodies prepare non-binding reports used by CADE when judging the cases. CADE, an autonomous agency linked to the Ministry of Justice, has been functioning since 1962, and it acts as an administrative tribunal. CADE is the tribunal of last instance on competition policy issues and is responsible for the final decision regarding competition after having received non-binding opinions from the SEAE and SDE.

Anti-trust legislation applies to all sectors. CADE rules apply in general. Some sectors, considered by the Government as requiring specialized approach, are subject to specific legislation and are supervised by specialized regulatory agencies. These sectors include energy, telecommunications, oil and gas.

Brazilian legislation provides for the monitoring of all acts and contracts that may limit, or in any way harm competition or result in the dominance of relevant goods or services markets, including those expressly aimed at any type of economic concentration. CADE must analyze the effect of mergers and acquisitions ex-post, especially in view of potential damage or restriction to free competition.

During the last few years, a number of provisions of the Brazilian antitrust law have been modified with the purpose of strengthening enforcement of anti-competitive laws and improving the Brazilian Competition Policy System (BCPS). New draft competition policy legislation was analyzed by Congress in 2008 to enhance the CADE's powers and to introduce a system of pre-merger notifications. Thus, competent authorities have been granted new powers, especially during cartel investigations. Nowadays, merger control in Brazil is mandatory over an established threshold.

Brazil has subscribed to a number of international cooperation agreements on competition policy. In May 2008, agreements were in force with Argentina, Canada, Portugal, Russia and the United States. The agreements usually deal with inter-agency cooperation and conditions for exchange of information in investigations dealing with international cartels.

2.4.6 State Ownership and Privatization Policy

The Ministry of Planning, Budget and Management's Department of Coordination and Control of State Enterprises (DEST) is in charge of coordinating investments and expenditures of state-owned enterprises and monitoring their performance.

The State still controls a relatively large number of entities involved in the production of goods and services. In 2008, there were 135 majority government-owned enterprises covering a wide range of sectors - electricity, petroleum and petrochemicals, port services, transportation services, and health services. Twenty of these 135 government-owned enterprises operate abroad. Sixteen are linked to PETROBRÁS and four to Banco do Brasil S.A. State ownership of some firms reflects a policy decision that government control is appropriate to accomplish strategic objectives, or to offset market failures, or because the firms involved provide public services. State-trading enterprises are PETROBRÁS, BR Distribuidora, COBRA, INB, CONAB (Companhia Nacional de Abastecimento), CMB, and the energy company ELETROBRÁS.

The National Privatization Council (CND), created in 1995, is in charge of privatization. Since 2002, six state-owned enterprises operating in the financial sector have been privatized; one in the electrical sector was incorporated; and four were dissolved. Plans for future privatizations focus on granting concessions in electricity generation and transmission, oil exploration and transformation, and public services linked to modernization and expansion of railways, railroads, and port services.

3. Multilateral, Regional and Bilateral Agreements

Brazil is an original member of the WTO and grants at least MFN treatment to all its trading partners. The WTO remains at the centre of Brazil's trade policy and a reinforced multilateral trading system remains a Brazilian priority. Brazil conducts over three quarters of its trade with MFN trading partners. It participates actively in the WTO and is a leading voice among developing countries, particularly in the context of Doha Development Agenda (DDA). Brazil has presented, alone, as part of MERCOSUR, and together with other countries in groupings such as the G20, a number of proposals in the areas covered by the DDA.

Brazil is a founding member of the Southern Common Market (MERCOSUR). In addition, through its participation in MERCOSUR, Brazil has preferential trade agreements in force with Bolivia, Chile, Colombia, Ecuador, Venezuela, Cuba, Mexico and Peru. In the framework of the Latin American Integration Association (LAIA), Brazil has Economic Complementarity Agreements (ECAs) in force with Guyana and Surinam.

MERCOSUR is by far Brazil's most important preferential agreement in terms of value of trade, though only about 10% of Brazil's merchandise trade takes place with the three other MERCOSUR members (Argentina, Paraguay and Uruguay). The Common Market was established in November 1991 by the Treaty of Asunción. The Protocol of Ouro Preto, signed in December 1994, provides the institutional structure. The main decision-making body, the Council for the Common Market, comprises of Ministers of Foreign Affairs as well as Finance of the member countries. The Common Market Group, MERCOSUR's executive body, is in charge of supervising the application of the Treaty of Asunción, its protocols and the agreements signed within its framework. It is also responsible for negotiating with third countries, groups of countries and international organizations. The Common Market Group issues Resolutions that are mandatory for the member countries. Within the Common Market Group, there are a number of working groups, committees and ad-hoc groups. The Trade Commission is responsible for the application of common trade policy instruments, as well as for the follow-up and revision of related issues. The Protocol of Olivos, signed in February 2002 and in force since January 2004, replaced the Protocol of Brasilia as MERCOSUR's dispute settlement mechanism. The Protocol of Olivos provides for the choice of forum (MERCOSUR or WTO) for a dispute, recourse to mediation by the Group Common Market upon agreement by the parties, and a review procedure. The Protocol of Montevideo on Trade in Services in the MERCOSUR came into force in December 2005.

Brazil participates in the Global System of Trade Preferences among Developing Countries. Brazil grants preferences to participating countries on some 98 HS96 tariff headings. The preferences range from 10% to 50% and include agricultural products, fuels, chemical products, hides and skins, ferrous and steel products, among others.

Brazil is negotiating preferential trade agreements with Egypt, the Gulf Cooperation Council (GCC), Jordan, Morocco and Turkey.

MERCOSUR and India signed a framework trade agreement on 17 June 2003, which provided for the negotiation of a partial scope agreement signed on 25 January 2004 (annexes were signed on 19 March 2005). The agreement contains disciplines on safeguards, anti-dumping and countervailing measures, technical barriers to trade, and sanitary and phytosanitary measures, as well as dispute settlement procedures. The trade agreement covers 450 tariff lines for India and 453 lines for MERCOSUR, with reductions of between 10% and 20% on the MFN tariff. As in September 2008, the agreement was not yet in force, pending ratification by Uruguay.

MERCOSUR and South Africa signed a framework agreement in December 2000. Its main objective is the conclusion of a free-trade agreement. The other four member countries of the Southern African Customs Union (SACU) joined the negotiations in 2003 and a preferential trade agreement between MERCOSUR and SACU was concluded in April 2008.

A free-trade agreement between MERCOSUR and Israel was signed on 18 December 2007. The agreement establishes the gradual elimination of tariffs within a ten-year timeframe. The agreement has provisions on rules of origin, dispute settlement, safeguards, technical regulations, standards, conformity assessment procedures, sanitary and phytosanitary measures, technical cooperation and mutual assistance in customs matters.

Discussions on the possible conclusion of a MERCOSUR-CARICOM trade agreement have also started.

Trade negotiations between MERCOSUR and the European Union are based on the EU-MERCOSUR Interregional Framework Co-operation Agreement signed in December 1995. The negotiations were formally launched in 1999 and tariff and services negotiations began in July 2001. There have been a number of ministerial and senior official contacts but no formal resumption of negotiations.

Russia¹

1. Institutions

1.1 Institutional Framework for Trade Policies

The Ministry of Economic Development (MED) and the Ministry of Industry and Trade (MIT) are the federal executive bodies responsible for regulation of foreign trade in the Russian Federation.

1.2 Executive, Legislative and Judicial Branches of the Government

The President is the Head of State of the Russian Federation. State power is exercised by the President, the Federal Assembly (the Council of the Federation and the State Duma), the Government, and the courts of the Russian Federation. The competence of each body is defined in the Constitution.

Executive: Executive power is exercised by the Government of the Russian Federation. The Government oversees the implementation of trade, foreign, financial, credit and monetary policy, and the implementation of measures required to ensure the rule of law. Federal ministries, services, and agencies have been established with different spheres of competence. Federal ministries are responsible for formulating government policy, preparing legislation, and coordinating the activity of federal services and agencies under their authority. Federal services perform special functions related to national defence, internal and border security, and public safety. Federal agencies are responsible for managing State-owned property and law-enforcement.

Legislature: The Federal Assembly (the Parliament) is vested with legislative authority in the Russian Federation. It consists of two chambers - the Council of the Federation and the State Duma. The Council of the Federation includes representatives from the legislative and the executive. The State Duma consists of 450 deputies elected for a term of four years. Both chambers are involved in the adoption of federal laws, including the federal budget, taxes and duties, financial, and customs regulations, and ratification of or withdrawal from international treaties and agreements. The right of legislative initiative is vested with the President, the Members of the Council of the Federation, the Deputies of the State Duma, the Government, and the legislative bodies of the republics, regions, oblast, cities, and autonomous regions or areas of the Russian Federation. The right of legislative initiative is also vested, in matters under their competence, with the Constitutional Court, the Supreme Court, and the High Arbitration Court of the Russian Federation.

¹ This chapter has been compiled by Prof. Sajal Mathur, Meghna Dasgupta and Pallavi Sirohi at the Centre for WTO Studies, Indian Institute of Foreign Trade, New Delhi. Material for the chapter has been drawn from the Report of the Working Party on the Accession of the Russian Federation to the WTO (WT/ACC/RUS/70 and WT/MIN(11)/2).

International treaties form an integral part of the legal system of the Russian Federation. International treaties are concluded on behalf of the Russian Federation (inter-state treaties), on behalf of the Government (inter-governmental treaties), or on behalf of the bodies of executive power (treaties of inter-ministerial nature). Once a treaty enters into force, through ratification or otherwise, it is binding and enforceable throughout the entire territory of the Russian Federation (i.e. in republics, regions, oblast, cities, autonomous regions and areas). While an international treaty does not prevail over the Constitution or federal constitutional laws, in the event of a conflict, international treaties prevail over domestic federal laws adopted prior to or after entry into force of the treaty.

Judiciary: Judicial power is exclusively exercised by courts manned by judges, juries, and arbitrators duly appointed under constitutional, civil, administrative and criminal court procedures. The court system consists of the Constitutional Court, Federal Courts of General Jurisdiction, Federal Arbitration Courts and relevant courts in the “subjects” of the Russian Federation (i.e. in republics, regions, oblast, cities, autonomous regions and areas). Judgments, rulings, orders, summons and other lawful communications issued by the courts are binding upon persons, entities or governmental authorities throughout the whole territory of the Russian Federation.

The Office of the Public Prosecutor is responsible for ensuring overall observance of the Constitution and all legal acts by federal and regional governments. General authority of the High Courts (the Supreme Court and the High Arbitration Court of the Russian Federation) to give guidance to the subsidiary courts is stipulated in the Constitution. High Courts have the authority to issue guiding resolutions on the interpretation and application of legislation, and such resolutions are binding with respect to all lower courts of their respective judicial branch. Such resolutions can be adopted only by plenary sessions of the Supreme Court or the High Arbitration Court, or by a joint plenary session of those high courts. The plenary resolutions normally either interpret an important legislative act or provide guidelines for the decisions of the courts in a specific field of law. Judges applied interpretations of the plenary resolutions in all cases involving the subject matter of such resolutions.

Pending resolution of a matter by the appropriate court, the President has the right to suspend the operation of executive bodies in the “subjects” of the Russian Federation; if the President believes they were not in compliance with the Constitution, federal laws, and international commitments of the Russian Federation.

Decisions and actions (or inactions) of State bodies and local governments, public associations and officials can be appealed to the court with appropriate jurisdiction. An appeal can also be addressed to either the Government or a Government agency overseeing the administrative body responsible for the decision as the aggrieved party can decide whether to pursue an administrative review or court procedures. In case of judicial procedure, appeals of a decision of a lower court are also possible.

The EurAsian Economic Community (EurAsEC) Court and the national judicial system of the Russian Federation are independent. The Treaty provides that the highest judicial authority of the Russian Federation is authorized to apply to the EurAsEC Court for an opinion on interpretation of certain international treaties. The EurAsEC Court, however, does not serve as an appeals court from the national judicial system. But the Supreme Court of any of the constituent parties to the customs union (CU) can ask the EurAsEC Court to provide an advisory opinion in respect of implementation of the CU legal acts. Subsequently, the national Supreme Court can reflect this opinion in a Resolution of the Plenum which would be taken into account by all lower national courts.

2. Trade Policies

2.1 Trade in Goods

2.1.1 Import Policy

A) TARIFFS

Structure: Since 1 January 2010, the legal basis for the customs tariff of the Russian Federation has been the Agreement On Common Customs and Tariff Regulation between the Governments of the Republic of Belarus, the Republic of Kazakhstan and the Russian Federation (hereafter: Agreement on Customs Regulation), establishing the Common External Tariff (CET) of the CU. According to the Agreement on Customs Regulation, the Customs Union (CU) Commission can issue decisions determining CET tariff rates. The rates are based on negotiations among the CU Parties. The Government Commission for Economic Development and Integration is responsible for establishing the position of the Russian Federation on customs and tariff policies, including the development of proposals to set or change import duty rates.

The CET is based on the Harmonized Commodity Description and Coding System (HS2007). The CET nomenclature consists of 11,170 tariff lines. In 2010, the simple average MFN applied rate was 9.5% for all products, 13.5% for agricultural and 8.9% for non-agricultural goods, respectively. A majority of tariff lines (9,208) were subject to ad valorem duties, 216 tariff lines were subject to specific duties and the remaining 1,746 tariff lines were subject to combined (mixed) duties. The ad valorem tariff rates ranged from 0 to 30 per cent, except for meat, used vehicles, alcohol, furniture, caviar and sugar which were subject to higher duties. Products subject to specific duties were apples, chocolate, beer, and strong alcoholic beverages.

As part of its WTO accession commitments, Russia is set to bind its tariff average for all products at 7.8% (10.8% for agricultural and 7.3% for non-agricultural goods). The Russian Federation has committed to bind its tariffs for information technology products at zero and join the Information Technology Agreement (ITA) as a WTO member. The implementation period for Russia's tariff bindings is the longest for pork products i.e. upto 8 years, followed by a 7 years implementation period for motor cars, helicopters and civil aircraft. Other tariff bindings will apply from the date of accession or will be subject to shorter implementation periods.

Tariff quotas: Each year the CU Commission establishes the list of goods subject to Tariff Rate Quotas (TRQs), the volume of TRQs, and whether CU Bodies or national bodies acting under national law will be responsible for the administration of TRQs. The list of such goods for the year 2011 covered pork, poultry and bovine meat. The CU Commission also determined that in the year 2011, the TRQs in the CU Parties would be administered by the governments of the CU Parties in accordance with national legislation.

In the Russian Federation, TRQ allocations can be distributed amongst foreign-owned as well as Russian owned firms established as Russian legal entities, as well as natural persons registered as individual entrepreneurs. Ministry of Economic Development of the Russian Federation is the body responsible for the distribution of in quota volumes within the TRQs. The Ministry of Industry and Trade (MIT) of the Russian Federation is the body responsible for issuing non-automatic licenses for imports under TRQs. Since 2006, the auctioning method of distributing part of the TRQs volumes has not been used and as such the entirety of the volume of products subject to TRQs is distributed between importers in accordance with their historical shares in imports. A new entrant has to import meat under the out-of-quota duty rate, to be included later in the list of historical shares in imports.

Preferential rates: The Russian Federation applies the common CU Scheme of Tariff Preferences for developing and least-developed countries (CU GSP Scheme), which is based on the GSP scheme in force in the Russian Federation before 1 January 2010. Under the CU GSP Scheme, the import duties on products eligible for tariff preferences are at the level of 75 per cent of the MFN duty rates for goods originating from developing countries and duty free from least developed countries.

Exemptions: The Agreement on Customs Regulation provides a unified list of CU-wide exemptions from the customs tariff rates for the following categories of goods: (i) means of transport of international shipments of freight, baggage and passengers, and goods that maintain them; (ii) products of fishing operations owned or leased by entities and individuals of the CU Parties; (iii) goods imported for official or personal use by third countries' diplomats; (iv) currency and securities in accordance with the CU Parties' national legislation; (v) goods imported as humanitarian or disaster aid; (vi) goods imported as assistance (including technical assistance) and charity from third countries and international organizations; (vii) goods covered by import customs regimes which call for such duty exemption; (viii) goods imported by individuals for their own use, in accordance with customs regulation legislation; and (ix) goods subject to government expropriation by the CU Parties as provided for in their legislation. The Agreement on Customs Regulation also provides for tariff exemptions in the field of research and exploration of space and spacecraft. Upon accession, any tariff exemption for space equipment will be provided on an MFN basis.

In addition, tariff exemptions (or lower duties) could be established for goods imported as a contribution to the charter capital of an investment approved by national legislation. Pursuant to the Protocol on Exceptions from the CET, the CU Commission could decide that a lower or higher duty rate than the CET will be applied by one of the CU Parties, if one of the following exceptional circumstances exists (i) such a measure is a necessary condition for the development of industries of that CU Party; (ii) the CU Party concerned is facing an acute shortage of goods; (iii) such a measure is necessary to address the socially relevant needs of the population of the concerned CU Party; or (iv) to address the needs of production, which depends largely on traditional imports from third countries and cannot be implemented through the production of this or similar goods in the CU.

Goods imported to be used in work and operations specified in Product Sharing Agreements (PSAs) were exempted from the import tariff, pursuant to the Tax Code of the Russian Federation which has remained in effect until the CU Commission issues a Decision in respect of goods imported under PSAs.

B) INTERNAL TAXES ON IMPORTS

Excise taxes: Excise tax rates for imports and domestic products are identical. As per the Tax Code of the Russian Federation, excise taxes are applied on the basis of specific rates for all types of excisable goods, excluding certain cigarette products. For tobacco products combined tax rates are applied, consisting of both a specific and an ad valorem tax rate. Excise taxes are levied in a uniform manner on all imports based on the country of destination principle. If excisable goods are placed under customs treatments of transit, bonded warehouse, re export, processing under customs control, free customs area, destruction or refusal in favour of the State, excise tax do not have to be paid.

Differentiation of excise tax rates apply to specific categories of alcoholic beverages (beer, wine and spirits) based on the principle of harmonizing the applied rate with the concentration of alcohol in the beverages (e.g. fortified wine being subject to higher rates than wine). The excise tax on automobiles is applied on the basis of engine capacity. For importing motorcars, the rates vary with the age of the cars.

Value Added Tax: VAT is applied in a uniform manner to all domestic and imported products on the basis of the country of destination principle. VAT is currently levied at a single rate of 18 per cent for most products. However, for some goods, the rates are 0 per cent and 10 per cent including certain medical equipment and products, foodstuffs and children's items. All these rates and exemptions are applied in a non-discriminatory manner to domestic and imported goods.

Goods placed under the specified customs regimes of transit; customs warehouse; re-export; duty free shop; processing under customs control; free customs zone; free warehouse; destruction and refusal in favor of the state, and movement of stores are exempt from VAT. The tax base for the imposition of VAT includes excise taxes, if any. For imported goods, the tax base for the imposition of the VAT also includes customs duties.

C) QUANTITATIVE RESTRICTIONS

Russia currently applies quantitative import restrictions on a CU-wide basis pursuant to the agreements established in the Customs Union with Kazakhstan and Belarus. As a consequence, decisions to impose non-tariff measures on third-country imports into the CU are taken by the CU Commission. Non-tariff measures include quantitative restrictions, exclusive import or export licenses, non-automatic or automatic licenses (permits).

Prohibitions and Quotas: Import restrictions are applied pursuant to the CU Agreement on Non-Tariff Regulation, federal laws and international treaties of the Russian Federation, if those measures (i) are necessary to maintain public morals or law and order; (ii) are necessary to protect the life or health of citizens, environment, life or health of animals and plants; (iii) are related to the import or export of gold or silver; (iv) are applied to protect cultural valuables and heritage; (v) are required to prevent the exhaustion of irreplaceable natural resources; (vi) are linked to a limitation of export of domestic raw materials; (vii) are essential to acquire or distribute goods in case of their general or local shortage; (viii) are essential to comply with the international obligations; (ix) are essential to ensure the defence of the country and security of the state; (x) are necessary to ensure the observance of regulatory legal acts related to the application of the customs law, preservation of the environment, protection of intellectual property and other legal acts; and (xi) are to protect the external financial situation and safeguard the balance of payments.

In addition, quantitative import restrictions could be introduced on agricultural or fishery products imported into the CU in accordance with Article XI:2 of the GATT 1994. A CU Party can also unilaterally and temporarily impose a non-tariff measure if such a measure is aimed at (i) the observance of public morality, law and order; (ii) defence and security; (iii) protection of life or health of the citizens, environment, life or health of animals and plants; (iv) protection of cultural values and cultural heritage; (v) protection of intellectual property; (vi) prevention of the exhaustion of irreplaceable natural resources; (vii) prevention or reduction of the critical shortage in the domestic market of food or other goods that were essential for the domestic market; or (viii) protection of the external financial position and safeguarding the balance of payments. The CU Agreement on Measures Concerning Foreign Trade provides further grounds to introduce unilateral non-tariff measures. Such unilateral measures can be imposed for only six months.

In the Russian Federation, import prohibitions exist on certain ozone depleting substances, hazardous wastes, printed or audio-visual material that are defamatory and not in national interests, plant protection chemicals, weapons, and implements for depletion of biological resources.

Poultry, beef and pork meat, and products thereof, are subject to quotas for the purpose of ensuring the conditions for the stable development of the Russian production. The Government accordingly approved the list of goods and volumes of their importation into the Russian Federation in 2010-2012.

The TRQ on raw sugar was eliminated in 2003.

Licensing: The CU Commission approved the Common List of Goods subject to Non-Tariff Measures which came into force on 1 January 2010. According to the CU Agreement on Non-Tariff Regulation, licensing is required (i) in the event of temporary quantitative restrictions on imports of certain types of goods; (ii) to regulate the importation of certain goods for reasons of national security, health, safety or environmental protection; (iii) to grant an exclusive right to import certain goods; or, (iv) to carry out international obligations. The authorized body of each CU Party is responsible for issuing and monitoring the implementation of non-automatic licenses and/or automatic licenses (permits).

In the Russian Federation, import licenses are generally issued by the Ministry of Industry and Trade, based on “conclusions” issued by the relevant competent authorities following an “expert examination” of the good. In the case of weapons, ammunitions and dual-purpose goods, licenses are issued by the Ministry of Defence. The licensing regime is applied uniformly to imports from all non-CU countries, including imports from CIS countries without discrimination as regards to the country of origin. An import license or permit authorizes the licensee or permit holder to import the relevant good into only the CU Party that issues the license or permit; the license or permit does not authorize the licensee or permit holder to import the relevant good into other CU Parties. The license or permit does, however, give the licensee/permit holder the right to transit the good through the territory of the other CU.

The Ministry of Industry and Trade issues three types of licenses - one time, general, and exclusive. One time licenses are issued to applicants on the basis of a foreign trade contract relating to goods subject to import licensing. One time and general licenses are issued to applicants upon decision of the authorized body. Both types of licenses grant the right to import the goods subject to licensing in the quantity determined by the license and are valid for one year. Exclusive licenses give the applicant the exclusive right to import certain types of goods. The goods subject to exclusive licenses are decided by the CU Commission, but until now exclusive import licenses have not been issued in the Russian Federation. Decisions and actions of the authorized body may be appealed.

As a result of the CU's Common List, wines, vitamins and radio-electronic products were added to the list of products subject to non-tariff measures in the Russian Federation. Besides these, licensing requirements are applicable in the case of pharmaceuticals, ozone destroying substances, plant protection chemicals, hazardous wastes, weapons and encryption devices. Imports into the Russian Federation of certain goods subject to veterinary controls are required to have an import permit. As part of its WTO accession package, the Russian Federation committed that no licences will be required for imports of certain encryption technology products -electronic digital signature devices, personal smart-cards and wireless radio equipment.

D) STANDARDS

- TECHNICAL BARRIERS TO TRADE

Legal and Institutional Framework: The legal framework for technical regulations, standards and conformity assessment systems in Russia is governed by international agreements of the EurAsEC and of the CU and by other EurAsEC and CU Acts. These replaced the Russian Federal Law No. 184-FZ

which had hitherto served as the overall legal framework for technical regulations. Certain provisions of Federal Law No. 184-FZ remain in effect, however to the extent that they do not conflict with CU and EurAsEC Agreements and EurAsEC and CU Acts, including CU Commission Decisions. In addition some mandatory requirements not included under the Federal Law, are laid out in domestic laws of the Russian Federation (e.g. safety to humans using telecommunications or nuclear equipment). As part of its membership package, the Russian Federation has undertaken a commitment that all its legislation related to technical regulations, standards and conformity assessment procedures will be in conformity with the WTO TBT Agreement upon accession to the WTO.

The development and implementation of TBT measures for the CU countries is carried out by the Coordination Committee on Technical Regulation, Sanitary and Phytosanitary Measures along with the CU Commission Secretariat. For EurAsEC, this work is undertaken by the Commission for Technical Regulation and Sanitary, Veterinary and Phytosanitary Measures in Trade of the EurAsEC Integration Committee (hereafter the EurAsEC Commission for Technical Regulation) and the EurAsEC Interstate Council.

The Ministry of Industry and Trade (MIT) is the national executive authority in the Russian Federation responsible for the development and elaboration of national policy in the area of technical regulation, including standardization, conformity assessment procedures (including testing and certification) and for coordinating the development of technical regulations. Ministry of Economic Development (MED) is the national executive authority in the Russian Federation responsible for the development, elaboration of national policy and legal regulation in the area of accreditation.

Rosstandart is the national authorised body on standardization of the Russian Federation authorised, inter alia, to carry out expert assessment of national standards; publish notifications about development of drafts of technical regulations and national standards and the final technical regulations that comes into being; develop a programme for the elaboration and approval of national standards; execute the functions of the national body on standardization; and maintain the national information database containing technical regulations and standards. It is also the State body responsible for accreditation of the GOST conformity assessment system which is the most widely applicable system in the Russian Federation. There are 15 other Federal Ministries and agencies responsible for accreditation. A single national accreditation body under the authority and control of MED is to be established which will replace both Rosstandart and the other existing accreditation bodies in the Russian Federation. The Rosstandart serves as a Single Enquiry Point, as contemplated under the WTO TBT Agreement and the WTO SPS Agreement, providing access to Russian regulations, standards, rules, and conformity assessment procedures, as well as drafts of respective documents. The Sub-Commission on Technical Regulation of the Governmental Commission on Economic Development and Integration is an inter-ministerial body, which is responsible for coordination of the Federal Executive bodies of the Russian Federation regarding implementation of policy in the field of technical regulation.

Technical Regulations: Certain priority technical regulations have been identified by the CU Commission (47 technical regulations) and the EurAsEC Interstate Council (35 technical regulations) with a view to their development and adoption. These technical regulations are to comply with the principles of the WTO TBT Agreement, relating in particular to transparency, predictability, and avoiding unnecessary obstacles to trade. Relevant international standards, and other documents (i.e. rules, directives and recommendations or any other documents accepted by international standardizing organizations) will be used as the basis for elaborating the EurAsEC and CU technical regulations, except for cases where such documents are absent, or do not conform with the purposes of the technical regulations of the Customs Union, in particular, due to climatic or geographical factors or technological and other particularities.

Draft technical regulations are developed in the participating countries including the Russian Federation using internal procedures before being proposed by the authorised national bodies in the field of technical regulation to the designated EurAsEC or CU bodies for harmonization, review, and adoption as provided for in the relevant international agreements or CU decisions. In the case of EurAsEC, the EurAsEC Commission for Technical Regulation after collecting public comments on the draft technical regulations, forwards it to the EurAsEC Interstate Council for adoption as an Agreement. In the CU framework, this coordination and transparency role is fulfilled by the Coordination Committee on Technical Regulation, Sanitary and Phytosanitary Measures (hereafter the CU Coordination Committee) while the CU Commission adopts these draft technical regulations as an Agreement.

In addition to technical regulations, there exist a host of Russian national standards containing mandatory requirements. Federal Law No. 184-FZ required replacement of these national standards with technical regulations prior to 1 July 2010. While that deadline is no longer operational, Federal Law No. 184-FZ provides that national standards applied prior to 1 July 2003 containing mandatory requirements will stay in force only to the extent that they do not contradict the principles set-out in the Law, and which comply with the principles of the WTO TBT Agreement. The remaining national standards containing mandatory requirements will be eventually replaced by EurAsEC and CU technical regulations as part of the CU technical regulation harmonization process.

Along with the national standards applied prior to 1 July 2003 containing mandatory requirements that are in force, there are still a few areas wherein mandatory requirements are laid out in the Russian domestic laws (other than Federal Law No. 184-FZ). For example, there are exemptions concerning requirements connected with the functioning of the national communications network and the use of the radio frequency spectrum. In the case of telecommunications equipment, the Russian Federation has committed to limit the mandatory requirements for equipment used in public networks to the technical regulations adopted consistently with the Eurasian Economic Community and Custom Union agreements.

As part of its WTO accession terms, the Russian Federation is committed to review not only its lists of products subject to obligatory certification or declaration of conformity, but all the technical regulations applied on the territory of the Russian Federation, including CU and EurAsEC technical regulations, on an ongoing basis to ensure that they remain necessary to achieve the desired legitimate objective. Technical regulations are not to be maintained if the circumstances or objectives giving rise to their adoption no longer exist or if the changed circumstances or objectives can be addressed in a less-restrictive manner.

Standards: Voluntary standards within the meaning of the WTO TBT Agreement are used in the Russian Federation. These include national standards; rules, norms and recommendations; classifications applied in accordance with the established procedure; standards adopted by organizations (standards of enterprises, scientific, technical, engineering institutions and other societies); sets of rules, (voluntary documents, elaborated and approved by the Federal Executive bodies related to the standardization area); international standards; regional standards or regional sets of rules; standards or sets of rules of foreign states registered with the Federal Information Fund of Technical Regulations and Standards; and duly certified Russian translations of international standards, regional standards, regional sets of rules, standards of foreign states and sets of rules of foreign states accepted by Rosstandart.

Currently about 47 per cent of national standards in force are harmonised with international standards. Both Federal Law and the CU Agreement on Uniform Technical Regulation Principles establish the application of international standards as the basis for elaboration of national standards, except when

such standards are not relevant, including due to the effects of climatic and geographic factors or technological considerations.

Conformity Assessment and Accreditation: Conformity assessment procedures (including the criteria by which the Russian Federation designated or otherwise recognised conformity assessment bodies and their results) are established according to the following principles: non-discrimination between domestic and imported products and among suppliers of imported products, both in terms of procedures and in terms of fees; proportionality of procedures to the level of risk; transparency and predictability of the procedures; and protection of confidentiality.

Recognition of conformity assessment results is in accordance with international treaties of the Russian Federation and other international arrangements. Documents confirming compliance and reports of research (tests) and measurement of products, obtained outside the Russian Federation, are recognised in accordance with the international treaties and other arrangements. Currently, the Russian Accreditation Body Association of Analytical Centres “Analitica” (AAC Analitica) is a member of the International Laboratory Accreditation Cooperation (ILAC) and a signatory to the ILAC Arrangement with regard to standards. Once the single national accreditation body of the Russian Federation is established, as expected by end June 2012, the newly established body will join ILAC which will facilitate recognition of the results of the assessments of the laboratories and assessment bodies accredited by ILAC Members. Prior to this, the Russian Federation is ready to conclude bilateral and multilateral arrangements with interested WTO Members, including recognition of results of activity of third country certification bodies. The WTO Agreement is recognised to be an “international treaty” by the Russian Federation and consequently the Russian Federation from the date of its accession to the WTO, has to ensure, whenever possible, that results of conformity assessment procedures of conformity assessment bodies located in other WTO Members are accepted, provided that the Russian Federation is satisfied that those procedures offered an assurance of conformity with applicable technical regulations or standards equivalent to the own procedures of the Russian Federation.

Federal Law No. 184-FZ provides that until corresponding technical regulations come into effect, the Government will approve a unified list of products that will be subject to obligatory certification, and a unified list of products, that will be subject to declaration of conformity, and will supplement these lists every year. These lists will form the basis for the contribution of the Russian Federation to a CU Unified List of Products for which it is possible to use a certificate or to register a declaration of conformity assessment. During the transition phase, only producers or persons resident in one of the CU Parties representing a foreign producer can declare conformity on the basis of its own proofs (i.e., the declaration of conformity of a manufacturer or supplier). Importers can do so for foreign goods they import into the Russian Federation based on a contract for that importation. In respect of mandatory certification, Federal Law No. 184-FZ provides that certification schemes applied for certification of products is determined in the relevant technical regulations and not by the certification authority. The duration of validity of conformity certificates and conformity declarations would be established in the relevant technical regulation.

- SANITARY AND PHYTOSANITARY MEASURES

Legislative and institutional framework: The legislative basis for the regulation of the sanitary and phytosanitary (SPS) regime in the Russian Federation is established by the EurAsEC and CU Agreements and the CU Commission Decisions. Federal laws remain in effect to the extent that they do not contradict the CU Agreements and CU Commission Decisions. Currently the Russian Federation has new draft laws on veterinary practice and on plant quarantine at the national level. As part of its accession package,

the Russian Federation committed to develop and apply all SPS measures in accordance with the WTO SPS Agreement from the date of WTO membership.

The development and implementation of SPS measures for CU Parties is coordinated by the CU Commission. The CU Commission has laid out common general principles and adopts common safety requirements for goods marketed within the territory of the Customs Union. These safety requirements cover sanitary and epidemiological, veterinary, and phytosanitary regulations that govern production and trade of the CU. The CU Commission has established a Coordination Committee on Technical Regulation and Application of Sanitary, Veterinary and Phytosanitary Measures (Coordination Committee) to ensure implementation of CU Agreements and CU Acts in the SPS Agreement. The Coordination Committee in turn has established a senior level Expert Group on “Technical Regulation and Application of SPS measures” that meet as needed and comprise of six expert groups that focus on different SPS issues. Specific product requirements for veterinary and sanitary controls are established by the CU Commission; however, national bodies establish specific phytosanitary requirements.

Within the Russian Federation, both the Ministry of Health (MoH) and the Ministry of Agriculture (MoA) are responsible for ensuring that SPS measures adopted at the national level complied with the corresponding SPS norms adopted at the CU level. Rosselkhoz nadzor, the Federal Service for Veterinary and Phytosanitary Surveillance, is under the jurisdiction of the MoA and is responsible for veterinary (veterinary-sanitary) supervision (control) of goods which may be dangerous for animal health. Rospotrebnadzor, the Federal Supervisory Service for Protection of Customers Rights and Human Well-Being is under the jurisdiction of MoH and is responsible for control of safety of food products and securing human health. Rospotrebnadzor and territorial bodies in regions of the Russian Federation are authorised to suspend or ban the production, storage, transportation, circulation and importation of food commodities, food additives, food products, water and other materials or products in contact with these goods.

With regard to the national enquiry point on SPS, the Russian Information Centre of Standardisation, Certification and to Overcoming of Technical Barriers in Trade (RIC WTO TBT/SPS) supplies domestic authorities and businesses, foreign trade partners, and the WTO Secretariat with Russian rules, directives, and regulations relating to TBT and SPS.

The Russian Federation is a party to the International Plant Protection Convention (IPPC), and a member of the FAO/WHO Codex Alimentarius Commission and the World Animal Health Organization (OIE). In addition, Russia is currently party to 32 bilateral and multilateral inter governmental agreements with third countries on food hygiene, safety, sanitary or phytosanitary measures.

SPS Measures: Draft technical regulations or mandatory measures related to SPS, are developed in the participating countries using internal procedures. The authorised national bodies i.e. the MoH and MoA propose the draft SPS technical regulations or measures to the designated EurAsEC or CU bodies for harmonization, review, and adoption as provided in the relevant international agreements or CU decisions. For EurAsEC, the designated body is the Commission for Technical Regulation and Sanitary, Veterinary and Phytosanitary Measures in Trade of the EurAsEC Integration Committee (the EurAsEC Commission for Technical Regulation). The EurAsEC Commission for Technical Regulation, after collecting public comments on the draft technical regulation, sends it to the EurAsEC Interstate Council for adoption as an Agreement. In the CU framework, this role of coordination and transparency is fulfilled by the Coordination Committee on Technical Regulation (the CU Coordination Committee) which with the assistance of the CU Commission Secretariat analyses and prepares recommendations on the draft technical regulations before forwarding the proposals to the CU Commission for adoption through decisions.

A schedule outlining the development of priority SPS measures or technical regulations of the CU has been adopted. Under this schedule, SPS technical regulations governing grain, juice products, oil and fat products, and milk and milk products, food safety and labelling of food products, meat and meat products, the safety of dietetic food and special food and healthy and dietary meals, on safety of food supplements, on safety of feed stuffs and feed additives, fish and fish products, tobacco products and the safety of alcoholic beverages were included. A schedule outlining the development of EurAsEC priority technical regulations has also been adopted. Included in this schedule were SPS technical regulations on grain, food safety, labelling of food products, tobacco products, juice products, oil and fat products, milk and milk products, honey and products of bee-farming, and on the safety of bottled water. A choice has been made to focus on the adoption of CU technical regulations, since the CU procedure for adoption of technical regulations was faster. These CU technical regulations will be a basis to propose technical regulations covering these products at EurAsEC level. However, the EurAsEC Technical Regulations supersedes Technical Regulations of the Customs Union.

National SPS measures in place, when in conflict with CU SPS acts, will not apply to the extent of the conflict. Moreover, the Russian Federation is to cease adopting amendments of national SPS measures on matters covered by the CU acts except for the purpose of aligning national measures with CU acts. Until that time, a transitional period allows the adoption of national measures. These national measures are applicable only in so far as they do not contradict CU acts.

SPS measures, applied in the Russian Federation, are required to be based on scientific risk assessment. Moreover, in the absence of a scientific basis of risk to the life or health of people, animals or plants, the relevant international standards, guidelines and recommendations set out by the World Animal Health Organisation (OIE), the International Plant Protection Convention (IPPC), and the Codex Alimentarius (Codex) will apply in the CU territory so as to ensure compliance with the requirements of the WTO SPS Agreement. In cases where the CU Commission or the national authorities had not established mandatory requirements in the veterinary, or phytosanitary, or sanitary epidemiological and hygienic sphere, the CU Parties apply standards, recommendations and guidelines of the OIE, IPPC, and the Codex respectively. Similarly, if CU veterinary, phytosanitary and sanitary-epidemiological and hygienic mandatory requirements in effect in the territory of the CU are more stringent than relevant international standards, guidelines and recommendations, in the absence of scientific justification of risk to human, animal, or plant life or health, relevant international standards, guidelines, and recommendations, or parts thereof, are applied. In order to ensure compliance with the principles of equalization and regionalization as laid out in the WTO SPS regime, the Russian Federation is committed to follow the relevant standards, guidelines and recommendation laid down by international organizations like the OIE, IPPC, Codex and the WTO itself.

Veterinary measures: Goods included in the list of goods subject to veterinary control can be subject to any three of the following requirements (a) the exporting establishment has to be included in the Registry of Establishments authorised to export to the CU; (b) the good has to be accompanied by a veterinary certificate; and (c) an import permit has to be issued for importation of goods from an establishment in the Registry. As per an amendment to the governing legislation, certain goods are not subject to any of the three forms of veterinary requirements when they were destined for the Russian Federation. New categories of goods can be added to the list of goods subject to veterinary control or the form of veterinary control applied to categories of goods on the list may be modified if such goods are in compliance with the provisions of WTO SPS Agreement.

Establishments on a third country's territory can be included in the Common Registry of Establishments (i) at the request of the competent authorities of the third country, and following a systems audit to

determine if the official system of supervision of that third country is capable of providing a level of protection at least equivalent to that provided by CU requirements;(ii) in case the CU provides a third country the authority to list establishments located on its territory in the Registry, based on guarantees, the CU Parties can conduct joint inspections of a representative percentage of establishments to check and confirm the operation of the third country's official system of supervision that was the basis for the guarantees; (iii) Finally, establishments can be included on the Register based on a joint inspection of the establishment by all CU parties. Removal of an establishment from the Registry (de-listing) can occur in only two cases: at the request of the relevant establishment, and at the request of the competent authority of the third country. Instead of de-listing an establishment, the CU can, in line with international standards or based on risk assessment, temporarily suspend imports from the establishment and/or subject imports from that establishment to intensified monitoring. Except in case of serious risks of animal or human health, Rosselkhoznadzor does not suspend imports from establishments based on the results of on-site inspection before it has given the exporting country the opportunity to propose corrective measures. The preliminary report is sent to the competent authority of the exporting country for comments before the report is finalised.

Imports into the Russian Federation of certain goods subject to veterinary controls are required to have an import permit issued from Rosselkhoznadzor through the ARGUS information system. This permit is valid for a calendar year and for a certain quantity. The permit is issued taking into account the epizootic situation of the place of production and in cases where there is a registry of enterprises authorised to export the relevant goods to the territory of the CU, when the enterprise is on that list of enterprises. At present CU Parties are creating a common information data system of external and internal trade of the CU Parties which will be used for issuance of veterinary import permits and accounting for commodities subject to veterinary control (surveillance). Until then, the CU Parties will follow the procedures specified in their respective national legislation.

A new administrative regulation on issuing permits provides for a special form of permit (provisionally named a general permit or Form 1) at the national level which is to be introduced. The administrative regulation also provides for decreasing the number of products that require the registration of permits, including criteria and procedures for suspending and cancelling a previously issued permit. Upon Russia's accession to the WTO, the reasons for suspension, cancellation, or refusal of an import permit are to be consistent with international standards, recommendations, and guidelines as well as the WTO SPS Agreement.

Aside from import permits, 40 CU common forms of veterinary certificates for import into the CU territory from any third country have been adopted by CU Commission Decision. Veterinary certificates between exporting countries and the Russian Federation finalized prior to 1 July 2010 will be valid at least until 1 January 2013. Furthermore, the competent authorities of the CU Parties can negotiate and agree to veterinary certificates with requirements that differ from the CU common form and specific CU Common Requirements, if an exporting country makes a substantiated request to negotiate such a veterinary export certificate prior to 1 January 2013. Currently, amendments of the common veterinary requirements and the common forms of certificates are being prepared in parallel so as to ensure compatibility with international standards, recommendations and guidelines in particular OIE standards.

Phytosanitary measures: Phytosanitary measures apply only to the extent necessary to prevent importation and acclimatization of quarantine objects in the Russian Federation. These are developed and implemented at the national level as CU does not have common phytosanitary requirements. The existing list of products under quarantine (regulated goods) that are subject to quarantine phytosanitary control at the customs border of the CU and the territory of the CU has been divided into two groups:

(i) regulated products of high pest risk; and (ii) regulated products of low pest risk. Imports of regulated products of high pest risk need to be accompanied by a phytosanitary certificate. A procedure for risk assessment is being developed with the new draft Law "On Plant Quarantine". An accreditation body to accredit laboratories and these requirements is being developed by MOA.

In the case of goods from areas affected by certain quarantine pests, the Russian Federation is ready to assess mitigation measures proposed by exporting countries within a reasonable period of time, as set-out in international standards, guidelines and recommendations. As part of its accession package to the WTO, temporary phytosanitary measures implemented by the Russian Federation are to be applied in accordance with international standards. In addition, from the date of accession of the Russian Federation to the WTO, if the phytosanitary requirements of the Russian Federation results in a higher level of protection than that achieved by measures based on relevant international standards, recommendations or guidelines, the Russian Federation will apply its phytosanitary requirements in accordance with the WTO SPS Agreement. Rosselkhozadzor will provide explanations for such phytosanitary measure, including the relevant risk assessment, on a bilateral basis following receipt of a request from an exporting Member.

Food safety and protection of Human Health: Products produced in, or imported into the customs territory of the CU for distribution to the population, use in industry, agriculture, civil construction development, transportation with direct human involvement, or for private and household use, have to conform to the relevant requirements and regulations. Conformity to the safety requirements for a certain groups of goods is confirmed by a State Registration certificate. The State Registration procedure applies to mineral water, tonic beverages, alcoholic beverages; specialised foodstuffs; biologically active dietary supplements and its raw materials; organic products; foodstuffs derived from GMO and GMO; food additives and flavourings; and food contact material, some non-Food Products, such as disinfectants, cosmetics or hazardous chemical substances and in the case of new products i.e. if the goods are manufactured for the first time on the territory of the CU or imported for the first time into the CU territory. The State Registration certificate issued for a given type of product is valid for exports from the relevant country without time limitation and is valid throughout the entire territory of the CU. Applications for evaluations are submitted to Rospotrebnadzor or its territorial bodies. State Registration certificates are valid throughout the entire territory of the CU.

While higher risk products are subject to State Registration, products of lower risk are subject to "confirmation of conformity." "Confirmation of conformity" encompasses multiple means of establishing that a product meets CU requirements. The type of confirmation required, depends on the degree of responsibility of the product in economic activity (level of risk). They are provided either through a certificate of conformity from third-parties, or a declaration of conformity. State surveillance is also conducted. In future, only one form of confirmation will be required for a product and this will be specified in the relevant technical regulations. The declaration of conformity is provided upon assessment by the certification bodies and testing laboratories (centres) included into the Single Register of Certification Bodies and Testing Laboratories (centres) of the CU.

Some commodities are also subject to mandatory confirmation of conformity to CU requirements. These include food and feedstuffs such as (i) canned food products (fish, caviar, seafood); (ii) coffee and coffee products; (iii) tea; (iv) sugar (cane and beet); (v) spices; and (vi) feeds for animals, including formula feeds, pre-mixes, protein feed additives, such as oilseeds meal and cake, fish meal, protein vitamin additives, dry milk for feeding and dry milk replacements. With regard to feedstuffs, self-declaration of conformity can be made on the basis of an assessment provided by the producer. Foreign manufacturers, located outside the territory of the CU, can apply for a certificate/declaration of conformity that is issued in accordance with national legislation of a CU Party or for a CU uniform certificate of conformity.

E) CUSTOMS MEASURES

The Russian Federation is an active participant at the World Customs Organization (WCO) and is a party to the International Convention on the Harmonized Commodity Description and Coding System, the Customs Cooperation Council, the ATA Carnet, the Nairobi and Istanbul Conventions and the International Convention on the Simplification and Harmonization of Customs Procedures (Revised Kyoto Convention, 1999).

Since 1 July 2010, the Customs Union (CU) Agreements, CU Decisions and other CU legal documents, have provided the legal framework for the customs regime of Russia and other CU Parties. Pursuant to these CU legal acts, customs regulations are also provided by the domestic legislation of the individual CU Parties. The CU Customs Code is based on generally accepted international rules, including the Revised Kyoto Convention, and is the principle legal document that governs customs administration and customs procedures. The CU Customs Code has also established the right of appeal against customs decisions and addressed WTO rules and disciplines on the protection of intellectual property rights at the border, customs valuation, customs fees, special economic zones, trade in transit, and rules of origin.

The Federal Customs Service (FCS) is the authorized Federal executive body in Russia, which carries out the functions of elaboration of State policy and the implementation of legal regulation (including CU Decisions); control and supervision in the sphere of the customs system; the functions of a currency control agent; and special functions of fighting smuggling and other crimes and administrative offences. However the vast majority of provisions of the CU Customs Code and other CU Agreements and Decisions relating to customs issues are of direct application, thereby removing the element of FCS discretion from many customs operations.

Custom Valuation: The basic provisions relating to customs valuation principles and policies in the Russian Federation are contained in the Agreement on the Determination of Customs Value of Goods, Transferring Across Customs Border of the Customs Union of 25 January 2008 (hereafter the CU Agreement) and the Customs Code of the Customs Union, adopted on 27 November 2009 (hereafter the CU Customs Code). While in some cases the CU Agreement is applied directly as law, in others it is implemented through national legislation. The Russian Federation committed to apply from the date of accession, its customs valuation laws, regulations and practices, including those to prevent under-valuation of goods, in conformity with the WTO Agreement, including Article I of the GATT 1994 and the WTO Agreement on Implementation of Article VII of the GATT 1994 (Customs Valuation Agreement). All six methods of customs valuation hitherto applied in the Russian Federation are based on the provisions of the WTO Customs Valuation Agreement (CVA). In particular the CU Agreement establishes that the “Customs valuation of imported goods shall be, as a matter of principle, based on the price of transaction with these goods...” and “The customs value of goods imported to the Common Customs Area of the Customs Union was the price of the respective transaction, i.e., the price actually paid or payable for these goods sold for export to the country of importation to the Common Customs Area of the Customs Union...”

Rules of Origin: From 1 July 2010, the Russian Federation has applied rules of origin to imports pursuant to Chapter 7 of the CU Customs Code and Chapter 10 of the Federal Law on Customs Regulation of November 2010. The principles for determining the country of origin of goods are based on international practices including the recommendations of the revised Kyoto Convention. Upon accession to the WTO, measures on rules of origin, whether adopted by the Russian Federation or the competent bodies of the CU, will be applied in conformity with the provisions of the WTO Agreement on Rules of Origin (RoO Agreement), and will reflect the interim rules in Annex II of the WTO RoO Agreement, including provisions for transparency, right of appeal, and notifications to the WTO Committee on Rules of Origin.

Currently, goods are recognized as originating from a specific country if they are wholly made in that country or have been substantially transformed in accordance with criteria set forth in the CU Agreement on Rules of Origin and CU Commission decisions. The country of origin of goods can also be a group of countries, a customs union, a region, or a part of a country, if the exact country of origin within the group cannot be determined. The basic criterion for substantial transformation for non-preferential goods is a shift in the tariff classification of the good at the level of at least one of the first four HS digits. MFN treatment is granted if the country of origin is declared and accepted as being a country receiving MFN tariff treatment. Imports from destinations of non MFN origin are subject to twice the MFN tariff rate. A double MFN tariff rate is also levied if MFN origin cannot be initially proven for goods. For MFN treatment, no certificate of origin is required unless the authorities had reason to believe that the good was not of MFN origin.

Preferential tariff treatment is provided for goods from developing and least developed countries. Goods are considered as originating from a developing or least developed country when they are fully produced in such a country. Legal provisions also exist wherein CU Parties can establish a procedure for the application of criteria of substantial transformation for countries eligible for tariff preferences, based on the determination that the value of inputs used in the production process originating from countries not covered by preferential treatment or of unknown origin did not exceed 50 per cent of the total declared value. In case of preferential rules of origin for goods traded within the Customs Union and/or goods covered by free trade Agreements between the Russian Federation and other CIS Members a criteria of direct purchase is used, along with requirements that the exporter be established legally in a Party to the CIS free trade Agreement. Certificates of origin are mandatory in the case of preferential goods.

Pre-shipment Inspection and other custom formalities: The Russian Federation does not currently require any inspection services prior to shipment, but has reserved the right to recourse to such measures.

Concerning other customs formalities, a customs declaration has to be furnished at the time of presentation of the goods to customs authorities at the point of destination in the customs territory, i.e., when placed under the customs procedures and jurisdiction, other than the customs procedures for transit goods which are subject to customs declaration on the day of completion of customs transit procedure. The customs authority can refuse to release such goods if the goods are not produced to the customs authority, which registers the customs declaration, or to the other customs authority specified by the customs legislation of the member state within thirty calendar days from its registration.

A number of categories of goods remain subject to customs declaration and/or entry at the designated customs checkpoints. These include (i) meat and meat by products used as food, poultry meat and poultry offal for food, which is permitted only at the sea and air checkpoints if, the country of origin is not connected with the Russian Federation by means of land transportation; (ii) goods subject to excise tax (certain alcohol and tobacco products, certain automotive goods); (iii) alcohol products originating in the Republic of Moldova; (iv) goods transported by pipelines and electric power grids; certain wood products; (v) goods transported by international mail; (vi) goods for exhibitions; (vii) goods transported by air; (viii) precious stones and metals; (ix) banknotes, securities, and coins; (x) fissionable and radio-active materials; (xi) goods subject to temporary admission; and (xii) diplomatic correspondence and goods, conveyed by certain categories of foreign persons. Any measures contrary to the WTO Agreement were to be eliminated from the date of accession.

F) TRADE REMEDIES AND CONTINGENCY MEASURES

The legal acts regulating anti-dumping, countervailing and safeguard measures in the Russian Federation are (i) the Protocol of 17 February 2000 On the Mechanism of Application of Safeguard, Anti-dumping and Countervailing Measures in Trade of the Member States of the Customs Union as between the Republics of Belarus, Kazakhstan, Tajikistan, the Kyrgyz Republic and the Russian Federation (hereafter: the Protocol); (ii) Agreement of 25 January 2008 On Application of Safeguard, Anti-dumping and Countervailing Measures in Respect of Third Countries between the Republics of Belarus, Kazakhstan and the Russian Federation (hereafter: the Agreement of 25 January 2008); (iii) the Decision of the Commission of the Customs Union No. 191 of 26 February 2010 “On the Application of Safeguard, Anti-dumping and Countervailing Measures in the Territory of the Customs Union of Belarus, Kazakhstan and the Russian Federation” (hereafter CU Commission Decision No. 191); and (iv) domestic legislation of the Russian Federation: Federal Law No. 165-FZ of 8 December 2003, as amended by Federal Law No. 280-FZ of 30 December 2006; and Government Resolution No. 546 of 13 October 2004. The Agreement of 25 January 2008 will be directly applicable in the territory of the Russian Federation, after the expiration of the transitional arrangement set out in the Agreement and Federal Law No. 165-FZ. During the transitional period, provisions of domestic legislation will apply to the extent that they do not contradict the Agreement of 25 January 2008. Upon the expiration of the transitional period, national regulations would be abolished.

During the transitional period provided for in the Transition Agreement, the national authorities of the Russian Federation would conduct new trade remedies investigations in the Russian Federation upon the request of the domestic industry of the Customs Union. The Ministry of Industry and Trade is the investigating authority, in the Russian Federation, for safeguards, antidumping and countervailing investigations. However, all decisions to impose, extend, review or terminate trade remedy measures would be taken by the CU Commission on the basis of a proposal from the Government of the CU Party that carried out the investigation. During the transitional period, economic disputes and other cases connected with the safeguard, antidumping and countervailing measures (including cases challenging normative legal acts and decisions, actions or inactions of the authorities and officials) would be considered by courts of arbitration of the Russian Federation.

After the transition period, decisions related to the introduction, review or termination of trade remedies will be taken by the CU Commission on the basis of a proposal from the single designated competent authority of the CU following the investigation. The procedural rules for trade remedy measures will be set out in a separate CU Regulation. The decisions of the CU Commission will be applied by all Parties to the CU, within the whole territory of the CU, to the imports of relevant third countries.

In accordance with the Agreement of 25 January 2008, the application for imposition of a trade remedy must be submitted together with the evidence of support of such application on the part of producers of a like product in the CU Parties. The Agreement of 25 January 2008 provides that the determination of the threat of material injury is to be based only on economic evidence. Injury to a domestic industry of the CU Parties, as a result of the dumped or subsidized imported products, is established based on the results of the analysis of the volume of the dumped or subsidized imported products, its effect on the prices of like products in the market of the CU Parties and domestic producers of the like products in the Custom Union, etc.

A competent authority is required to ensure the publication of the notification concerning the imposition of the provisional and definitive anti-dumping, countervailing or safeguard measures. Interested parties are permitted to comment on the decisions by the competent authority, within the corresponding period

of time. Upon request of any interested party, the competent authority allows for consultations on the issues under investigation. The information submitted in written form by any interested party, as evidence related to the investigation, are provided in writing to participants in the investigation by the competent authority with due regard to the protection of confidential information. Decisions pertaining to trade remedies are published in the official publication of the CU Parties and the website of the competent authority. The competent authority is also required to notify in writing the exporting country on the imposition of an anti-dumping or countervailing measure and about any other decision concerning application of a trade remedy measure.

Every administrative decision, action or inaction of the authorities and officials of the Russian Federation in charge of investigations, impositions, reviews, terminations or applications of trade remedies in the Russian Federation, can be referred for “judicial review”.

2.1.2 Export Policy

A) EXPORT DUTIES

The CU Agreement, which resulted in the establishment of the Customs Union of Belarus, Kyrgyzstan and Russia, does not provide for unified export tariffs and export tariff regulation. As such export duties remain subject to regulation at the national level and are reviewed regularly. Export duties are also the subject of bilateral tariff negotiations with some nation states.

Over the last few years, the coverage of products on which export duties are levied has been subsequently reduced. However export duties remain an important tool for serving a multitude of objectives, ranging from economic to environmental. Currently export duties are levied on 310 tariff lines. The incidence of export duties seems to be higher in certain sectors namely in the case of marine products (HS 0303 and 0306); oilseeds; mineral fuels (especially HS 2707, 2709 and 2710); raw skin, hides and leather; wood and articles of wood (especially HS 4401, 4403 and 4407); precious and semi-precious stones; and metals and scrap (especially HS 7204, 7403, 7404, 75, 76 and 81). Export duties are applied on an MFN basis with a few exceptions like in the case of goods exported to the Parties of the Treaty on the Customs Union and Single Economic Space (the Republic of Belarus, Kazakhstan, Tajikistan and the Kyrgyz Republic) and a certain volume of natural gas exported to Ukraine, both of which are exempted from export duties. A majority of the export duties are applied with ad valorem rates. The ad valorem rates applied may range from 3 to 50 per cent with a few exceptions where it is higher. The rest (petroleum oils, raw skins and hides and certain lines of wood) are subject to specific duties.

As per Russian Federation’s accession commitments to WTO, export duties are be fixed for over 700 tariff lines, including certain products in the sectors of fish and crustaceans, mineral fuels and oils, raw hides and skins, wood, pulp and paper and base metals.

B) EXPORT RESTRICTIONS

Since January 2010, the CU Commission has been the principal authority responsible for administering export restrictions or non-tariff barriers on exports. National legislations, which hitherto governed the imposition of non tariff barriers in the Russian Federation, have remained to the extent permissible under the CU legislation. Non tariff measures may be imposed in the Russian Federation for addressing issues of national security, food safety, environmental protection, domestic scarcity, external finance or in compliance with international commitments. In addition as per CU legislation, under certain conditions the Russian Federation may also unilaterally impose non-tariff measure on a temporary basis.

Currently, only a few goods are subject to export prohibitions. These include weapons, certain wood articles and printed or audio-visual information against public morals or national economic or political interests. In contrast, a considerable number of goods are subject to export licensing restrictions. This includes certain lines of pharmaceuticals, precious stones, metals and minerals, dual use goods, hazardous products, endangered species, etc. Sensitive goods, like mineral raw materials and goods with cryptographic capabilities are subject to non automatic licensing. The rest are subject to automatic licensing for the purpose of monitoring trade flows.

Broadly, licenses in Russian Federation may be classified under three heads (i) one-time (ii) general (iii) exclusive. The first two are issued by the relevant authorized body of the Russian Federation, and grant the holder the right to export certain types of goods in the quantity determined by the license for a period of one year. Holders of exclusive licenses on the other hand, are granted the exclusive right to export certain goods by the CU Commission. Until now, no CU exclusive export licenses had been issued in the Russian Federation.

C) EXPORT SUBSIDIES

In order to promote exports, certain goods are subject to VAT refunds. These are applied in accordance with the Tax Code of the Russian Federation.

2.1.3 Sectoral Policies

A) AGRICULTURE

Policies in the Russian agricultural sector need to address a number of problems which have accumulated over the years of planned economy. These include the sectoral imbalance in prices and revenue, a major adverse factor in an agricultural sector characterized by low profitability, and underdevelopment of production and social infrastructure. To resolve these problems, a number of normative legal acts were adopted by the Russian Federation including the Resolution of July 2007 “On the State Program of Development of Agricultural Sector and Regulation of Markets of Agricultural Products, Raw Materials and Food for 2008-2012.” The main objectives as laid down in the Resolution, are to ensure sustainable development of rural territories, increase employment and standard of living, and enhance the overall competitiveness of Russian agricultural products on the basis of financial stability and modernization of agriculture. The implementation of the programme is financed from the federal and regional budgets according to planned expenses for each successive three year period on a rolling basis.

Support measures in Russia are implemented at federal and regional levels and may be financed both at federal and regional levels. In order to reduce the debt burden on agricultural producers, provisions for restructuring and writing off debts have been made by the Russian Government under the relevant domestic legislations. Soft crediting of agriculture is one of the major tools of support for livestock and crop sector. Soft crediting allows for partial subsidization of costs associated with interest payments on loans received by agricultural producers from lending institutions. In 2009, the share of this measure was about 51.3 per cent of total non product specific support and about 45 per cent of total AMS.

Other measures falling under Russia’s Aggregate Measurements of Support (AMS) include (i) subsidies for the delivery of seeds to the disadvantaged areas; (ii) subsidies for provision of seeds from the Federal Fund of seeds on free of charge basis (programme “Creation of the Federal Fund of Seeds”); (iii) provision of compensation for use of mineral fertilizers; (iv) costs for maintenance of land reclamation, and land

amelioration systems; and (v) scheduled operational and maintenance expenditures within the “Federal Task Program on ‘Fertility’”.

During Russia’s accession negotiations to the WTO, concerns were raised regarding the classification of a number of programmes as “non-product-specific support” which in the view of several members did not provide generalized support to agricultural producers. To address these concerns, the Russian Federation committed that from the date of its accession to the WTO through to 31 December 2017, in any year, the sum of all product-specific aggregate measurements of support would not exceed 30 per cent of the non-product-specific aggregate measurement of support.

As part of its accession commitments, the Russian Federation committed that the total trade distorting agricultural support would not exceed US \$ 9 billion in 2012 and this would reduce to US \$ 4.4 billion by 2018. The Russian Federation committed to comply with all provisions of the WTO Agreement on Agriculture, and the commitments on domestic support and export subsidies for agricultural products which are contained in its Schedule of Concessions and Commitments on Goods annexed to the Protocol of Accession to the WTO.

B) INDUSTRY/ MANUFACTURING

State support to the industrial sector is mainly provided under federal targeted programmes. Direct transfers from the federal budget or a regional budget to industries are also available. Funding of export credits, guarantees, and partial compensation of credit stakes are envisaged in the Federal Budget. The total amount of the State export guarantees issued in 2005-09 was US\$990 million, of which US\$282 million was issued in 2009. Principles and mechanisms for granting export credits and guarantees in the Russian Federation envisage procedures for granting state guarantees against political and commercial risks arising during implementation of export contracts with foreign importers; export credits including supplier credit; and partial compensation of interest rates of export credits including supplier credits. A mechanism for granting credits and guarantees compliant with the rules and norms of the WTO Agreement on Subsidies and Countervailing Measures is being elaborated. In addition the “Exim bank of Russia” (Joint-Stock Company) has been designated as an agent for the Government of the Russian Federation in providing State financial (guarantee) support for industrial exports.

The sub-federal governments of the Russian Federation generally provides the same forms of State support to industrial production sectors as does the Federal Government. Such support is mostly aimed at the financial rehabilitation of enterprises, resolution of social problems, and reimbursement of losses.

From the date of WTO membership, the Russian Federation is committed to eliminate all subsidies falling within the scope of Article 3 of the WTO Agreement on Subsidies and Countervailing Measures or to modify the programmes so that any subsidy provided is not contingent upon exportation or the use of domestic over imported goods. Any subsidy programmes in place or established after accession within the territory of the Russian Federation will be administered in conformity with the WTO Agreement on Subsidies and Countervailing Measures. The Russian Federation will not invoke any of the provisions of Articles 27 and 28 of the WTO Agreement on Subsidies and Countervailing Measures.

2.2 Trade in Services

The Russian Federation is a net importer of services. In 2010, services exports stood at US\$ 43.96 billion while imports amounted to US\$ 70.22 billion.

The market for services started developing only in the first part of the 1990s, following domestic reforms, privatization and liberalization of the Russian economy. To create a favourable economic and investment climate in the sphere of services, the Russian Federation embarked on a series of actions to reduce constraints in the economy, involving streamlining of procedures for company registration, downsizing the list of types of activities subject to licensing, and reduction of the frequency of inspections of enterprises. The economic reforms have created new services sectors while contributing to the development of existing ones. The domestic regulatory system is struggling to keep pace with the dynamism of the services markets in Russia.

As per existing domestic legislation, some services continue to be subject to licensing. One of the basic licensing principles has been to ensure the existence of a single economic space in the territory of the Russian Federation. A license issued by a Federal Executive body or the executive body of a particular region can be thereby used to pursue the licensed activity throughout the entire territory of the Russian Federation. Services which are subject to licensing include, inter alia, gambling, telecommunication services; the use of frequencies for tele- and radio broadcasting; certain financial services; certain distribution services (ethyl spirit, alcoholic and alcohol-containing products); and the use of natural resources and services in the field of nuclear energy (e.g. designing, construction and operation of nuclear plant, treatment of radioactive wastes).

Administrative reforms have been introduced, aiming at separating the legal regulatory functions and the control/supervision of activities between different Federal Executive bodies and ensuring the independence of the Federal Executive bodies from service suppliers. Formulation of State policy and legal regulation has been assigned to the relevant ministries in accordance with their competence. The function of control/supervision has been assigned to the Federal services. There are certain sectors wherein the Federal Executive bodies responsible for the regulation of the respective service sectors has their designated representatives using a special right ("golden share") in the management of Joint-Stock Companies which supply services in such sectors, as telecommunications, transport and energy.

The Central Bank of the Russian Federation (CBR) is responsible for the registration and supervision of credit organizations and also participates in the capital of Sberbank, one of the largest commercial banks in Russia. The CBR also has the discretion to take certain actions, if foreign investments in the banking sector or the insurance sector of the Russian Federation exceed the 50 per cent ratio. This charter capital requirement is applied on a non-discriminatory basis. In such circumstances, the actions authorities can take in the commercial banking sector are to (i) stop issuance of licenses for new foreign invested banks; (ii) prohibit the increase of charter capital of existing Russian banks contributed by foreign investors (non-residents); and (iii) prohibit the alienation (sale) of shares of existing Russian banks to foreign investors (non-residents). Similar provisions are applicable in the insurance market. Market access to direct branches of foreign banks and companies is currently not allowed. But foreign banks will be allowed to establish subsidiaries while foreign insurance companies will be allowed to establish branches nine years after Russia's accession to the WTO. There will be no caps on foreign equity in individual banking institutions though the overall foreign capital participation in the banking system continues to be limited to 50% (not including foreign capital invested in potentially privatized banks). The Russian Federation also plans to introduce International Accounting Standards (IAS) in the near future.

Concerning horizontal measures of regulation, services considered to be public utilities and referred to in the horizontal section of the Russian Federation's Services Schedule, can be subject to public monopolies or exclusive rights granted to private operators, for instance, operators with concessions from State bodies and local self-governmental bodies. Services considered as public utilities are supplied on the basis of public contracts. In service sectors, included in the Services Schedule, Russian juridical persons

with 100 per cent foreign equity participation are allowed to apply for these exclusive rights on equal terms with national services suppliers.

As part of its accession to the WTO, the Russian Federation is bound to make commitments on 11 services sectors and on 116 sub-sectors. Besides financial services, reforms are to be introduced in a number of other sectors. On telecommunications, foreign equity limitation (49%) would be eliminated four years after accession. On transport services, Russia inscribed specific commitments in maritime and road transport services, including on transportation of freight and passengers. On distribution services, Russia would allow 100% foreign-owned companies to engage in wholesale, retail and franchise sectors upon WTO accession.

2.3 Trade in Intellectual Property Rights

Several governmental bodies are responsible for the regulation and enforcement of intellectual property rights in the Russian Federation, namely:

- The Ministry of Education and Science and the subordinate Federal Service for Intellectual Property, Patents and Trademarks (Rospatent);
- The Ministry of Culture and the subordinate Federal Service for Supervision of the observance of the legislation on Protection of Cultural Heritage;
- Ministry of Communication and Mass Communications and the subordinate Federal Service on Supervision in the Field of Communications, Information Technologies and Mass Communications;
- The Federal Customs Service;
- The Ministry of Industry and Trade;
- The Ministry of Health and Social Development and the subordinate Federal Service for Supervision of Protection of Consumers' Rights and Human Welfare and the Federal Service for Supervision in the Sphere of Public Health and Social Development;
- The Ministry of Internal Affairs;
- The Ministry of Justice;
- The Office of the Public Prosecutor; and
- The Federal Antimonopoly Service.

The Courts of general jurisdiction and arbitration courts of the Russian Federation hears the cases on infringement of intellectual property rights in accordance with the relevant procedural laws.

The legal framework for civil protection of intellectual property rights is the Constitution of the Russian Federation and the Civil Code (Part IV). The Civil Code permits the Russian Federation to finalize codification of its civil legislation with the objectives of harmonizing norms on intellectual property with the general provisions of civil legislation; achieving full conformity of domestic legislation with the international obligations of the Russian Federation; amending the intellectual property laws of the Russian Federation, to keep the most effective provisions of currently applied laws, while strengthening protection where appropriate; and strengthening available civil remedies to combat counterfeiting, piracy and the making available of pirated material over the internet. Other laws set out certain enforcement measures for intellectual property rights but relevant provisions of these laws and other measures are required to be in conformity with the Constitution and Part IV of the Civil Code.

In addition to the legal framework for protection and enforcement of intellectual property, the Government has established a Sub-commission for Technical Regulation and Counteracting Infringement in the Sphere of Intellectual Property, its Legal Protection and Use. The Sub-commission is chaired by the Ministry of Industry and Trade and reported to the Committee on Economic Development and Integration. The main objectives of the Sub-commission are to ensure the implementation of a unified Government policy with regard to protection and use of intellectual property; counteracting infringements of intellectual property through improvements in enforcement; ensuring effective cooperation and coordination of activities of federal executive bodies, regional executive bodies, State and other organizations; and increasing international cooperation in this sphere. The Sub-commission is also developing proposals on improving the normative legal base for protection and enforcement of intellectual property rights; forming a positive environment for the development and protection of intellectual property; working out measures to stimulate application of high technologies to production, and ensuring exchange of the results of intellectual activity between the military and civil spheres.

The Russian Federation has been a Member of the World Intellectual Property Organization (WIPO) since 1970 and is a party to, inter alia, the Paris Convention for the Protection of Industrial Property (the "Paris Convention"); the Berne Convention for the Protection of Literary and Artistic Works (the "Berne Convention"); the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (the "Rome Convention"); the Madrid Agreement Concerning the International Registration of Marks (Stockholm Act); the Patent Cooperation Treaty (PCT); and the Singapore Trademark Law Treaty (2006). In February 2009, the Russian Federation acceded to the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). With WTO membership, Russia will fully apply the provisions of the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) including provisions for enforcement, without recourse to any transitional period. Russian Federation will also apply all rules of the Berne Convention.

2.3.1 Patents and Industrial Designs

Industrial designs and patents are protected by the provisions of the Chapters 69 and 72 of the Civil Code. The term of protection of patents for inventions is 20 years; for utility models is ten years; for industrial designs is 15 years, starting from the date when the application is submitted. The Civil Code provides for the possibility of extending the term of protection for pharmaceutical products (medicines), pesticides and agricultural chemicals, if their use required consent of an authorized State body. In such cases, the general 20 year term can be extended for up to five years.

Under the provisions of the Civil Code, a patent might not be obtained in relation to the plant varieties, animal breeds, and layout designs of integrated microcircuits that were not new, or did not involve an inventive step, or were not capable of industrial application, and inventions violating social interests or humanitarian and moral principles. The Civil Code also allows for other exclusions from patentability for serving "societal interests." In addition, use of an invention, utility model, or industrial design without right holders' consent for the satisfaction of personal, family, home or other needs which are not connected with entrepreneurial activity do not constitute an infringement, if the purpose of such use is not the receipt of profit or income.

Assignment of a compulsory license is prohibited if there are dependent patents for the patent in question. The right to use on the basis of the compulsory license cannot be transferred to other persons except in case of alienation of the second patent. The holder of a patent for an invention or utility model that is the subject of a compulsory license requires a cross-license for the use of a patented invention which is dependent on the patented invention that is subject to the compulsory license.

2.3.2 Copyright and Related Rights

Copyright and related rights are protected under the provisions of Chapters 69, 70, 71 of the Civil Code. Protection of Copyright provides exclusive right to literary, scientific and artistic works. There are also provisions for protection of software and databases. The Civil Code introduced national treatment in respect of protection of copyright and retroactive protection of works. In general, copyright is valid during the life of the author and for 70 years after his/her death.

“Related rights” consist of provisions dealing with protection of the rights of performers, directors of plays, and conductors on the results of performances; the rights of producers of phonograms and video recordings; and also the rights of on-air and cable broadcasting organizations in their programs. In addition, Russian legislation prescribes protection of the exclusive right of a database producer in the contents of such databases and also provides an exclusive right for a publisher under the category of related rights. The related rights of performers are protected for 50 years from the date of first performance; in the case of phonograms producers, protection is provided for 50 years from the date of first publication or, should the phonogram not have been made public within 50 years of fixation, protection is provided for 50 years from fixation; rights of television and radio broadcasting organizations remain valid for 50 years from the date of first broadcast, and the rights of cable television organizations remain valid for 50 years from the date of first cable transmission.

Exception to the protection of copyright is provided in the Civil Code by allowing reproduction by “citizens exclusively for personal purposes of a work lawfully made public...without the consent of the author or other right holder... and without compensation”. There are six categories of work not subject to this generalized exception which include, inter alia, reproduction of works of architecture, reproduction of databases and computer programmes, the reproduction of books (in full) and musical notation texts etc. Similar copyright exceptions are applicable in the context of related rights. In addition the Civil Code does not adequately provide that temporary reproduction of works fall within the exclusive right of reproduction of the copyright owner.

2.3.3 Trademarks

Protection of trademarks, service marks, firm names and commercial designations are regulated by the provisions of Chapters 69 and 76 of the Civil Code. The Civil Code provides parity of rights to the different means of individualization (commercial designation, firm names, and trademarks). Firms or commercial designation can be the ground for refusal of a trademark only with respect to goods of the same type and if the indication is the same or similar to the point of confusion with firm name or commercial designation.

Trademarks are designations serving for individualizing goods of legal entities or individual entrepreneurs and maybe a word, image, 3-dimensional and other designations or combinations thereof. A trademark certificate is issued for a trademark registered in the State Register of Trademarks. A certificate of a trademark certifies the priority of the trademark and the exclusive right to the trademark in respect of the goods specified in the certificate. The Civil Code prohibits the registration of trademarks “that are the same as, or similar to the point of confusion” with trademarks and other indications owned by other persons.

The exclusive right to a trademark is effective for ten years after the filing of the trademark. The effective term of the exclusive right to the trademark may be extended by ten years through an application filed

during the last year of the right's effective term. The effective term of exclusive right to the trademark can be extended an infinite number of times.

The Civil Code stipulates the principle of "seniority" which secures the interests of right holder in respect of an earlier registered trademark. In addition the Civil Code includes a definition of a well-known trademark, and provides for protection of well-known trademarks. Any trademark claiming to be well-known is recognized as such by a competent authority and does not require the registration of well-known trademarks. A sign or registered trademark is considered well-known in the Russian Federation if this sign or registered trademark, as the result of intensive use has become widely known in the Russian Federation among the corresponding consumers with respect to goods of this applicant on the certain date.

2.3.4 Plant varieties

Plant varieties and animal breeds are protected in accordance with the Chapter 73 of the Civil Code. Legislation which hitherto governed their protection were modified to bring norms in conformity with general principles of the protection of intellectual rights in the Civil Code, while addressing specific issues related to the particularities of biological objects, which are the subject of protection of selection achievements. Plant variety protection will be accorded to natural persons and legal entities of all WTO Members from the date of Russia's accession to the WTO.

2.3.5 Geographical Indications

The protection of designations of the place of origin of goods is provided for in Chapter 76 (Section 3) of the Civil Code. The legislation prohibits registration of trademarks containing indications (signs) of the place of production of goods as well as trademarks containing false indications or indications which might mislead the customer as to the identity of the producer of goods. Protection of designations of the place of origin of goods is provided for all kinds of goods, such as food and manufactured goods, including handicrafts. The term "designations of the place of origin of goods", although translated in different ways, has the exact same meaning as the term "geographical indications" as defined under the TRIPS Agreement. A certificate of exclusive right to an appellation of origin is effective for ten years after the date of filing of the application for the appellation of origin with the federal executive governmental body charged with intellectual property matters.

2.3.6 Other IPRs

Layout designs of integrated circuits: Layout designs of integrated circuits are protected in accordance with the Chapter 74 of the Civil Code. The provisions of the Chapter are intended to be in conformity with the provisions of the Treaty on Intellectual Property in Respect of Integrated Circuits and relevant provisions of the TRIPS Agreement. The exclusive right to a layout-design is effective for ten years.

Requirements on undisclosed information, including trade secrets and test data: Russian legislation contains a number of normative legal acts which regulate and determine the mechanisms for ensuring protection of undisclosed information. These measures prohibit disclosure of undisclosed information and/or its use without the consent of the owner. They grant the owners and other eligible persons protection of their rights, inter alia, by prohibiting actions, which could infringe or threaten an infringement of their rights. These measures also provide protection for undisclosed information that is legally required to be submitted to Government bodies or organizations authorized by the Government to receive and deal with such information.

2.3.7 Enforcement

Civil and Administrative Remedies: Preliminary and final remedies currently available under the Civil Code include confirmation of rights, injunctive relief, prohibition of actions violating rights, compensation of damages caused to the right holder, and statutory compensation. Regarding claims for damages and assessment of damages, civil law cases provide for the general principle of full recovery of damages. Civil legislation also provides the possibility of confiscation and destruction of counterfeit and pirated products and confiscation of materials and equipment used for their production.

With regard to administrative procedures and remedies, the Code of Administrative Offences established administrative liability for violation of copyrights and related rights, rights regarding inventions and industrial designs, trademarks, service marks and indications as well as for disclosure of information by persons having received access to such information in connection with performance of a service or professional duties. In addition to fines of up to RUB 40,000 (i.e., about US\$1,300), administrative sanctions in case of copyright infringements include obligatory confiscation of counterfeit and pirated products, materials and equipment used in their production, and other instruments used in committing the administrative offence. Confiscated products, materials, equipment and instruments are subject to destruction or, at the request of the right holder, are transferred to him/her.

Appeal processes in intellectual property matters can be carried out through both judicial and administrative procedures. Rights in copyright and related rights and commercial secrets are enforced only by the courts. For other intellectual property rights, the Patent Disputes Chamber of Rospatent conducts an administrative dispute procedure in cases connected with submission and consideration of applications for the issuance of patents for inventions, utility models, industrial designs, achievements of breeding, trademarks, service marks, and designations of places of origin of goods, involving State registration of these results of intellectual activity and means of individualization, and issuance of the corresponding right-establishing documents. The cases involve contesting the grant or denial of registration for these results and means of legal protection or with the termination of such protection. These administrative decisions can be appealed to a court.

Criminal Remedies: The application of thresholds is traditionally used in Russian legislation to separate criminal offences punishable by means of criminal prosecution from administrative misdemeanours. Further, if the suspected infringer is found to have been previously engaged in infringement of intellectual property rights, including in an administrative proceeding, under the repeat-offender provisions, the thresholds mentioned above do not apply. The Criminal Code as last amended includes four articles specifically dealing with intellectual property. These are:

(i) Article 146 (Copyright and Related Rights Violations): The penalty provided by Article 146 can be up to six years of imprisonment and also cover the illegal use of works through posting them on the Internet. In 2007, 7,874 crimes covered by the Article 146 were tackled, including 7,418 large scale crimes. More than 8.5 million counterfeit CD and DVD discs were seized valued at more than RUB 1 billion. With regard to piracy on the internet, efforts have been made to shut down servers situated on the territory of Russia and websites that promote illegal distribution, which include making the object of a copyright or related right available, of content protected by copyright or related rights.

(ii) Article 147 (Patents Violations): Under Article 147 of the Criminal Code, the illegal use of an invention, utility model or industrial design, or disclosure of the essence of an invention, utility model or industrial design, without the consent of its owner or applicant before any official publication of information about them; illegal acquisition of authorship; or compelling of co-authorship are criminally punishable if these

acts have inflicted serious damage. Article 147 provides punishment by fines of up to RUB 300,000 (more than US\$10,000) or up to two years of wage, salary, or any other income of the convicted person, arrest for up to six months, or deprivation of liberty for up to six years.

(iii) Article 180 (Trademark Violations): In accordance with Article 180, the illegal use of a trademark or service mark, appellation of origin, or similar designations for homogeneous goods, as well as the illegal use of a special marking designating a trademark or an designations of origin which have not been registered in the Russian Federation are criminally punishable if these acts have taken place more than once or have inflicted serious damage. Article 180 provides punishment by fines of up to RUB 300,000 or up to two years of wage, salary, or any other income of the convicted person, arrest for up to six months, or deprivation of liberty for up to six years. In 2007, 957 crimes covered by the Article 180 of the Criminal Code were discovered; and criminal procedures were instituted against 154 persons.

(iv) Article 183 (Illegal Receipt and Disclosure of Information Containing Commercial, Tax or Bank Secrets): Article 183 established criminal liability for the illegal receipt and disclosure of information containing commercial, tax, or bank secrets. Damage inflicted by actions specified in the Article is regarded as serious when it exceeds RUB 1.5 million (US\$50,000).

Border Measures: Border measures in the Russian Federation are applied pursuant to Chapter 46 of the CU Customs Code and Section 42 of the Federal Law on Customs Regulation. Consistent with the procedures set out in the CU Code, the customs authorities of the Russian Federation (i.e., the Federal Customs Service of the Russian Federation (FCS)) are authorized to take action to protect intellectual property rights included in a customs register maintained by the FCS and in the unified customs register of intellectual property rights of the CU Parties. The term of protection for goods under for both the National and the unified Customs register is 2 years from the date of application in the register. In addition, the CU Customs Code provides that in accordance with the national legislation of the Russian Federation, the Russian customs authorities are authorized to enforce intellectual property rights with respect to intellectual property not included in those customs registers if during the performance of custom formalities and customs control, custom authorities discover goods potentially violating intellectual property rights.

2.4 Economic Policies affecting Trade

Current economic policies in the Russian Federation are aimed, inter alia, at “de-bureaucratization” of the economy, including elimination of unnecessary and burdensome administrative barriers, improvement of competition and investment attractiveness of the country, as well as achievement of its fiscal and monetary stability.

2.4.1 Monetary and Fiscal policy

Monetary Policy: The Central Bank of the Russian Federation (Bank of Russia or CBR) is responsible for conducting a uniform monetary and credit policy in co-operation with the Government of the Russian Federation. Decisions on the issues of monetary and credit policy are taken by the Board of Directors and the Monetary and Credit Policy Committee of the Bank of Russia. In addition, a number of topics related to the activities of the Bank of Russia are included in the competence of the National Banking Council, particularly, the examination of the draft “Guidelines for the Common State Monetary Policy” for the next calendar year. The representatives of the Government of the Russian Federation are Members of the National Banking Council and participate in meetings of the Board of Directors of the Bank of Russia with a right of advisory vote. The Bank of Russia and the Government are required to inform each other about

intended actions of national importance; coordinate policy and hold regular consultations. For matters related to the issuance of Government notes and the repayment of debt of the Russian Federation, the Bank of Russia consults the Ministry of Finance.

To achieve the monetary policy objectives and to respond more quickly and effectively to any changes in money and credit, including inter-bank interest rates fluctuations, the CBR actively uses market instruments, combining operations of medium and long term sterilization of temporarily free funds with operations to provide, when necessary, liquidity to banks which helps the CBR to maintain balanced and relatively stable conditions on the money market. The application of instruments and methods of monetary regulation is based on the combination of regular market-based auctions and operations with standing facilities. Monetary instruments and methods are adjusted depending on the economic situation in compliance with the legal framework. The principal instruments and methods of the monetary policy of the CBR are the following: interest rates operations of the CBR, ratios of the required reserves deposited with the CBR, open market operations, refinancing of credit institutions, currency interventions, issue of bonds on its own behalf and setting targets for money supply growth. To absorb free banking liquidity, the CBR also holds regular deposit auctions to attract funds from credit institutions for periods ranging four weeks to three months. To absorb free funds of credit organizations for a longer period, the CBR holds auctions on issuing its own bonds for a term of seven months and six month put options.

For the purpose of absorbing excess liquidity, the CBR also uses outright sales of government bonds from its portfolio at market yields without an obligation of reverse repurchase. The CBR also conducts deposit operations on standard terms and conditions at a fixed interest rate through the Reuters Dealing System and MICEX (Moscow Interbank Currency Exchange) System of electronic lot trading (SELT). Interest rate policy of the Bank of Russia is aimed at narrowing the spread of interest rates on its operations in the monetary market.

When banks are in need of additional liquidity, the CBR provides funds to credit institutions on a market basis through direct repo and Lombard auctions for two weeks. In addition, the CBR extends to banks intra-day overnight settlement loans and Lombard loans at fixed interest rate for seven days, backed by federal government and local government securities, bonds issued by corporate entities - residents of the Russian Federation, mortgage bonds, CBR obligations (OBR) and obligations of international financial organizations. Credit institutions also have the opportunity to receive liquidity through foreign exchange swaps arranged with the CBR. An important monetary policy instrument used by the CBR is currency interventions (foreign exchange outright sales and purchases) in the exchange and over-the-counter segment of the domestic foreign exchange market. To manage their own liquidity, credit institutions actively use averaging of required reserves. The CBR is required to annually submit to the State Duma draft "Guidelines for the Common State Monetary Policy for the coming year" no later than 26 August, and the same but approved document - no later than 1 December.

Fiscal Policy: The main federal bodies responsible for defining and conducting the fiscal policy of the Russian Federation are the Ministry of Economic Development and the Ministry of Finance of the Russian Federation. The Federal Tax Service under the jurisdiction of the Ministry of Finance is the federal executive body in charge of overseeing the implementation of legislation related to taxes and fees (calculation, fullness and timeliness of obligatory payments to the relevant budget etc.).

The current forms of taxation in the Russian Federation are established by the Tax Code. The Code distinguishes between federal taxes, regional taxes, and local taxes. Federal taxes comprise the value-added tax, excise tax, royalty tax for use of natural resources and extraction of minerals, profit tax imposed on legal persons, income tax imposed on natural persons, State duties, fees for the use of fauna objects and

objects of water bio-researches and water use tax. Pursuant to the Tax Code, regional taxes comprise the property tax imposed on organizations; transport tax; and gambling tax. Local taxes and fees comprise the land tax and property tax imposed on individuals.

2.4.2 Foreign Exchange and Balance of Payments

The national currency the ruble (RUB - equal to 100 Kopeks) is convertible to foreign currencies on the basis of current market rates. The CBR exercises control over timely and full transfer of export earnings to the country and over making payments for goods imported to Russia under pre-payment terms. The CBR also exercises control to enable the detection of fictitious foreign exchange operations by residents in off-shore zones.

Federal Law “On Currency Regulation and Currency Control” aims at the implementation of the single State currency policy and stability of the currency of the Russian Federation, while at the same time ensuring the progressive liberalization of the foreign exchange legislation of the Russian Federation. One of the main features of the new regulation has been a shift from the previous principle “everything is forbidden except what is permitted by law” to “everything is permitted except what is forbidden by law.” The Law provides for a clear and balanced distribution of powers between the Government of the Russian Federation and the CBR in the field of regulation of currency transactions pertaining to capital movement. According to the Law, reservation requirements, mandatory surrender requirement and use of special bank accounts will remain in force until 1 January 2007.

The CBR had introduced five different categories of special bank accounts to be used by residents and non residents while carrying out currency transactions. These relate to granting and raising credits and loans and /operations with securities denominated in Russian or foreign currency (including related payments, transfers and performance of obligations). In the current foreign exchange legislation, there are no restrictions’ on the rights of residents to acquire and hold foreign exchange. The opening of accounts in foreign and national currency by residents and non-residents on the territory of the Russian Federation is carried out without any restrictions. As to the accounts of residents in the banks located outside the territory of the Russian Federation, starting from 1 January 2007, they can be opened freely in any country, with subsequent notification to the Federal Tax Service by the holder.

2.4.3 Foreign Investment Regime

The Ministry of Economic Development is the authority responsible for formulating and implementing the investment policy of the Russian Federation. The basic legal provisions relating to the activities of investors are set forth in the Constitution; the Civil Code (Part One and Part Two, as amended); relevant international treaties to which the Russian Federation is a party, and a number of other legislative acts.

The Federal Law “On Foreign Investments in the Russian Federation” ensures a legal basis for provision of national treatment for foreign investors. The law stipulates that the property of a foreign investor or a commercial legal entity with foreign investment cannot be subject to forced seizure, including nationalization, or requisition, except for the cases and reasons determined by a federal law or international treaty of the Russian Federation. Foreign investors have the right to freely use the revenues and profits (which have been obtained from the investment made in Russia) in the territory of the Russian Federation for any purpose, including reinvestment, as long as such use did not contradict the legislation of the Russian Federation. A foreign investor can acquire stocks and other securities of Russian commercial organizations and State securities, in accordance with the respective legislation. In some cases, investments and reinvestments by foreign investors may be limited or prohibited under Russian legislation. The

details concerning compensation available to foreign investors are provided for in the respective bilateral Agreements for the Promotion and Reciprocal Protection of the Investments.

Foreign investors, other than those investing in non-commercial organizations, can transfer abroad unhampered their profits and other sums of money in foreign currency lawfully gained in connection with previously made investments. The right to transfer funds abroad does not affect any obligations a foreign investor may have under the relevant legislation of the Russian Federation, including tax legislation, criminal legislation, and legislation on bankruptcy.

Tax privileges for foreign investors, comprise exemption from taxation of technology equipment and parts and spare parts for such equipment, imported into the customs territory of the Russian Federation. As to customs privileges, products imported to the customs territory as contribution to the assessed capital are free from tax duties under the condition that the products are: not excisable; related to the main productive funds; imported within the period defined by the constituent documents for assessed capital foundation. Some investment privileges have been granted in the field of the car and aircraft industries (those in the sector of aircraft had since been abolished).

Up to October 2010, the Russian Federation was a party to 70 bilateral investment treaties (BITs), of which 49 were in force. In respect of investors and their investments, BITs contain, inter alia, provisions on national treatment and MFN with exemptions; guarantees in case of expropriation and rules for compensation of losses; free transfer of revenues and profits and dispute settlement procedures.

Restrictions of activity of foreign investors can be established only by federal laws and only to the extent necessary to achieve the purpose of defending constitutional order, moral, health, rights and legal interests of other persons and ensuring the defence and the security of the State. The Federal Law No. 57-FZ of 29 April 2008 established the general framework for regulation of foreign persons' participation in enterprises and activities having strategic importance for national defence and security. In case of conflict between the provisions of the Federal Law and obligations under an international agreement of the Russian Federation, such as the GATS, the obligations under an international agreement will apply.

2.4.4 Pricing Policy

Prices in most sectors of the Russian economy are now determined freely by market forces though in certain sectors, prices continue to be regulated by the State. The Presidential Decree and Government Resolution No. 221 of 28 February 1995 established the main principles of State price (Tariff) regulation in the domestic market of the Russian Federation. Price regulation can fall either under the jurisdiction of regional governments or under that of the Federal governments. The Government of the Russian Federation is required to coordinate the activity of the regional governmental bodies in State price (tariff) regulation. Sub-Federal executive bodies, currently, do not have any powers to regulate prices, including imposing mark-up restrictions, for any agricultural product and, accordingly, do not maintain or apply such regulations.

The Federal Service for Tariffs, being the main Federal authority empowered to exercise State price regulation, develops detailed principles (methods) for price regulation in different sectors, such as electric power and heat power, oil and gas transportation through main pipelines, etc. All authorities engaged in regulating prices are required to use these principles (methods) for establishing prices. In determining prices, these principles (methods) took into account certain elements, such as (i) the cost of production, including production (marketing) expenses; (ii) taxes and other payments; (iii) the cost of fixed production

assets; (iv) the demand for investment; (v) depreciation charges; (vi) estimated profits; (vii) remoteness of different consumer groups to the production site; and (viii) quality of the output. Compliance with decisions of the Federal Service for Tariffs is obligatory for all operators. The prices (tariffs) regulated by the State are applied in the domestic market by all enterprises and organisations.

Minimum prices for vodka, liquor products and other alcohol (more than 28 per cent volume) relate only to the internal sale at the retail level, and are not applied in a discriminatory manner between domestically-produced and imported products.

Government purchases of agricultural products are undertaken at pre-announced administered prices in order to provide market price support to domestic producers. These purchases were only for rye and milling wheat (in 2001, 2002, 2003 and 2005); for rye, wheat, corn and barley in 2008; and for wheat, rye and barley in 2009.

In August 2001, the first stage of unification for railway freight tariffs was implemented with the transition to payment for import and export cargoes shipped through Russian ports, based on tariffs given by the Federal Energy Commission. Russia is to introduce the same pricing scheme on tariffs for import cargoes and domestic products. Competent Federal authorities are preparing the second stage of tariff unification, which will extend to import cargoes shipped through border land checkpoints.

Energy and natural gas prices are also regulated. The basic principle of price setting is to ensure economically viable production and recovery of costs, including the cost of production, overheads, financing charges, transportation, maintenance and upgrade of infrastructure, investment in exploration and development of new fields, and reasonable profits. Gas export prices are not regulated and are established on the basis of supply and demand in the importing country. With Russia's accession to the WTO, producers and distributors of natural gas in the Russian Federation are to operate on the basis of normal commercial considerations, based on recovery of costs and profit. However, the Russian Federation is to continue to regulate price supplies to households and other non-commercial users, based on domestic social policy considerations. The price of gas for internal consumption by industrial consumers in the Russian Federation was fixed at an average level of US\$80 per thousand cubic meters in 2010 that secured recovery of estimated costs (around US\$64 per thousand cubic meters in 2010) and an amount for profit. During the last nine years, the gas price had increased from US\$19.3 (in 2001) up to US\$80 (in 2010). The Government intends to modify State regulation of gas prices and develop market pricing principles for the domestic gas market. The Government has accordingly directed the Federal executive body, responsible for State regulation of prices, to develop a formula which would ensure equal return on gas supplies to the international and domestic markets.

Electricity prices are regulated in a similar way as gas prices. The amount of electricity sold on the deregulated market, by the end of 2010, had increased to around 80 per cent of the total electricity sold in the domestic Russian market. Conditions of sale of electricity at regulated prices are provided for under the relevant domestic legislation. Operators engaged in providing services under conditions of natural monopolies are obliged, to provide services subject to price regulation in accordance with the legislation, on non-discriminatory conditions according to the requirements of antimonopoly legislation.

2.4.5 Competition Policy

The basic goal of competition policy in the Russian Federation is to create a favourable climate for enterprises, and the facilitation of competition and efficient functioning of the markets by preventing, restraining and eliminating monopolistic and anti-competitive practices among economic operators. The

legislative framework for realization of competition policy and prevention of anti-competitive practices is set out in the Federal Law No. 135-FZ “On Protection of Competition” (as amended), the Civil Code of the Russian Federation and the Code on Administrative Offences and the Criminal Code, which establish civil, administrative and criminal liability for infringement of the anti-monopoly legislation. Anti-competitive market structure and unfair business practices, including infringement of intellectual property rights, that impede competition, are subject to this anti-monopoly legislation.

The Federal Law “On Protection of Competition” concerns the barring of monopoly activity and unfair competition as well as anti-competitive behaviour by federal executive bodies and governmental bodies. Violation of the anti-monopoly legislation by officials of the federal executive bodies, the executive bodies, local governments, and other bodies and organizations vested with functions under the legislation, as well as violations by natural persons, including individual entrepreneurs are covered under the Law. Violations can lead to civil, administrative or criminal liability. The Law covers also the relations connected with protection of competition and prevention of monopolistic activity and unfair competition, in which foreign legal persons participate. In this respect, this law provides for the similar application of the regulations to Russian and foreign legal persons.

The Federal Anti-Monopoly Service is authorized to carry out the State policy on facilitating development of commodity markets and competition, control over execution of antitrust legislation, as well as prevention and suppression of monopolistic activity, undue competition and other activities restricting competition. The main functions of the Federal Anti-Monopoly Service are to introduce legislative initiatives in the field of anti-monopoly activity and to investigate and ensure compliance with legislation in the sphere of competition in the commodity markets, defence of competition in the financial services market, activities of subjects of natural monopolies, and advertising. The Anti-Monopoly Service also reviews anti-monopoly aspects of establishment and mergers, share transactions and acquisitions. According to the provisions of anti-monopoly legislation and in order to perform the above-mentioned functions, the Anti-Monopoly Service can initiate and conduct administrative cases, take decisions and issue prescriptions to participants of business activities that are obligatory for such participants. The action by the Federal Anti-Monopoly Service can be triggered upon initiative of the Anti-Monopoly Service or by requests of State bodies or legal and natural persons. Under the Constitution of the Russian Federation, regional authorities do not have jurisdiction over competition policy.

2.4.6 State Ownership and Privatization Policy

The specific percentage of state-ownership of shares in a public joint-stock company is not stipulated and currently the percentage of state-ownership varies from 100 per cent to 34 per cent. In industrial and agricultural production, the share accounted for by State enterprises amounts to approximately 10 per cent, while the share of exports and imports is negligible. State participation in the gas production sector is higher than in other sectors. In 2009, Gazprom, which is 51 per cent owned by the State, had an 84 per cent share of the total gas production in the Russian Federation and had a 100 per cent share of gas exports from the Russian Federation.

The basics of the regulation of privatization in the Russian Federation were established by the Civil Code and Federal Law of December 2001 “On Privatization of State and Municipal Property” (as last amended). A total of 1,863 enterprises were privatized between 2005 and 2009. As a result of the privatization process, the number of federal State unitary enterprises came to 3,765 on 1 January 2009, and the number of joint-stock companies with the participation of the Russian Federation came to 3,337 by the same date. Every year, the Government of the Russian Federation endorses a forecast plan (programme) containing a list of federal state unitary enterprises, federally-owned shares of open joint-stock companies,

and other federal property to be privatized in that year. The "Forecast Plan (programme) for federal property privatization and the main directions of the federal property privatization for 2011 and 2013" contained a list of 809 joint-stock companies belonging to the Russian Federation for which shares are to be put up for sale in 2011-2013 as well as 114 federal State unitary enterprises planned to be privatized in 2011-2013. It is planned, in particular, to put up for sale 7.58 per cent shares of Sberbank, 100 per cent of the United Grain Company (by 2012) and 50 per cent minus one share of Rosagroleasing (not before 2013).

Shares of "strategic" Joint-Stock Companies (JSCs) and "strategic" enterprises can be offered for privatization. The possibility of the State to use a special right is provided for in the Federal Law "On Privatization of the State and Municipal Property." When the decision to use the "golden share" has been taken, the Russian Federation or the bodies of the Russian regions appoints the respective representatives to the board of directors (supervisory board) of a joint-stock company in question.

There are no specific conditions for foreign investors set out in the legislation on privatization, concerning participation in the privatization programme other than those that apply to domestic investors. Furthermore, the basic Law on privatization establishes equality of rights of all customers in the process of privatization. However, certain limitations on foreign ownership are provided for by Russian legislation regulating different areas of economic relations. Such limitations are to be observed in the process of privatization. Also as per the Law "On Privatization of the State and Municipal Property," the participation of some categories of persons (Russian as well as foreign) can be restricted by other federal laws for the purposes of defending the constitutional order, morals, health, the rights and legal interests of other persons, and ensuring the defence and security of the state.

As per the Law, some property cannot be privatized, because it can be owned only by State or municipal Governments and federal laws stipulate that some property and objects cannot be subject to any form of transaction. Property and objects which cannot be privatized consist, among other things, of mineral wealth, forest fund, water resources, air space, resources of the continental shelf, territorial waters and sea economic zones of the Russian Federation, budgetary and non-budgetary funds, currency and other reserves, objects of historic and cultural heritage of federal value, property passed over to state unitary enterprises and state institutions involved in the turnover of narcotics and psychotropic substances, nuclear stations and enterprises producing special nuclear and radio-nuclear materials, nuclear weapons, property of the enterprises performing scientific research and development works, and property permanently used to provide social services.

3. Multilateral, Regional and Bilateral Agreements

The Treaty on the Establishment of the Common Customs Territory and the Formation of the Customs Union of 6 October 2007 between the Republics of Belarus, Kazakhstan and the Russian Federation entered into force with the establishment of a Common External Tariff (CET), adoption of a Customs Union (CU) Customs Code and establishment of CU institutions. The Treaty lays out a framework for progressively increasing economic cooperation amongst Member countries of the Eurasian Economic Communities (EurAsEC). The EurAsEC consisting of the Russian Federation, the Republics of Belarus and Kazakhstan, Tajikistan and the Kyrgyz Republic was established through the Treaty on the Establishment of the Eurasian Economic Community of 10 October 2000 (as amended).

In addition the Russian Federation, Ukraine and the Republics of Belarus and Kazakhstan signed an Agreement on the Establishment of a Single Economic Space intending to promote mutual trade and investment and to increase the competitiveness of their economies via, inter alia, the creation of a

free-trade area and possibly of a customs union. However, no specific follow-on Agreements aimed at a realization of this Single Economic Space have been concluded so far, and efforts to implement the Agreement are, at this time, suspended.

The Agreement on General Conditions and Mechanism of Support for the Production Cooperation Development of Enterprises and Industries of CIS Member States - the Ashkhabad Agreement - was signed by all CIS Members. The Agreement provides for coordinated policies in the sphere of international specialization and industrial cooperation through joint projects and programmes. These projects and programmes are implemented through annual Protocols with attached lists of specific products generated by the individual participating enterprises. The goods covered include components, parts, and spare parts necessary for the technologically interconnected production of final products. The Agreement provides for the tax exemption for goods imported according to the contracts between enterprises of the CIS countries on industrial cooperation. During recent years, the Agreement has been exercised only between the Russian Federation and Ukraine, and the Russian Federation and Moldova, covering metallurgy, aircraft building and chemical industry. Protocols for further cooperation were signed in 2010.

A regime of free trade in goods had been established between the Russian Federation and each individual CIS country and Georgia, based on bilateral agreements that covered a substantial part of trade in goods. The Russian Federation, along with the Republics of Kazakhstan and Belarus, has resumed collective negotiations with other CIS Member states to establish an FTA among the CIS Members which would replace the individual FTAs of the CIS countries with the Russian Federation and establish a CIS-wide preferential trade area.

Since the establishment of the Republics of Serbia and Montenegro, the Free Trade Agreement with the Republic of Yugoslavia has applied equally between the Russian Federation and these countries. The original Agreement which had not been ratified by the Russian Federation is still being applied provisionally. The Agreement stipulates that the Parties would liberalize trade in accordance with the provisions of the Agreement and WTO rules in order to create a free trade regime.

India¹

1. Institutions

1.1 Institutional Framework for Trade Policies

Trade policy is formulated and implemented mainly by the Ministry of Commerce and Industry, along with other ministries and agencies including the Ministry of Finance, the Ministry of Agriculture and the Reserve Bank of India. The mandate of the Department of Commerce in the Ministry of Commerce and Industry is to formulate and implement India's international trade and commercial policy.

The Director General of Foreign Trade (DGFT) advises the Government in the formulation of India's Foreign Trade Policy (FTP) after consulting with various trade bodies such as the Federation of Indian Export Organisations, export promotion councils, commodity boards and leading industry associations. The FTP is issued every five years but it is reviewed periodically in view of changing domestic and international situations. The FTP is updated through the issue of notifications by the Director General of Foreign Trade, attached to the Ministry of Commerce and Industry. The Tariff Commission within the Ministry issues recommendations on the appropriate tariff levels. However, the tariff and other duties are under the purview of the Central Board of Excise and Customs (CBEC) in the Ministry of Finance.

India considers trade policy as an instrument to attain its overall economic policy objectives of growth, industrialization and self-sufficiency. In its 2004-09 Foreign Trade Policy (FTP), India highlighted the need to expand trade, setting two objectives - (i) to double India's share of global merchandise trade within five years, and (ii) to use trade expansion as a policy to promote economic growth and employment generation. In the context and aftermath of the global economic and financial crisis, India has sought to arrest and reverse the declining trend of exports and to provide additional support, especially to sectors hit badly by the global recession, as asserted in the 2009-14 FTP. India's short-term objective, according to the latest FTP, is to achieve annual export growth of 15%. The long-term objective is to accelerate the export growth rate to 25% per annum and double India's share in global trade by 2020. In order to meet these objectives, India implements a mix of policies including tax incentives and credit facilitation. Although India aims to provide a stable trade policy regime to reach its long-term goals, it also uses trade policy to attain short-term goals such as containing inflation. Trade policy is also used as an instrument of industrial policy, for example, to protect the local industry through its applied tariff and the use of contingency measures.

¹ This chapter has been compiled by Prof. Sajal Mathur, Meghna Dasgupta and Pallavi Sirohi at the Centre for WTO Studies, Indian Institute of Foreign Trade, New Delhi. Material for the chapter has been mainly drawn from the 2011 WTO Trade Policy Review of India (WT/TPR/S/249 and WT/TPR/G/249).

1.2 Executive, Legislative and Judicial Branches of the Government

The Constitution of India provides for a parliamentary system of Government with bicameral legislature and separation of powers between executive, legislature and judiciary. India has a federal structure with elected governments in the states. As on date, India is a union of 28 states and 7 union territories.

Executive: The constitutional head of the Union is the President. Article 74 of the Constitution provides for a Council of Ministers, headed by the Prime Minister. The President appoints the Prime Minister; the other Ministers are appointed by the President on the advice of the Prime Minister. The President exercises his/her functions in accordance with the advice of the Council of Ministers. Thus, executive power is, in practice, vested in the Council of Ministers.

Legislature: Legislative power is vested in the Parliament which consists of the Council of States (Rajya Sabha or the Upper House) and the House of the People (Lok Sabha or the Lower House). The President is elected for five years by the members of an electoral college comprising members of both houses of Parliament and of the state legislative assemblies.

Every State has a legislative assembly. The distribution of legislative powers between Parliament and state legislatures is clearly laid down in the 7th Schedule of the Constitution. Parliament has exclusive power to legislate on issues such as international trade and agreements and taxes like customs. The states are responsible for issues such as law and order and taxes like octroi. On certain matters such as economic and social planning both Parliament and the state legislatures have concurrent powers.

The President has the power to promulgate ordinances when both houses of Parliament are not in session. Ordinances have the same force and effect as Acts of Parliament. However, ordinances must be put before both houses of Parliament for approval once they resume work. If they are not approved, they cease to operate within six weeks of the reassembly of Parliament, or before if both houses disapprove it. The President may withdraw an ordinance at any time.

Judiciary: India's legal system is based on the common law system. The Supreme Court is India's highest judicial body, comprising of a Chief Justice and other judges, all appointed by the President. The Supreme Court is the highest appellate court, taking up appeals against judgments of the High Courts of the states and Union Territories. At the state level, the judicial administration is headed by a High Court. Each State is divided into judicial districts covered by district and sessions courts, which are the judicial authority in a district. Below this, there are subordinate courts of civil and criminal jurisdiction.

2. Trade Policies

2.1 Trade in goods

2.1.1 Import Policy

A) TARIFFS

Structure: Under the Customs Tariff Act 1975, the MFN tariff is based on the standard rate. It is a statutory duty. In addition to the standard rate, importers are required to pay an additional duty ("countervailing duty") and a special additional duty instead of local taxes. The "effective" tariff may be lower because of general or industrial use based exemptions. India's tariff is announced in the annual Budget at the end

of February each year, however, additional changes to individual tariff rates may be made during the year by the Ministry of Finance's Central Board of Excise and Customs through notifications published in the Gazette of India.

The 2010-11 applied tariff (HS2007 nomenclature) has 11,328 tariff lines at the eight digit level. Some 94% of tariff lines are ad valorem. Duty is levied on the c.i.f. value of imports. The simple average applied MFN tariff was 12% in 2010-11. The simple average tariff for agricultural goods (WTO definition) has declined over the years to 33.2%, but remains substantially higher than that for manufactured goods which face an average tariff of 8.9%. Dispersion remains high with standard deviation at 14.2.

In 2010-11, tariffs ranged from zero to 150%. The majority of lines (71%) carry a rate greater than 5% but less than 10%, while 12.8% of total lines have a tariff rate greater than zero but less than 5%. The number of duty-free lines stood at 3.2% of the total tariff lines. Among agricultural products, beverages and spirits have the highest tariffs, followed by coffee and tea, dairy products, sugar and confectionary. In the case of non- agricultural goods, fisheries and transport equipment bear an above average tariff protection of 29.5% and 21.5%, respectively.

Non ad valorem rates apply to 690 tariff lines - five are specific rates (i.e. almonds and platinum), while 685 (6.1% of all tariff lines) are alternate rates (textiles and clothing). The simple average applied MFN tariff in 2010-11 was 13.4%, including AVEs (12% without AVEs). The inclusion of AVEs affects only industrial average tariff, increasing it from 8.6% to 10.3%. Mainly affected commodities are textile and clothing. Some goods have protection of around 600% (e.g. silk shawls and scarves (exceeding 60 cm) [HS 6214.10.20 (598.32%)], women's or girls' suits of silk [HS 6104.19.20 (620%)] and scarves of silk measuring 60 cm or less [HS 6214.10.10 (656.41%)]).

The implementation of India's Uruguay Round tariff commitments was completed in 2005. Some 75% of India's tariff is bound, 100% for agricultural (WTO definition) and 71.6% for non-agricultural products. The average bound tariff is 46.4%. Bound rates are mainly ad valorem (90.2%); non ad-valorem bound rates apply mainly to textile and clothing. India did not bind any tariff lines in HS sections 12 (footwear and headgear), 19 (arms and ammunitions), and 21 (works of art). Partial bindings are mainly in HS section 11 (textiles and clothing). Bindings range from zero to 40% for non-agricultural products, with some exceptions such as fish products (150%), and range from 10 to 300% for agricultural products with most bound at 100 and 150%. Some edible oils are bound at 300%. The average bound tariff is 118.3% for agricultural products (WTO definition) and 32% for non-agricultural products.

Some imports are also subject to other duties and charges. Such imports are high-speed diesel oil and petrol (i.e. motor spirits), some cigarettes and tobacco products (HS 24.02 and 24.03), petroleum oils (HS 2709.00.00), telephones for cellular network or for other wireless networks and vehicles and motor cycles (HS 8703, 8704, 8706, and 8711).

Tariff-quotas: Tariff quotas are allocated by the Directorate General of Foreign Trade (DGFT) upon request by designated agencies such as the National Agricultural Cooperative Marketing Federation of India Ltd., the State Trading Corporation of India Ltd., PEC Ltd. and the National Dairy Development Board. Tariff rate quotas are maintained on 19 tariff lines at the HS eight digit level - milk and milk powder, maize (corn), rape, colza and mustard oil, crude sunflower seed and safflower oil. In December 2010, due to a shortage, natural rubber (five tariff lines at the HS eight digit level) was put under a tariff quota regime for the remainder of the financial year 2010-11. A tariff quota was also put in place for butter and other animal fats. The fill ratio of these quotas was low, apparently because of lack of demand. Under the free trade agreement with Sri Lanka, India maintains tariff rate quotas on clothing and tea imports.

Preferences: Preferential rates are granted for certain articles under GSTP, regional (SAFTA, APTA, MERCOSUR and ASEAN) and bilateral agreements (Singapore, Korea, Rep. of, Chile and Sri Lanka). Under the GSTP, India has granted tariff concessions to 12 countries on a limited number of products. Only preferences under the SAFTA II (at 2.3%) and under the Sri Lanka FTA (at 2.3%) are significantly lower than the simple average applied MFN of 12%. In other instances, preferences are not substantial (Rep. of Korea) or the number of tariff lines subject to preferences is minimal (e.g. MERCOSUR and Chile). India's Duty Free Tariff Preference Scheme for LDCs, which came into effect in August 2008, covers about 92.5% of global exports of all LDCs and provides duty free and preferential tariff access on 94% of India's tariff lines. It is proposed that the coverage of the scheme would be further expanded in line with the mandate.

Exemptions: The Central Government is empowered to exempt any goods from customs duties on grounds of public interest. Tariff concessions are announced in the annual Budget and throughout the year through notifications by the Ministry of Finance. These concessions are both product specific and based on end use. Goods imported under processing for export regimes, e.g. special economic zones (SEZs) and export oriented units (EOUs), are eligible for tariff concessions. Other programmes to promote exports and investment also provide for tariff concessions.

B) INTERNAL TAXES ON IMPORTS

India applies a number of duties and charges on imports, other than tariffs. These include additional customs duty, special additional duty, education cess and secondary and higher education cess. Some charges and cesses are also applied on specific products.

The additional customs duty (AD) is aimed at removing or reducing what the Government considers a pro import bias resulting from the application of central excise duties to domestically manufactured goods, in accordance with India's trade legislation. To this end, the AD rate should be equivalent to the central excise duty, also referred to as Central Value Added Tax (CENVAT), on domestically produced goods of the same tariff classification. The general AD rate was 10% in 2010. However, some goods may have lower rates of 4% and 0% and specific or compound rates. The rate and its exceptions are defined in each Budget or through notifications.

The 4% special additional customs duty (SAD) continues to be imposed on imports, with few exceptions (14.8% of all tariff lines), to partially compensate for the sales tax, state value-added tax, local tax or any other charges levied on a like article on its sale, purchase or transportation in India. However, as the SAD is an across-the-board tax applied at a flat rate on most goods, it may not always be equivalent to local sales taxes on similar domestically produced goods, which may be higher or lower. The SAD paid on imports subsequently sold within India and for which the importer has paid state level value-added taxes, may be refunded.

Since 2004, an education cess has been charged on imports at the rate of 2% on all aggregate customs duties (excluding safeguard, countervailing or anti dumping duties, if applicable). The secondary and higher education cess of 1%, which entered into force through the Finance Bill of 2007, is also levied on all imports. This cess is calculated on the aggregate value of all excise duties (including the additional and the special duties or any other duty or excise), but excluding the education cess and safeguard, countervailing or an anti dumping duty, if applicable.

The clean energy cess is levied on coal, lignite and peat produced in India and imported. There is also an entry tax (octroi) on entry of certain domestic and imported goods to the jurisdiction of certain states.

Calculation of all charges applied on imports including landing charges, effective customs duty, additional customs duty, special additional customs duty and education cess show an average protection of 25.6%. Some of these charges are in lieu of domestic taxes. Additional cesses are levied on imports and domestic products for the development of specific industries and are not part of the fiscal revenue. The authorities note that these cesses are charged as part of the excise duty. Thus in the case of imports they are part of the additional duty (AD).

The objective of the authorities is to eliminate the cesses once the Goods and Services Tax (GST) is implemented.

C) QUANTITATIVE RESTRICTIONS

Prohibitions: Import restrictions may be imposed under Section 3 of the Foreign Trade (Development and Regulation) Act 1992 and through notifications, under Section 11 of the Customs Act 1962, declaring the importation or exportation of any good as prohibited or restricted.

Import restrictions may be imposed for security, self-sufficiency, balance of payments, health and moral reasons. In practice, India links the use of import restrictions and licensing and other non tariff measures (NTMs) to domestic policies. Import prohibitions are applied on a range of products from meat and offal of most wild animals to animal fats, ivory and ivory powder. For the past few years, certain mobile handsets and mobile phones have been included in the list of prohibited goods. For sanitary reasons, India has continued to ban imports of certain avian livestock and livestock products and has prohibited imports of milk and milk products from China since 2008. In addition, imports of rough diamonds from Côte d'Ivoire as well as some products from the Democratic People's Republic of Korea, Iran and Iraq are prohibited under UN resolutions, and imports of rough diamonds (HS 7102.10, 7102.21 or 7102.31) under the Kimberly Process. Imports of beef and beef products in any form remain prohibited.

Licensing: India applies an import licensing system to administer the importation of restricted items. Import licenses are administered according to the Foreign Trade (Development and Regulation) Act 1992 and Foreign Trade (Regulation) Rules 1993. Licensing requirements may be eliminated without legislative approval. The Import Policy Schedule lists items that are restricted completely and items that are restricted with conditions. Restricted items require a specific import licence issued by the Directorate General of Foreign Trade (DGFT). Restricted items subject to conditions, require import permits (e.g. sanitary and phytosanitary permits), in addition to the specific import licence.

Under India's current Import Policy Schedule (Foreign Trade Policy 2009 14), some 422 tariff lines at the HS eight digit level are subject to import restrictions (up from some 415 tariff lines in 2007). They represent around 3.7% of total tariff lines. Some 275 tariff lines are restricted while some 147 are restricted subject to conditions. Restrictions are imposed on products under HS sections 1 (Live animals and Products), 2 (Vegetable Products), 5 (Mineral Products), 10 (Pulp and Paper), 19 (Arms and Ammunitions) and 21 (Works of Art).

Quotas: India maintains import quotas for marble and similar stones (HS 2515.11.00, 2515.12.10, 2515.12.20, and 2515.12.90) and for sandalwood (HS 4403.99.22). Quotas are established annually and administered on an MFN basis. There is no maximum limit to be allocated per applicant. Applications are examined upon receipt and assessed according to the criteria stated in the notifications and circulars issued by DGFT on a yearly basis. India does not maintain bilateral quotas. As of 2010, India could impose quantitative restrictions by notification in the Gazette of India, on imports of goods that cause serious injury to domestic industry, as a result of a safeguard investigation.

D) STANDARDS

- TECHNICAL BARRIERS TO TRADE

Technical Regulations: The Ministry of Commerce retains overall responsibility for implementing the WTO Agreement on Technical Barriers to Trade (TBT). However, the Ministry of Commerce has nominated the Bureau of Indian Standards (BIS) as the TBT enquiry point for disseminating information on standards, technical regulations and certification. India accepted the WTO TBT Code of Good Practice in 1995. As of February 2011, India has made 41 notifications to the TBT Committee.

Responsibility for the formulation of technical regulations is with the agency in charge of the respective area. A draft technical regulation is sent out for comments prior to its adoption by the concerned ministry/department/organization. The draft technical regulations are also notified to WTO Members for comments. Comments received on the draft are examined by the ministry concerned. The final regulation (via a notification) is published in the Official Gazette giving its date of implementation; it is simultaneously notified to the WTO. Amendments to technical regulations are made through a similar process, from time to time, based on industry needs or due to new developments and for harmonization with international regulations.

Standards: Indian standards are established based on the provisions of the Bureau of Indian Standards (BIS) Act 1986 and BIS Rules 1987. The BIS is responsible for formulating and enforcing standards for 14 sectors. These are production and general engineering, civil engineering, chemical electro-technical food and agriculture electronics and information technology mechanical engineering, management and systems, metallurgical engineering, petroleum, coal, and related products, transport engineering, textile, water resources and medical equipment and hospital planning. Its role also includes the development of activities relating to certification of product and quality systems, testing and calibration, enforcement, international cooperation, and creating awareness among consumers. Other agencies are responsible for enforcement of standards in other areas.

Sectoral coordination committees have been established for food processing, power, steel, automotives, textiles and information technology in order to develop harmonized standards at the national level. The BIS has been placing emphasis on harmonizing national standards with international and regional standards. Thus, international standards are often adopted as Indian standards under the numbering system of ISO/IEC or are harmonized with international standards in areas of India's trade interests. The BIS is a member of the International Organization for Standardization (ISO) and participates in ISO technical and policy making committees. The BIS is also a member of the International Electrotechnical Commission (IEC). The BIS has bilateral memoranda of understanding with the national standards bodies of Afghanistan, Bhutan, Brazil, France, Germany, Israel, Mauritius, Nigeria, South Africa, the UAE and the United States. It also has a Mutual Recognition Agreement with the national standards body of Sri Lanka.

There were around 18,623 Indian standards as at 31 March 2010 and about 84% were harmonized with international standards. A preliminary draft standard prepared by expert bodies is considered by the relevant technical committee. Once the draft is approved by the technical committee, it is circulated amongst the various stakeholders and posted on BIS website for comments. Comments should be provided within two months. The technical committee finalizes the draft standard taking into account these comments. The finalized standard, its revisions, amendments and cancellation are published in the Official Gazette. Most standards in India are voluntary, although health and safety regulations are mandatory for several products and have evolved into technical regulations.

Conformity Assessment and Accreditation: The BIS is also the national certifying body. Conformity assessment procedures are regulated by the BIS Act 1986 and the BIS Rules and Regulations 1988. The Central Government, on grounds of public interest, notifies which articles or processes should conform to an Indian standard and should bear the BIS certification mark under a licence from BIS. Some 81 products are subject to the mandatory BIS certification mark. As of May 2011, there were more than 1,000 products under voluntary certification. The requirements for the use of the BIS certification mark are the same for domestic and imported products. Besides the normal product certification scheme, the BIS also grants licenses to environment friendly products under a special scheme and awards the ECO mark to such products. In order to implement its certification schemes, the BIS conducts conformity testing through its laboratories and has test facilities for most products under the Certification Marks Scheme.

In addition to the BIS laboratories, services are provided by 115 national laboratories recognized under the BIS Laboratory Recognition Scheme. The Scheme covers product testing needs for certification purposes. Once laboratories are recognized under this scheme, they are subject to audit to ensure continued suitability. Recognition is granted for three years and is renewable for similar periods. As of February 2011, 115 laboratories had been recognized under this scheme.

Foreign producers who wish to export products subject to mandatory certification must obtain a licence from the BIS. Foreign manufacturers must set up a liaison/branch office in India to obtain a licence if the BIS has not signed an MOU with the country where the manufactured goods originate. Otherwise, foreign manufacturers may nominate an authorized representative in India responsible for checking compliance with the provisions of the BIS Act 1986, and its Rules and Regulations. Licenses are initially valid for one year, but can be renewed for one or two years upon application to the BIS and payment of the required fees. Regular surveillance through random sampling is undertaken during the operation of the licence by BIS laboratories and accredited laboratories to ensure conformity of certified products.

The National Accreditation Board for Testing and Calibration Laboratories (NABL), an autonomous body under the Department of Science and Technology, is the sole accreditation body for testing and calibration laboratories in India. Laboratories seeking accreditation must comply with the relevant standards of accreditation as well as with NABL's specific requirements, such as successfully completing a proficiency testing programme. Accreditation is valid for two years. NABL conducts annual surveillance visits of the accredited laboratories to verify continued compliance with requirements.

- SANITARY AND PHYTOSANITARY MEASURES

Legislative and Institutional Framework: SPS matters continue to be governed and enforced through a number of laws and agencies. Relevant legislations include the Prevention of Food Adulteration Act 1954, Essential Commodities Act 1954, Livestock Importation Act 1898 (amended), Plant Quarantine (Regulation of Import into India) Order 2003 and a number of product-specific acts. Imports of plants and plant materials are regulated under the Destructive Insects and Pests Act 1914, the Plant Quarantine (PQ) (Regulation of Import into India) Order 2003 and international conventions.

In August 2006, the Government passed the Food Safety and Standards (FSS) Act of 2006 to consolidate separate food laws and to establish the Food Safety and Standards Authority of India (FSSAI). The various agencies implementing food laws will be brought under the FSSAI. The FSSAI also aims to establish a single reference point for all matters relating to food safety and standards.

The main institutions involved in the establishment and implementation of sanitary and phytosanitary measures are the Ministry of Health and Family Welfare, the Department of Animal Husbandry, Dairying, and Fisheries; the Directorate of Plant Protection, Quarantine and Storage; the Bureau of Indian Standards; and other state government agencies.

India has nominated three institutions as national enquiry points under the WTO SPS Agreement - the Department of Animal Husbandry, Dairying and Fisheries for animal health and related issues, the Department of Health for food safety related issues and plant protection, and the Department of Agriculture and Cooperation for plant health or phytosanitary issues.

India is a member of the Codex Alimentarius Commission (Codex), the World Organisation for Animal Health (Office International des Epizooties or OIE) and the International Plant Protection Convention (IPPC). India is also a signatory to the Convention on Biological Diversity.

Implementation of SPS measures: All plant and plant material consignments must be accompanied by a phytosanitary certificate issued by the national plant protection organization of the exporting country and an import permit issued by the officer in charge of the plant quarantine station. Some products may be imported without import permit but may be required to fulfil other conditions such as fumigation. Other phytosanitary requirements covering some 980 products are listed in PQ Order 2003. This Order also lists all the plant species that are prohibited for import. Imports of plants and plant products may only enter Indian territory through designated ports. Sampling and testing of consignments to prevent the risk of exotic pests is undertaken according to the International Standards for Phytosanitary Measures Guidelines No. 23 and 31. If commodities are found free from pests, then they are cleared for import; if not, then they must undergo fumigation with the accredited fumigation operators at the importer's cost.

Imports of animal products into India require sanitary import permits issued by the Department of Animal Husbandry, Dairy and Fisheries. Permits must be obtained prior to shipping from the country of origin. The Department approves or rejects the application after an import risk analysis on a case by case basis. Permits are valid for six months and may be used for multiple consignments. Some imports of animal products also require an import licence issued by Director General of Foreign Trade.

The FSSAI aims to ensure the availability of safe and wholesome food for human consumption through establishing and enforcing science-based food safety standards for domestically produced and imported foods, licensing and registering businesses selling food for human consumption, and regulating food manufacturing practices and labelling.

Imports of genetically modified (GM) food, feed and organisms, and living modified organisms for R&D, food, feed, processing in bulk and environment release is governed by the Environment Protection Act 1986 and Rules 1989. Imports of products containing GM material for industrial production or environmental release are allowed only with the approval of the Genetic Engineering Approval Committee (GEAC). The GEAC has accorded one time approval for imports of GM soybean oil derived from round up ready soybean for the purpose of consumption after refining.

India had made 71 notifications (till February 2011) to the SPS Committee, including measures on food items including processed food, pet food products of animal origin, plants and plant materials, food packaging materials, horns/hoooves of animals, meat and meat products, milk and milk products, food additives, maximum residues limits (MRLs) of different pesticides in carbonated water, MRLs of pesticides on different food commodities, pre-packaged food, and food safety and standards rules.

Labelling: The Legal Metrology Act 2009 and the Legal Metrology (Packaged Commodities) Rules 2011 regulates labelling requirements in India. Labelling requirements are uniform across all states and for all foreign suppliers. Packaged commodities must bear a label securely affixed. These labels should include the name, description, ingredients, name and address of manufacturer or importer, net weight or measure of volume (metric system) of contents, sale or maximum retail price (MRP) inclusive of all taxes, month and year of manufacture, date of expiry, licence number where relevant, and name, address or e mail if available of person or office to be contacted in case of a complaint. The Ministry of Health and Family Welfare has recently notified the quantitative ingredient declaration requirement as an additional labelling requirement for food. More specific labelling requirements exist for specified products such as infant milk substitutes and infant foods, bottled mineral water and milk products. Labels must be in Hindi and in English. In certain instances, they must be written in the language of the locality where the product is ultimately sold. Currently, there is no mandatory labelling requirement for genetically modified products.

E) CUSTOMS MEASURES

Customs Valuation: The Customs Act 1962 (Section 14), the Customs Valuation (Determination of Price of Imported Goods) Rules 1988, its amendments and the Finance Act 2007 regulate customs valuation in India. The determination of value of imports is based on the transaction value, i.e. “the price actually paid or payable for the goods when sold for export to India,” including any amount paid or payable for costs and services (e.g. commissions and brokerage, royalties and licence fees, transport and insurance costs, and handling charges). The calculation is based on the exchange rate in force when the bill of entry is presented to Customs. For goods sold on “high seas” sale contracts, the price paid by the last buyer constitutes the transaction value. The transaction value method may be rejected if “reasonable doubt” arises on the accuracy of the declared value. However, reasonable doubt does not lead to an upfront rejection of the import value presented, which, if justified by the importer, is accepted. If the transaction value is not used, then the value is determined according to other methods in sequential order - transaction value of identical goods, transaction value of similar goods, deductive value, computed value and residual method. The Rules 2007 also clarify that royalties and licence fees must be included in the transaction value, if not included in the price actually paid or payable, and the transport cost included in the ship demurrage charges. A landing charge (for loading, unloading and handling) of 1% of the c.i.f. value is added to the c.i.f. value to calculate the transaction value.

The Central Board of Excise and Customs is authorized, by notification in the Gazette of India, to fix “tariff values” (reference prices). At present, India uses “tariff values” to calculate customs duty applicable on imports of, inter alia, palm oil and palmolein oil (crude and RBD), crude soybean oil, poppy seeds and brass scrap. According to the authorities, “tariff values” are revised every two weeks and are adjusted to align with international market prices, though “tariff values” for edible oil has remained unchanged since 2006. Importers may file an appeal against customs decisions on valuation matters to the Appeals Commissioner or the Customs, Excise and Service Tax Appellate Tribunal.

India maintains in the WTO the special and differential treatment provisions in the Agreement. Hence, India continues to maintain a reservation concerning the reversal of the sequential order of Articles 5 and 6 and a reservation to apply Article 5.2 whether or not the importer so requests. In 2009, India decided to lift the reservation on minimum values entered under paragraph 3 of the Protocol to the Agreement on Implementation of Article VII of the GATT 1994 and in paragraph 2 of the WTO Agreement.

Rules of Origin: India does not apply non preferential rules of origin. Preferential rules of origin are applied under regional and bilateral trade agreements. Maximum foreign content requirements range

from 30 to 70%. Other criteria to determine origin are sufficient transformation and change in tariff classification. There are also product specific rules of origin under the SAFTA (180 products) and in the Agreements with Korea (1,780 products) and Singapore (380 products).

Pre-shipment Inspection and other Custom Formalities: Pre-shipment inspection for imports of certain goods has been mandatory since 2004. Goods subject to pre-shipment inspection include unshredded and shredded metallic waste and scrap. Imports of unshredded metallic waste and scrap are permitted through 26 designated ports. Inspections ensure that consignments are free of arms, explosives and radioactive contamination. Pre-shipment inspection certificates are issued by accredited certifying agencies located in and outside India. Imports of certain types of second hand and defective steel products as well as textiles and clothing articles are also subject to pre-shipment inspection on safety and health grounds.

India has continued the process of changing to paperless electronic customs clearance. Importers (Indians and foreign nationals), with a few exceptions, must register with the Directorate General of Foreign Trade (DGFT) and obtain an importer exporter code (IEC) number to be able to import commercially. Since 2007, registration can be done online through application and provision of supporting documents (e.g. bank certificate and income tax PAN- permanent account number).

India has six regimes for entry of imports - (a) imports for home consumption, (b) warehousing, (c) transshipment, (d) transit, (e) re importation, and (f) imports for special economic zones (SEZs). For home consumption, importers may clear goods after payment of the duties and charges, or for warehousing without immediate payment of duties. Imports cleared for warehousing require a bill of entry to be filed with all supporting documents as required for goods for home consumption. The duty payable is determined by Customs. In general, transshipment of containers at Indian ports is allowed without any examination by Customs. Transshipped goods require a transshipment Bill of Lading. Transit of goods through India is allowed without payment of duty and without examination by Customs, except if customs officials are informed of the possibility of illegal trade. Goods exported from India may be re imported within three years but there must be no change in the classification of the goods. Re imported goods are subject to duties, except goods exported for repairs abroad for exhibitions or as samples, which may be re imported duty free. Special economic zones (SEZs) are deemed foreign territory for trade operations. Imports into SEZs enter without payment of taxes, duties or cess. They are not subject to customs examination at the port. Any examination, if required, takes place inside the Zone.

In 2005, India introduced a risk management system (RMS) as a measure of trade facilitation to selectively screen only high and medium risk cargo for customs examination. The RMS consolidated the “green channel” clearance facility and other fast track facilities to clear goods. The RMS for processing imports is operational at 48 customs offices. About 85% of India’s imports are processed via this system. In addition, importers with a good track record and complying with qualifying criteria, are entitled to be accredited for special clearance procedures under the Accredited Client’s Programme (ACP).

In early 2011, 250 ACP importers were allowed to self assess their consignments with no need for examination in line with India’s commitments to simplify and harmonize Customs’ procedures under the revised Kyoto Convention. Under the RMS, importers file an electronic Bill of Entry and the system indicates which import certificates, permits or licenses are required. The RMS reviews the documents and provides one of four possible instructions for both ACP (if cargo is considered risky) and non ACP importers. These instructions are (a) imports may be discharged without further assessment (i.e. of their classification, rate of duty or valuation) or examination, (b) imports may be cleared with no further assessment but subject to examination, (c) the release of imports requires further assessment but no examination, or (d) imports must be assessed and examined.

Certificates of registration and import permits (e.g. certificates of origin, sanitary and phytosanitary certificates and end use certificates) issued by different agencies are required to import specific goods, in certain instances, depending on their end use. These certificates must be submitted at the time of filing the Bill of Entry. Under the Insecticides Act 1968, products that are included in the Schedule to the Act and are not registered in India as insecticides must be imported on the basis of import permit or end use (no objection) certificate for products used for non insecticidal purpose. Without the no objection certificate, which is issued only to end-users and not to importers in general, imports are not allowed. If these requirements are not fulfilled, then imports are confiscated and the importer may be fined and/or imprisoned. These measures are aimed at protecting public health. For imports under duty exemptions and free trade zones schemes, importers are required to “execute” a bond with Customs.

Customs clearance has been more efficient since 2007. On an average, import procedures are completed in 20 days (41 days in 2007), including 8 days for document preparation and 4 days for customs clearance and technical inspections. If an importer is not satisfied with the assessment (i.e. the classification, rate of duty or valuation) by the customs officer, then the importer may appeal against the “assessment order” (i.e. a decision made in writing by an officer).

F) TRADE REMEDIES AND CONTINGENCY MEASURES

India’s anti dumping, countervailing and safeguard legislation is contained in the Customs Tariff Act 1975, as amended. India considers anti dumping duties in particular and trade remedial measures in general as necessary protection instruments to eliminate injury caused to the domestic industry by unfair trade practices. Interventions are aimed at re-establishing a situation of open and fair competition in the Indian market.

Antidumping: India is one of the most active users of anti dumping measures among WTO Members. From the inception of the WTO until 30 June 2010, India accounted for 436 of the 2,433 anti dumping measures adopted by Members that is 17.9% of the total. During the same period, India initiated 613 investigations, out of a total of 3,752. The initiations affected mainly China (137), Korea (47), Chinese Taipei (45), the EU (42), Thailand (36), Japan (30), the United States (29), Indonesia (24), Singapore (23), Malaysia (22) and the Russian Federation (19). As of 30 June 2010, the average length of an anti dumping measure applied by India was 56.7 months.

Anti dumping investigations may be initiated by the Directorate General of Anti Dumping and Allied Duties (DGAD) in the Department of Commerce upon a written application by or on behalf of domestic industry or on its own initiative if there is justification to launch an investigation. The margin of dumping for each exporter or producer is determined by the DGAD, following which the Department of Revenue may impose the anti dumping duty by notification in the Official Gazette. Under Indian law, the Government is obliged to restrict the anti dumping duty to the margin of dumping or the margin of injury, whichever is lower. Anti dumping duties may remain in place for five years unless revoked earlier or extended by the DGAD. Indian legislation provides for levying anti dumping duty retrospectively where there is a history of dumping that caused the injury or when the injury is caused by massive dumping in a relatively short time so as to seriously undermine the remedial effect of an anti dumping duty. An investigation may be terminated by the DGAD at any time if - there is a written request from or on behalf of the domestic industry at whose instance the investigation was initiated; there is insufficient evidence of dumping or injury; the injury is negligible; the margin of dumping is less than 2% of the export price; or the volume of the dumped imports is less than 3% of imports of the like product, unless the countries accounting for 3% individually account for over 7% collectively of imports of the like product. Both mid-term and sunset reviews are conducted by the DGAD. Through this, it assesses the need for continued imposition of anti dumping duties.

Countervailing Measures: Definitive countervailing measures must be imposed by the Central Government on DGAD recommendation within three months of the final findings being published. Final measures may remain in force up to five years. As of June 2011, there were no definite countervailing measures in place. Anti dumping and countervailing measures may be appealed to the Customs, Excise and Service Tax Appellate Tribunal (CESTAT).

Safeguards: In addition to the Customs Tariff Act 1975, the Customs Tariff (Identification and Assessment of Safeguard Duty) Rules 1997 and the Customs Tariff (Transitional Products Specific Safeguard Duty) Rules 2002 describe the procedures for the application of safeguard measures in India. Domestic legislation and its implementation follow Article XIX of the GATT 1994 and the WTO Agreement on Safeguards.

Over 2007-10, 18 investigations were initiated. In eight of these cases (seven investigations), the Director General (Safeguards) recommended the application of some measures. All safeguard measures consisted of an increase in tariffs at the same or lower rates than those recommended by the Director General.

The Director General (Safeguards) in the Department of Revenue has the responsibility for hearing the petitions and conducting investigations on safeguards. Views regarding the results of the investigation conducted by the Director General (Safeguards) are placed before the Finance Minister for approval in respect of safeguard duties and before the Commerce Minister for imposition of quantitative restrictions. If the Central Government, after conducting a safeguard investigation, is satisfied that any article is imported into India in such increased quantities and under such conditions as to cause or threaten to cause serious injury to domestic industry, then it may, by notification in the Official Gazette, impose a safeguard duty on that article. The duty is levied only for the period necessary to prevent or remedy serious injury and to facilitate positive adjustment. It ceases to have effect four years after the date of imposition. However, if the Central Government is of the opinion that the domestic industry has taken measures to adjust to the injury or threat thereof and that the safeguard duty remains necessary, then it may extend the period of imposition up to a maximum of ten years from first imposition of the duty. A safeguard in place for more than one year must be liberalized progressively at regular intervals. If the period of imposition of a safeguard duty exceeds three years, then the Director General must review the situation not later than the mid term of such imposition and, if appropriate, recommend the withdrawal or the increase of the liberalization of duty. In case a request is made for provisional safeguard measures, full and detailed information regarding the existence of critical circumstances and how a delay in applying the measures would cause damage difficult to repair needs to be considered. Provisional measures may be imposed by the Central Government for up to 200 days. Decisions on safeguards cannot be appealed under the legislation, but appeals may be made to the High Court and the Supreme Court.

2.1.2 Export Policy

A) EXPORT DUTIES AND TAXES

Export taxes are used as a policy instrument to, inter alia, ensure domestic supply of raw materials for higher value added industries, promote further processing of natural resources, ensure “adequate” domestic price and preserve natural resources. Export taxes for tanned and untanned hides, skins and leathers (except manufactures of leather) have remained in place. Export taxes for iron ores and concentrates, chromium ores and concentrates, and products of iron and steel (including ferrous waste and scrap, flat rolled products, and tubes and pipes) were introduced in 2009. Export taxes are sometimes used with other measures to attain short-term goals. For instance, in April 2010 India introduced export

licensing/EARCs for raw cotton and cotton waste in addition to export taxes for six months to ensure an adequate domestic supply and to contain an increase in the price of cotton in the domestic market.

An export cess is collected for the development of a specific industry. It is levied on certain exports for the development of that industry. As at 2011, a cess applied to exports of shellac and lac based products, manganese ore, chrome ore, mica products, and iron ore. The Spices Cess Act 1986 and the Tobacco Cess Act 1975 were repealed by the Cess Laws (Repealing and Amending) Act 2006. The additional export cess under the Agricultural Produce Cess Act 1940 that applied to both of these products was also repealed in 2006.

B) EXPORT RESTRICTIONS

Prohibitions: Export prohibitions apply mainly for environmental, food security, marketing, pricing and domestic supply reasons, and to comply with international treaties. Since 2007, additional products have been subject to export prohibitions, including non basmati rice, wheat, pulses, and edible oils. Although exports of non basmati rice and wheat are prohibited, the ban does not apply to exports of organic non basmati rice and organic wheat certified by the Agricultural and Processed Food Products Export Development Authority (APEDA) which are subject to quotas.

Export prohibitions and export quotas are notified on an annual basis. They are usually in place for a specific period, during which they may be subject to changes. Customs are in charge of monitoring the quota. For example, the prohibition on exports of shavings of shed antlers of Chital and Sambhar (including manufactured articles) was relaxed from 8 to 30 September 2009. It was a one time relaxation and exports have been prohibited since October 2009. Exports of pulses were prohibited since 2006 till 31 March 2012. In addition, India bans exports of some products to the Democratic People's Republic of Korea, Iran and Iraq under UN resolutions and of rough diamonds covered under the Kimberly process.

Licensing: Under the current Export Policy Schedule, some 167 lines at the HS eight digit level excluding products of special chemicals, organisms, materials, equipment and technologies are currently subject to restrictions. Products may be exported only if a licence is issued by the DGFT. Export licensing is sometimes used as a policy tool to ensure the domestic supply of certain products. For example, exports of cotton (HS 5201, 5202, and 5203) excluding cotton yarn (HS 5205, 5206, and 5207) were restricted (i.e. subject to an export licence). Exports of cotton and cotton yarn required an export authorization registration certificate (EARCs). EARCs are issued by the DGFT only when the domestic supply of cotton is ensured.

Quotas: Organic non basmati rice and organic wheat certified by APEDA are subject to an export quota of 10,000 tonnes and 5,000 tonnes per year, respectively. Exports of brown seaweeds and sandalwood oil are subject to export quotas set by the DGFT. The quota is determined on the basis of domestic demand and anticipated production. Exports of wheat products (HS 1001) are subject to a ceiling. Exports of sugar (by state trading enterprises) are subject to quota under preferential regimes. In addition to this quota, the system of "export release order" for sugar exports was reintroduced in 2009. Under this system, based on domestic demand and supply estimates, the Sugar Directory determines annually the amount of sugar that can be exported subject to a "release order."

C) EXPORT SUBSIDIES

The incentive schemes notified by India to the WTO Committee on Subsidies and Countervailing Measures in 2010 were those provided under the Income Tax Act 1961 to free trade zones (Section 10A) and to

export oriented units (EOUs) (Section 10B). India is an Annex VII (b) Member under the SCM Agreement and as such may maintain these export promotion schemes until its per capita gross national product (GNP) reaches US\$1,000 in constant 1990 dollars for three consecutive years.

Special Economic Zones (SEZs): SEZs may be set up by the central or state governments or by private developers (including foreigners) as joint ventures with the State or as wholly private entities. The legal framework regulating SEZs at the central government level is the SEZ Act 2005 and Rules 2006. Besides, some states have enacted their own laws and rules to regulate SEZs. State SEZ legislation follows the lines of the SEZ Act 2005. The states that have enacted SEZ acts are Gujarat, Himachal Pradesh, Tamil Nadu, Uttar Pradesh, Haryana and Punjab. All SEZs are under the administrative control of the SEZ Development Commissioner.

Firms established in an SEZ benefit from several incentives subject to generating net foreign exchange earnings within five years of operation. SEZ units are exempt from various taxes such as income tax, central sales tax, minimum alternate tax, dividend distribution tax, service tax and from a series of state taxes (i.e. sales tax, stamp duty, electricity duty). SEZ units may import all types of goods (including new and second-hand capital goods) duty free both from abroad and from the domestic tariff area. Imports and exports into/from the SEZ are not subject to routine customs examination. Exports of products manufactured in SEZs are also not subject to pre-shipment inspection. Major exports from SEZs include chemicals and pharmaceuticals, computer and electronic software and gems and jewellery.

Export Oriented Units (EOUs): The EOU Scheme was introduced in early 1981. EOUs are regulated by the Foreign Trade Policy. The main objectives of the EOU Scheme are to increase exports and foreign exchange revenues, promote the transfer of latest technologies, stimulate direct foreign investment and generate employment. EOUs may be located anywhere in the country. The minimum investment in an EOU is Rs 10 million. EOUs are licensed to manufacture or provide services for exports for an initial period of five years, which may be extended. They are provided tax and other incentives, subject to export performance. Sector specific requirements are stipulated in the provisions of the EXIM Policy and vary from sector to sector. EOUs must also generate net foreign exchange earnings (NFEE) within five years of starting operations. If the unit is not NFEE positive, then the Development Commissioner is required to inform the Central Excise authorities for recovery of the proportionate duty.

As in the case of the SEZs, EOUs are exempt from various taxes, including income tax, until 31 March 2011. EOUs may import all types of goods (including new and second-hand capital goods) duty free from the DTA and abroad and are exempt from routine customs procedures, both at the time of import and export. Manufacturing EOUs are exempt from the state trading regime with the exception of chrome ore/chrome concentrate. Up to 100% of FDI is allowed in EOUs under the automatic route in areas where no FDI prohibition applies. A special licence granted by the Board of Approvals is necessary to set up an EOU to manufacture arms and ammunition, explosives and defence equipment, atomic substances, narcotics and psychotropic substances and hazardous chemicals, distillation and brewing of alcoholic drinks, cigarettes/cigars and manufactured tobacco substitutes. FDI is prohibited in manufacture of arms and ammunition, explosives, atomic substances, narcotics and hazardous chemicals, distillation and brewing of alcoholic drinks, cigarettes, cigars and manufactured tobacco substitutes.

Duty Drawback: The Customs Act 1962 (Sections 74-76) and the Customs and Central Excise Duties and Service Tax Drawback Rules 1995 continue to regulate the duty drawback system in India. Under the drawback system, exporters are entitled to a refund of the customs duties (including additional duties) on imported goods that are exported without transformation (Section 74), or customs duties, central

excise duties and the service tax levied on materials imported or procured locally to manufacture export products (Section 75).

There are two types of drawback - the “all industry rate” and the “brand rate” (for this refund may be negotiated). Under the “all industry” drawback rate, the amount refunded (i.e. “drawback rate”) is usually a percentage of the f.o.b. value of exports or a specific per unit value. For certain products, there is a cap or maximum amount that may be refunded. Drawback rates are based on different parameters including the prevailing price of inputs, standard input/output norms published by the DGFT, share of imports in total inputs and the applied rates of duty. The “drawback rates” and caps are listed in the drawback schedule which is reviewed and revised every year taking into account changes in the tariff duty rates.

For all products on which the All Industry Rates of Duty Drawback Schedule indicates a drawback rate of “nil”, the exporter may claim a “brand rate” drawback. If the exporter deems that the drawback level is too low, e.g. if the amount refunded is less than four fifths of the duties and taxes paid on the imported materials used for the manufacture of export products, the drawback rate may be adjusted upon request [Customs, Central Excise, and Service Tax Drawback Rules 1995 (Rule 7)]. According to the authorities, the “brand rate” drawback is determined on the basis of the actual duty incidence on the inputs used to manufacture the goods exported. Drawback is not allowed for casein, cement, cotton yarn, milk and milk products and rice; or if the market price is less than the amount of the drawback; or if the drawback due is less than Rs 50; or if the exported products have benefited from other incentives.

Other duty and tax concessions: India has a number of export incentive schemes, some of which are contingent on value addition and export obligations. India’s exports concession schemes include (i) duty exemption schemes, which allow exporters to import inputs (including fuel and oil) duty free; (ii) duty remission schemes, entitling exporters to a refund of customs duty on the inputs used to produce exports (post export replenishment/remission of duty paid on inputs); (iii) reward schemes granting exporters duty credits; and (iv) the Export Promotion Capital Goods Scheme, which allows exporters to import capital goods, at concessional or zero duty rates, subject to an export obligation. Special schemes are also in place for gems and jewellery and for export and trading houses. Amendments have included (i) introduction of a zero duty rate under the Export Promotion Capital Goods Scheme; (ii) increase of the duty credit to from 1.25 to 2% of the f.o.b. value of exports under the Focus Product Scheme, and from 2.5 to 3% of the f.o.b. value of exports under the Focus Market Scheme; (iii) reduction of the minimum value added required to receive benefits for gems and jewellery from 2 6.5% to 1.5 5%; and (iv) the introduction of a 15% minimum value added requirement under the Advance Authorization Scheme. Since 2007, two new export incentive schemes have been introduced - the Status Holder Incentive Scheme and the Agri Infrastructure Incentive Scheme.

Export promotion and Marketing Assistance: In addition to tariff concessions and export programmes, the Department of Commerce encourages exports indirectly through a number of schemes. The Assistance to States for Development of Export Infrastructure and Allied Activities Scheme provides assistance for, inter alia, setting up new export promotion industrial parks/zones (including SEZs) and supporting infrastructure (e.g. road links to ports, inland container depots, container freight stations and power supply). The Marketing Development Assistance Scheme supports export promotion activities through export promotion councils (EPCs). The Market Access Initiative Scheme supports EPCs and trade bodies (i.e. chambers of commerce and industries) that participate in export promotion activities. The Department of Commerce also provides support for trade facilitation (e.g. implementation of a single window for clearance of goods and e trading facilities). India’s 20 EPCs and the five Commodity Boards continue to promote exports of specific products like textiles, pharmaceuticals, chemicals, cosmetics, leather, gems and jewellery, engineering goods, civil construction projects, plastics, cashews, shellac, sports goods,

tea, coffee, rubber, spices and tobacco. Other bodies affiliated to the Ministry of Commerce and Industry are also actively involved in promoting exports through training, organizing trade fairs/exhibitions in India and abroad and acting as arbitrators in commercial disputes. These institutions are the India Trade Promotion Organization, the export and development authorities for marine products and for agricultural and processed food, the institutes for foreign trade, packaging and diamonds, the Federation of Indian Export Organizations, the India Brand Equity Foundation and the Indian Council of Arbitration.

Export finance and Insurance: Export finance is provided primarily by the Export Import Bank of India (Exim Bank) and through mandatory annual lending targets for foreign banks. In order to promote trade and investment, the Exim Bank provides Indian exporters with export credits on a cost-plus basis at market related interest rates. The Exim Bank also provides finance and export support for export oriented units (EOUs) and value-added services (e.g. advice and marketing support aimed at evaluating international risks and export opportunities). The Bank coordinates the work of other institutions financing trade (exports and imports). The Exim Bank may also provide lines of credit to governments and to overseas financial institutions to enable buyers in those countries to purchase goods and services from India. The terms of these credits are negotiated between the Exim Bank and the overseas agency based on market interest rates usually linked to the LIBOR. The Exim Bank also provides various export guarantee schemes and fee based services to support international trade and investment and conducts related research. The main industrial sectors to which the bank has exposure remain textiles and clothing, metals and metal processing and chemicals and petroleum. Under the current guidelines on lending to priority sectors, foreign banks operating in India must reserve 32% of their adjusted net bank credit (ANBC) or credit equivalent amount of off balance sheet exposure (OBSE), whichever is higher, for priority sectors of which 12% of ANBC/credit equivalent of OBSE must be loaned to the export sector. No target is fixed on lending to exporters for domestic (private and state owned) banks. The loans may be provided in domestic or foreign currency and are at concessional rates of interest.

Insurance against export credit risk is provided by the Export Credit Guarantee Corporation of India Ltd. (ECGC). ECGC is a state owned company functioning under the administrative control of the Ministry of Commerce and Industry. It is registered as a non life insurance company under the Insurance Regulatory and Development Authority Act. It provides exporters insurance against commercial or country risks. It also grants guarantees to banks/financial institutions, which allows them to offer export credit facilities to exporters on a more liberal basis. The ECGC also provides overseas investment insurance to Indian companies investing in joint ventures abroad through equity or loans. The ECGC holds 60% of India's total export credit risk market and covers exports to 193 countries. The ECGC does not receive a subsidy from the Government. The ECGC also operates the National Export Insurance Account (NEIA) which covers export credit risk for large long and medium term overseas projects that are commercially viable and of national interest (i.e. strategically important from an economic and political point of view) but fall beyond ECGC's underwriting capacity.

2.1.3 Sectoral Policies

A) AGRICULTURE

Agriculture and related activities contributed 16.6% to GDP in 2009-10. India produces a wide variety of agricultural products and is a major global producer of grains (wheat, rice and corn), dairy, fruits and vegetables and livestock. Agriculture employs some 58% of the population. Small-scale farmers account for more than half of total Indian agricultural production. The agriculture sector has long been characterized by underemployment.

India is a net exporter of agricultural products. In 2009-10, agricultural exports accounted for 10.6% of total merchandise exports. Basmati rice has become India's leading agriculture export product, followed by marine products and cotton. Agricultural imports are relatively low (4.4% of total merchandise trade) and are concentrated in a few commodities, including vegetable oils, pulses and wood products.

Agricultural policy in India is formulated and implemented mainly by the Ministry of Agriculture at the central level with the assistance of other institutions. India's current agricultural policy is outlined in the 11th Five Year Plan (2007-12) which identified three core policy objectives - food security, food self-sufficiency and income support for farmers. The Government uses tariffs and non tariff measures to meet these objectives. The Government is increasing public expenditure and encouraging private investment in agricultural sector to raise productivity, improve irrigation infrastructure and management of water resource, build support infrastructure in rural areas (e.g. roads, electricity), promote research and development and develop modern marketing system, among others.

Implementation of agricultural policies is mainly under the purview of state governments in India. The Central Government supports the state governments in their efforts to increase agricultural production, enhance productivity and exploit untapped potential. This support is granted through the implementation of centrally funded general agricultural support schemes and programmes. Direct subsidies to agriculture, as reported in the Central Government's annual Budget, amounted to Rs 1,413.5 billion (2.2% of GDP) in 2009-10. The bulk of India's direct subsidies are aimed at promoting food security and reducing poverty. Food subsidies provided by the Department of Food and Public Distribution aim to reduce the difference between actual prices and the central issue prices fixed under the Targeted Public Distribution System (TPDS) and other welfare schemes. The Central Government also provides a subsidy to the Food Corporation of India to keep buffer stocks of wheat and rice as a food security measure. India also continues to subsidize indigenous and imported (urea) fertilizers through price controls. In addition to the subsidy on fertilizers and food, India's farmers benefit from input support for irrigation water, electricity, diesel and seeds. These subsidies are financed by the central and state governments (water and electricity).

The Central Government has also put in place programmes to address the use of low quality seeds by farmers. These include the Indian Seed Programme and Central sector Development and Strengthening of Infrastructure Facilities for Production and Distribution of Quality Seeds scheme to supply quality seeds at "affordable prices." To promote seed production in the private sector, a credit linked back ended capital subsidy is provided to develop infrastructure to produce seeds. Assistance is also provided to the states/UTs and state seeds corporations for creation and operation of seed processing plants.

In addition, India sets targets for priority sector lending to ensure that banks provide credit to specific priority sectors. Banks are required to reserve a percentage of their adjusted net bank credit or credit equivalent amount of off balance sheet exposure, whichever is higher, for priority sectors. In addition to credit set asides, India has implemented programmes to ensure access to credit in agriculture and allied activities, which include subsidizing commercial banks including rural regional banks, rehabilitation packages for distressed farmers (e.g. debt write offs for farmers in distress and farmers in arrears), a One Time Settlement (OTS) Scheme for small and marginal farmers and relief to farmers indebted to non institutional lenders, such as money lenders.

B) INDUSTRY/ MANUFACTURING

Manufacturing showed robust growth over 2006-07 and 2007-08, but was subsequently affected by the global economic crisis which led to a decline in foreign demand, particularly in areas such as textiles and clothing. However, there was a resurgence of growth in 2009-10, mainly triggered by stronger domestic

demand, particularly for consumer durables, capital goods and industrial inputs. In order to encourage investment in the manufacturing sector, the Government has offered a wide range of tax incentives, concessionary credit and other types of assistance (see also section on export subsidies).

Prior to 2008, most domestic or foreign industries required an industrial licence to operate in India including those under “locational” restrictions. All industries were subject to an industrial licence (based on “location”) if they were established within 25 km of the “standard urban limits” in 23 cities, with over 1 million inhabitants. Exemptions were granted if industries were considered to be non polluting or were planning to locate in specific areas designated as “industrial areas.” The locational restriction was removed in August 2008. As of 2008, the scope of industrial licensing was reduced and now industrial licences are only compulsory for (i) five specific industries (i.e. distillation and brewing of alcoholic drinks, cigars and cigarettes of tobacco, manufactured tobacco substitutes, electronic aerospace and defence equipment, industrial explosives and specified hazardous chemicals), (ii) manufacturing items reserved for “non micro and small enterprises (MSEs),” and (iii) manufacturing items reserved for the public sector (i.e. railway transport and atomic energy).

Industrial licenses are regulated under the Industries (Development and Regulation) Act 1951. Licenses are issued by the Secretariat of Industrial Assistance (SIA) under the Department of Industrial Policy and Promotion, upon recommendation by the Licensing Committee. A licence is issued within 4 6 weeks from the date of application upon payment of a fee of Rs 2,500. Fees do not vary according to industry. Industries established in free trade zones are exempt from licensing. Industries exempt from industrial licensing must register with SIA and file an industrial entrepreneur’s memorandum (IEM). Fees for filing an IEM are Rs 1,000 for up to ten items to be manufactured and Rs 250 for up to ten additional items. All industries, whether or not licensed, must submit monthly production reports for statistical purposes.

At present, entrepreneurs are free to select the location for setting up industries. Despite the elimination of the “locational” restriction, the establishment of an industry remains subject to zoning, to land use regulations at the state level and to environmental regulations at the central level. Prior environmental clearance is required for all domestic or foreign companies planning a project in an area listed in the Schedule to the 2006 Environmental Impact Assessment (EIA) Notification.

The Micro, Small, and Medium Enterprises Development (MSMED) Act entered into force in 2006. Prior to this, there was no definition for medium sized enterprises. Under the Act, enterprises are classified as micro, small and medium enterprises based on the amount invested in plant and machinery (for manufacturing units) and equipment (for service providers). Registration for micro, small and medium enterprises (MSMEs) is voluntary. Most MSMEs (some 94%) are not registered and a large number of them operate in the informal sector. However, a registration certificate is seen as a proof of the company being a small scale unit and enables registered MSMEs to benefit from central and state incentives and facilities and government procurement preferences. The registration certificate may be granted even if an MSMEs is already in operation and is product and location specific. A provisional registration certificate may be given to MSMEs to be established to facilitate access to credit and approval and clearance procedures (e.g. land approval and environmental clearance). MSMEs may be deregistered if they exceed the levels of investment stipulated in the MSMED Act 2006, if they manufacture items that require an industrial licence, if they do not satisfy the condition of being independently owned, controlled or if are a subsidiary of any other industrial undertaking. Small enterprises (as defined under the MSMED Act 2006) require a carry on business (COB) licence if they exceed the prescribed limit of investment in plant and machinery and continue to manufacture reserved items. Reserved products may also be manufactured by non MSEs, subject to an industrial licence and to an export obligation of at least 50% of their annual production within three years. Industries, manufacturing items reserved for micro

and small enterprises when established in a free trade zone, are exempt from the licensing obligation. Prior to the Act, the amount of domestic and foreign equity participation in MSEs was capped at 24%. The foreign equity ceiling was removed in February 2009. However, prior approval from the Foreign Investment Promotion Board is still required if foreign equity in these industries exceeds 24%.

2.2 Trade in Services

In 2009-10, the services sector accounted for about 56% of GDP. The leading subsectors in terms of contribution to total value added in 2009-10 were financial services, commerce and communications. Tourism is an important subsector, though this is not apparent from GDP figures. It has a good growth potential through backward and forward linkages which can stimulate other economic sectors like agriculture, horticulture, handicrafts, transport and construction.

India is a net exporter of services. Its services balance showed a surplus of US\$35.73 billion in 2009-10 (equivalent to 2.7% of GDP). India is a leading exporter of computer and related services including software installation and data processing and a major supplier of back office processing services such as abstracting and indexing, data processing, legal transcription, telemarketing and web designing.

India's Schedule of Specific Commitments under the GATS is limited to commitments in 6 of the 12 services sectors - business services, communications services, construction services, financial services, health related and social services and tourism services. India took part in the negotiations on financial services and telecommunications and accepted the Fifth and Fourth Protocols to the GATS. As regards horizontal commitments, India has inscribed limitations on the entry and temporary stays of natural persons such as business visitors and intra corporate transferees. India's Schedule of MFN exemptions include entries on telecommunications services affecting neighbouring countries, audio visual services, shipping and recreational services.

2.2.1 Financial Services

Financial services (including banking and insurance) accounted for 7.9% of GDP in 2009-10. In contrast with previous fiscal years, in 2009-10 India ran a trade deficit in financial services as imports increased substantially faster than exports. Exports totalled US\$3.74 billion and imports US\$4.64 billion. The increase in imports mainly reflects higher costs of imported financial services as a consequence of the global financial crisis.

Financial services are regulated by the Reserve Bank of India (RBI) (banks and related financial institutions), the Insurance Regulatory and Development Authority (IRDA) (insurance companies) and the Securities and Exchange Board of India (SEBI) (securities and stock exchange activities). Financial services, particularly banking and insurance continue to be dominated by state owned companies. Measures have been adopted to encourage competition from the private sector. The restrictions on foreign banks' ownership and establishment conditions have been relaxed. Efforts have also been made to improve prudential regulations and, in general, banks are soundly capitalized. Plans to recapitalize rural regional banks have been devised and their performance has improved.

Foreign investment participation is allowed in both public and private sector banks up to a threshold of 74% for all forms of foreign investment (i.e. FDI and FII) in private banks and of 20% in public banks. In March 2010, nine Public Sector Banks had foreign capital of up to 10%, and 11 had foreign capital between 10% and 20%. These public banks also have domestic private shareholding. For 11 of them, total private sector participation (foreign and domestic) was between 40% and 49%.

2.2.2 Telecommunications

The telecommunications sector is regulated by the Indian Telegraph Act 1885 (as amended), the Indian Wireless Telegraphy Act 1933, the Indian Telegraph Rules 1951 (as amended), the Telecom Regulatory Authority of India Act 1997 and the directions, orders and regulations issued by the Telecom Regulatory Authority of India (TRAI). The Department of Telecommunications (DoT), in the Ministry of Communications and Information Technology, is in charge of formulating the telecommunications policy and of granting licenses. The DoT also controls central public sector undertakings operating in the telecom sector, including India's main fixed lines operators, Bharat Sanchar Nigam Ltd. (BSNL) and Mahanagar Telephone Nigam Ltd. (MTNL). The TRAI, created in 1997 as an independent body, regulates tariffs, inter connectivity and quality standards and ensures that the universal service obligation is met. TRAI also makes recommendations regarding the procedures to grant licenses. The Telecom Disputes Settlement and Appellate Tribunal (TDSAT) resolves disputes between the Government and licensees, service providers and consumers and deals with appeals against TRAI's decisions.

The Telecom Policy 1999, the Broadband Policy 2004, and their amendments continue to establish the main guidelines for the development of the telecom sector in India. The liberalization of India's fixed and mobile telecom markets started in 2000 and continued thereafter. Operators may provide all telecommunications services. Private operators (mobile and fixed telephony) serviced 85% of the total telecom market in 2010. Despite competition, BSNL and MTNL still hold 83% of the fixed telephony market. MTNL provides telecom services in Mumbai and Delhi while BSNL covers the rest of India. In the mobile segment, 173 licences have been issued since 2004, including to BSNL and MTNL. However, in December 2010, four companies (Bharti Airtel, BSNL, Reliance Telecommunications and Vodafone) accounted for 65% of the market. Despite the market concentration, tariffs for telecom services decreased over 2000-09. There are 164 internet service providers in India but BSNL and MTNL account for 70% of subscriptions.

To deliver services in each telecom/internet area, domestic and foreign operators must be licensed by the Department of Telecommunications. To apply for a licence, operators must register as an Indian company under the Indian Companies Act 1956 and have a maximum of 74% of foreign equity. India introduced the unified access service regime to licence fixed and mobile telecom operators in 2003. Licenses are granted for five years, subject to an annual fee (1% of the adjusted gross revenue). Over this five-year period, other operators may be licensed so that there is a backup if the primary licence holder fails to deliver services. All service providers, except providers of value added services (e.g. internet, voice mail, and e mail), are subject to a universal service levy of 5% of the adjusted gross revenue.

2.2.3 Transport

Shipping: Around 95% of India's merchandise trade by volume and 65% in terms of value are transported by sea. Over 110 domestic shipping companies are engaged in maritime trade. India's fleet comprises 1,071 commercial Indian flag vessels with a gross tonnage of 10.5 million tonnes. The Ministry of Shipping controls eight shipping enterprises, including the Shipping Corporation of India. The Government also has a strong presence in ship building. It owns three shipyards with approximately 10% of the commercial ship building market. However, India is short of vessels and hence foreign flag vessels dominate maritime transport.

India started implementing the National Maritime Development Programme (NMDP) in 2005 to develop maritime and coastal shipping and inland water transport system. The NMDP aims to expand India's

fleet tonnage, train personnel, develop infrastructure for coastal and inland water transport, improve ports infrastructure and modernize state owned shipyards for the construction of new vessels. Indian vessels average 18.3 years.

The registration of Indian vessels is governed by the Merchant Shipping Act 1958 (Part V) and the Merchant Shipping (Registration of Ships) Rules 1960, as amended. Indian vessels must register at designated port registries Mumbai, Kolkata, Chennai, Cochin and Mormugao, subject to fees. A central register is kept by the Director General of Shipping (DGS). The DGS issues general licences (for Indian vessels and vessels chartered by a citizen of India or a company or a cooperative society), licences for the whole or any part of the coastal trade and licences for a specified period/voyage (i.e. specified period licence (SPL)) granted to foreign flag vessels for coastal trade or cabotage subject to no objection certificate issued by the Indian National Ship-owners Association (INSA). The procedure for issuing licenses is similar for Indian and foreign flag vessels, except that in the case of the latter a certificate of no objection is required from INSA. In addition, there are some differences in the fee structure for licences granted to foreign and Indian flag vessels.

Ports: All ports are owned by the Government, but may be publicly or privately administered and operated. Foreign investment is allowed in port administration subject to conditions. The Government has announced guidelines to allow joint ventures and FDI is allowed up to 100% under the automatic route in construction and maintenance of infrastructure for water and maritime transport as well as in construction of ports and harbours. Major ports are administered by the Central Government through the Ministry of Shipping, Road Transport and Highways and managed by “port trusts,” except for Ennore port. Tariffs for services and facilities at major ports are regulated by the Tariff Authority for Major Ports (TAMP), constituted in April 1997 as an independent authority. The Ministry of Shipping drafted the Major Ports Regulatory Authority Bill 2011 to establish the Major Ports Regulatory Authority (MPRA). Minor ports are regulated by states’ maritime boards/departments. Minor ports are allowed to fix their own tariffs and in order to attract cargo from major ports they often fix their tariffs at levels lower than the regulated tariffs.

Civil Aviation: The Ministry of Civil Aviation is in charge of policy formulation and regulation of civil aviation in India. It supervises the Directorate General of Civil Aviation (DGCA) and the Bureau of Civil Aviation Security (BCAS). The DGCA regulates air transport services to/from India, enforces civil air regulations and standards, registers aircraft and licenses pilots, air engineers and traffic controllers. The BCAS is in charge of formulating security standards. The Ministry controls Air India Ltd. which operates domestic and international Air India flights. The Airports Authority of India (AAI) manages and operates 115 of India’s 454 civil airports. Pawan Hans Helicopters Ltd. operates helicopter services for the oil and tourism industries.

The Airports Economic Regulatory Authority (AERA), an independent body, was created in 2009. AERA is in charge of regulating airports with annual traffic of at least 1.5 million passengers while the Central Government is in charge of regulating smaller airports. The AERA is also responsible for, inter alia, fixing aeronautical services charges, the passenger service tax, and the airport and the user development fees for major airports and monitoring the quality and reliability of services rendered at airports. Airport operators collect the aeronautical charges and the taxes fixed by AERA.

FDI is allowed in scheduled air transport services and domestic scheduled passenger airlines up to 49% and in non-scheduled air transport service, non-scheduled airlines, chartered airlines and cargo airlines up to 74% (subject to governmental approval beyond 49%). FDI in airport projects is allowed up to 100% under the automatic route for Greenfield projects and up to 100% for existing projects, subject to

governmental approval beyond 74% and to sectoral regulations notified by the Ministry of Civil Aviation and security clearance. Ground handling services are open to FDI up to 74%, subject to sectoral regulations notified by the Ministry of Civil Aviation and to security clearance.

India maintains a limited open sky policy. In 2008, in order to promote tourism, India liberalized the operation of charter flights to/from India allowing all “inclusive tour packages” and eliminating existing restrictions. India acceded to the ICAO 2001 Cape Town Convention and Protocol and the 1999 Montreal Convention in 2009.

Road: The Ministry of Road Transport and Highways is responsible for formulating and implementing road transport policies and the construction and maintenance of national highways. Development of other roads is under the responsibility of the state or local authorities. India introduced a new national permit system in 2010 to render inter state freight traffic more efficient.

The National Highways Authority of India (NHAI) is in charge of implementing the National Highways Development Project (NHDP) launched in 1998. India is also implementing the National Highways Interconnectivity Improvement Programme which seeks to improve the entire national highways network by upgrading it to a minimum two lane standard by December 2014. The development of the road system in India is funded with public resources, the proceedings of the fuel cess, collection of tolls, loans from international institutions and the private sector. FDI in road construction and maintenance is allowed up to 100% under the automatic route.

Railways: India’s railway network is managed and operated by Indian Railways, an enterprise fully owned by the Government (Ministry of Railways). Indian Railways, the largest employer in India (1.4 million workers), controls 14 public sector undertakings (PSUs) that perform railway related works and five production units. Although the railways are still reserved for the public sector, private domestic participation has been encouraged in non core activities, e.g. wagon ownership/leasing and infrastructure projects.

To deal with infrastructure bottlenecks, in 2009 the Government launched Vision 2020 to expand and modernize fixed railway infrastructure and the rolling stock, to improve freight and passenger services (e.g. dedicated freight and high-speed corridors), and to enhance equipment reliability for zero accidents. To increase freight volume and revenue, Indian Railways launched the Policy Guidelines for Freight Incentives Schemes in 2006. Incentives are in the form of tariff freight discounts with discounts based on the type of commodity, distance, volume or weight, according to the scheme. Since 2007, India has allowed “eligible” operators to use the Indian Railways network to provide merchandise transport services. Operators must be registered as Indian companies under the Companies Act 1956 and have a minimum annual turnover (Rs.1 billion) prior to applying for a licence. In 2010, the Ministry of Railways implemented the Private Freight Terminal Scheme, which allows private operators to build freight terminals and handle third-party cargo; the Special Freight Train Operators Scheme, which allows private operators to run special freight trains for commodities requiring special wagons; and Automobile Freight Train Operator Scheme to allow private operators to transport automobiles.

2.3 Trade in Intellectual Property

The Department of Industrial Policy and Promotion (DIPP) in the Ministry of Commerce and Industry covers patents, trademarks, designs and geographical indications, all of which are administered by the Office of the Controller General of Patents, Designs and Trade Marks (CGPDTM). The Departments of Higher Education, Information Technology, and Agriculture and Cooperation are in charge of copyright

protection, protection of layout designs and the protection of new varieties of plants, respectively. The Intellectual Property Appellate Board (IPAB) was constituted to hear appeals against the decisions of the registrar of trademarks and geographical indications. The IPAB has also heard appeals regarding patents. Provisions related to patent revocations and to infringements regarding patents, trademarks, designs and geographical indications, are dealt with by the judicial authorities.

India is a party to the Convention establishing the World Intellectual Property Organization (WIPO) (1975) and to other international conventions on intellectual property like the Paris Convention (Industrial Property), December 1998; the Berne Convention (Literary and Artistic Works), April 1928; the Patent Cooperation Treaty (PCT) (Patents), December 1998; the Geneva Convention (Unauthorized Duplication of Phonograms), February 1975; Budapest Treaty (Deposit of Micro organisms), December 2001; and the Nairobi Treaty (Olympic Symbol), October 1983. India has signed bilateral cooperation MOUs on IPRs with Australia, France, Japan and Switzerland and with the European Patent Office, the German Patent Office, the US Patent and Trademarks Office and WIPO. There is also a joint statement of Intent of Bilateral Cooperation between India and United Kingdom. These agreements focus on capacity building and the creation of public awareness to facilitate enforcement of IPRs.

India's WTO contact point for intellectual property purposes is the Department of Commerce.

2.3.1 Patents

The Patent System in India is governed by the Patents Act 1970, as amended and by the Patents Rules 2003, as amended. There are patent offices in Chennai, Delhi, Kolkata and Mumbai that deal with patent applications. Applicants, who are non-resident or have no domicile or no place of business in India, must employ a patent agent to file the patent application.

Patent protection may be granted to any invention relating to either a product or process that is new, involves an inventive step and is capable of industrial application. The Act also sets out products or processes that are not recognized as inventions and are therefore not patentable. The Act refers to the scope of patentability of pharmaceutical and other chemicals and calls for proof of efficacy of the substance. The claimed substances should differ significantly in properties from the known substances with regard to efficacy, which needs to be proved at the time of filing or during the patent application to prove inventive step. Patents of addition for an improvement to a patented product can be granted to the holder of the original patent for the same period as the validity of the original patent. It is also possible to file an international application (a Patent Convention Treaty (PCT) application) in India, in any of the different patent offices.

The term of patent protection in India is 20 years from the date of filing of the application, irrespective of whether it is filed with a provisional or a complete specification. Compulsory licensing is permitted under certain circumstances. After the expiry of three years from the date of grant of the patent, an application for grant of a compulsory licence may be considered if the reasonable requirements of the public with respect to the patented invention have not been satisfied; if the patented invention is not available at a reasonably affordable price; or if it is not worked in India. Two years after a compulsory license has been granted, the Central Government or any interested person may request the revocation of the patent. The Central Government may, if necessary (as in the case of a national emergency), provide for the issue of a compulsory licence for a patented product through a notification in the Official Gazette and may use a patented invention for government purposes. Compulsory licenses are also permitted for exports of patented pharmaceutical products in certain exceptional circumstances, when the Government declares an emergency.

The Indian Patent Office has been recognized as an International Searching Authority (ISA) and International Preliminary Examining Authority (IPEA) under the PCT. Contravention of secrecy provisions relating to certain inventions or falsification of any information relating to the Patents Register is punishable by a fine or imprisonment for up to two years. False representation of any article sold in India as being patented in India or for which an application has been made is punishable by a fine of up to Rs 100,000. Appeals may be made to the Intellectual Property Appellate Board (IPAB).

2.3.2 Copyright and Related Rights

The Copyright Act 1957, as amended, governs the copyright system in India. The Copyright Act grants protection to original literary, dramatic, musical and artistic works, cinematographic films and sound recordings. Registration is not mandatory. There is no difference in the copyright protection granted to a registered or unregistered work. However, as per Section 48 of the Act, registration provides prima facie evidence in case of a dispute. Copyright owners may file an application with the Registrar of Copyrights either in person or through a representative. Separate applications need to be filed for each piece of work.

Protection is for the lifetime of the author plus 60 years for literary, dramatic, musical and artistic works and 60 years after the year of publication for anonymous and pseudonymous works, photographs, cinematographic films, sound recordings and works owned by the Government or by a public undertaking or an international organization. Broadcast reproduction rights are for 25 years from the year of broadcast and performers' rights are for 50 years from the date of performance.

Through the International Copyright Order, copyright is protected in India for nationals of countries that are members of the Berne Convention, the Universal Copyright Convention, or the WTO TRIPS Agreement. Copyright may be licensed or assigned to another person provided the arrangement has been put in writing. Compulsory licenses may be issued for works withheld from the public or for unpublished "Indian works" where the author is dead or unknown. Applications for licences to publish a translation of a literary or dramatic work in any language may be made to the Copyright Board seven years after publication of the work (three years if the translation is required for teaching, scholarship or research).

2.3.3 Trademarks

Trademarks are protected under the Trade Marks Act 1999, and the Trade Marks Rules 2002, both in force since September 2003. The Trade Mark (Amendment) Act 2010 will enable India to accede to the Madrid Protocol. Membership of the Protocol will help Indian companies to register their trademarks in the Protocol member countries through a single application.

As a signatory to the Paris Convention, India recognizes foreign priority provided that the application in India is filed within six months of filing of the application abroad. The registration of a trademark in the Office of the Controller General of Patents, Trade Marks, Industrial Designs and Geographical Indications typically takes about two to three years, subject to the trademark not being opposed by a third party. A trademark application may be filed in any of the Registry offices in Ahmedabad, Delhi, Chennai, Kolkata or Mumbai. Proprietors of trademarks may file a trademark application only if they have a place of business in India, otherwise the application must be filed through a trademark agent/attorney.

Trademark law in India is a "first to file" system that requires no evidence of prior use of the mark in commerce. Any person claiming to be the proprietor of a trademark used or proposed to be used in commerce may apply for registration in writing or electronically to one of the offices of the Trade Marks

Registry within their territorial limits. A single application may be used for registration of a trademark. The law protects product, service, certification and collective trademarks. Protection is also granted to well known marks as well as service and collective marks. The law stipulates the types of trademarks that would be refused for registration. These include trademarks that are devoid of any distinctive character or consist exclusively of marks or indications that may serve in trade to designate the kind, quality, quantity, intended purpose, values, geographical origin or the time of production of the goods or rendering of the service or other characteristics of the goods or service; as well as marks or indications that have become customary. Registration of names of chemical elements or international non-proprietary names is prohibited.

Registration is not necessary to exercise the right over a trade mark, which is also acquired by use. However, registration of a trademark gives the owner the exclusive right to the use of the registered trade mark and facilitates the seeking of relief in the appropriate courts in case of infringement of the exclusive right. The exclusive right is subject to any conditions entered on the register, such as limitation of area of use. The Trade Marks Act 1999 preserves common law rights in respect of an unregistered trade mark. Hence, even when a trademark is unregistered, the right holder is entitled to protection and may initiate action against a third party under the law.

The period of trademark protection is ten years, renewable for further periods of ten years on payment of the prescribed fee. A trademark can be removed from the Register on grounds of non-use if the registered mark is not used for a continuous period of five years and three months from the date it was registered, or if the renewal fee is not paid. Appeals against a decision by the Registrar are made to the IPAB.

2.3.4 Industrial Designs

The Designs Act 2000 and the Designs Rules 2001 govern industrial designs in India. The Designs Rules 2001 were amended in 2008 to enable e filing. India has not yet acceded to the Hague System for the International Registration of Industrial Designs, which gives the owner of an industrial design the possibility of protection in several countries by filing one application in one language with the International Bureau of WIPO.

India follows the first to file system. To be registered, designs must be new or original; they must not have been disclosed to the public in India or another country by publication prior to the filing or priority application date; they must be able to be reproduced by industrial means; they must be significantly distinguishable from known designs or combinations of known designs; they must not comprise or contain scandalous or obscene matter; they must be appealing to the eye; and they must not include anything that is in substance a mere mechanical device. Proprietors of designs may file for protection in India only if they have a business address in the country. If that is not the case, then they may file an application through an attorney or agent. The application may be filed at the patents offices in Delhi, Chennai, Kolkata and Mumbai. After registration of the design, which could take 6 to 12 months, the particulars are entered in the Register of Designs and the design is published in the Official Journal of the Patent Office and made publicly available in a Register of Designs.

Registration of an industrial design in India gives the proprietor an exclusive right to sell, import and apply it to any article. Once a design has been registered, the article on which the design is being used must be marked with the word "registered" (or any of its abbreviations) along with the design registration number to inform the public that the right holder has the exclusive proprietary right to use it. If this is not done, then the right holder must prove that an infringer was aware that he was violating the right holder's exclusive proprietary rights when using the infringing design. A registered design is protected

for ten years from the date of registration or from the priority date and is renewable for five years upon application prior to the expiry of the initial period. Registration provides protection only in India. A design may be cancelled by the Controller General if it is determined that it does not fulfil the requirements for registration defined in the Act. Since 2007, 16 registered designs have been cancelled. Appeals against a decision by the Controller General may be made to the High Court within three months of the decision. At present, 28 cases are pending in the High Court.

2.3.5 Plant Varieties

Plant varieties are protected in India through the Protection of Plant Varieties and Farmers' Rights Act 2001 and the Rules and Regulations 2006. Registration of a plant variety gives protection only in India and confers upon the right holder, its successor, agent or licensee the exclusive right to produce, sell, market, distribute, import or export the variety. New varieties may be registered if they conform to the criteria of novelty, distinctiveness, uniformity and stability. A variety that has already been on the market for less than one year may be eligible for registration as a new variety. Older varieties may be eligible for registration as extant varieties. Registration of a variety is not allowed when it is necessary to prevent commercial exploitation of such variety to protect public order or public morality or human, animal and plant life and health or to avoid serious damage to the environment.

Application for registration of a variety is made to the Registrar General of Plant Varieties. Until the Plant Varieties Protection Appellate Tribunal is established, a person aggrieved by a decision of the Protection of Plant Varieties and Farmers' Rights Authority (established in 2005) or the Registrar, may file an appeal before the IPAB or the High Court.

A certificate of registration is issued for a term of nine years for trees and vines and six years for other crops, and is renewable for a maximum of 18 years for trees and vines, or a total of 15 years for extant varieties (from the date of notification under the Seeds Act 1966) and other crops (from the date of registration of the variety). A certificate of registration for a variety confers an exclusive right on the breeder or his successor, his agent or licensee, to produce, sell, market, distribute, import or export the variety. However, farmers are entitled to save, use, sow, resow, exchange, share or sell their farm produce, including seed (except "branded seed") of a variety protected by the Act. Registration may not prevent the use of any variety for conducting experiments or research or for the purpose of creating other varieties. The authorization of the breeder of a registered variety is required if the repeated use of the variety as a parental line is necessary for commercial production of another newly developed variety. Compulsory licences may be granted after three years from the date of registration. The duration of the compulsory licence is determined on a case by case basis but in no event will the duration of the licence exceed the total remaining period of protection.

2.3.6 Geographical Indications

Geographical indications (GIs) are protected under the Geographical Indications of Goods (Registration and Protection) Act 1999 and the Geographical Indications of Goods (Registration and Protection) Rules 2002. Applications for registration of a geographical indication must be made in writing to the Registrar of Geographical Indications. Geographical indications will not be registered if their use is likely to deceive or cause confusion or would be contrary to any law in force or if they comprise or contain scandalous or obscene matter or any matter likely to hurt religious susceptibilities. In addition, GIs determined to be generic names or indications of goods and therefore not protected in their country of origin or if it is falsely represented that the goods originate in another country, will not be registered. Once an application

is accepted, the Registrar advertises the application and if there is no opposition the GI is registered. Decisions by the Registrar may be appealed to the IPAB.

Protection for the owner of the GI and any authorized user is for ten years, but may be renewed by the Registrar for further periods of ten years. Additional protection may be provided by the Central Government to certain goods or classes of goods by notification in the Official Gazette. At present wines and spirits are the only class of goods that receive higher protection in India. Registration guarantees the exclusive use of the GI by the owner or authorized user and protection in case of infringement. By the end of 2009-10, 120 GIs of products were registered representing a wide variety of goods. These include goods such as Darjeeling tea, Pochampally ikat, Chanderi sarees, Mysore agarbathi, Kullu shawls, Coorg oranges, Aranmula mirrors and Kancheepuram silk.

2.3.7 Other IPRs

Integrated Circuits: The Semiconductor Integrated Circuits Layout Design Act 2000 and the Semiconductor Integrated Circuits Layout Design Rules 2001 is the prevailing law regulating the protection of integrated circuits. Layout designs may not be registered if they are not original; they have been commercially exploited anywhere in India or in a Convention country; are not inherently distinctive; or are not inherently capable of being distinguishable from any other registered layout design. A creator seeking registration of a layout design must apply in writing to the Registrar. Registration is valid for ten years from the date of filing or the date of first commercial exploitation anywhere in the world, whichever is earlier. Decisions by the Registrar may be appealed to the Layout Design Appellate Board.

Trade Secrets: India has no specific legislation regulating the protection of trade secrets. Hence enforcement measures/penalties for violations of trade secrets are available through common law. Trade secrets are protected either through contract law or through the equitable doctrine of breach of confidentiality.

2.3.8 Enforcement of IPRs

India has taken several initiatives to modernize its IPR administration. The major achievements during the period include an increase in the level of computerization, providing Internet connectivity amongst the various offices, creating an online facility for filing and processing patent and trademark applications and computerizing intellectual property records to create databases.

The Government has continued its efforts to step up training to increase awareness of IPR enforcement through the National Institute of Intellectual Property Management (NIIPM). Since 2007, the NIIPM has undertaken wide ranging activities including training, education and research.

Enforcement of intellectual property rights in India (except at the borders) is under the purview of state governments. Enforcement is carried out by the police for domestic cases, and by the police and Customs for imports and exports.

The Trade Marks Act and the Copyright Law provide for both civil and criminal remedies. Penalties for falsification of trademarks and selling or providing goods that infringe trademarks include a prison term of six months to three years, and a fine of between Rs 50,000 and Rs 200,000. Similarly infringement of copyright could lead to imprisonment for six months to three years and/or a fine of between Rs 50,000 and Rs 200,000. In the case of patents, false representation of any article sold in India as being

patented in India or for which an application has been made, is punishable by a fine of up to Rs 100,000. Similar mechanisms may also be used for penalizing infringement of other IPRs like industrial designs (sale, import or imitation of any article with a registered design without the consent of the registered owner is punishable by a fine of up to Rs 25,000 together with any other damages incurred of up to Rs 50,000); geographical indications (falsely applying geographical indications or selling goods under false geographical indications is punishable with imprisonment for six months to three years, and a fine of Rs 50,000 to Rs 200,000) and protected plant varieties (applying a false denomination is punishable with imprisonment for three months to two years and/or a fine of Rs 50,000 to Rs 500,000). Repeat offences are subject to stricter penalties.

Under the Customs Act, Customs may seize and hold goods for a reasonable period (e.g. six months), including for suspected violations of intellectual property rights, following which, the goods must be released or a court injunction obtained to start infringement proceedings. In order to further implement border measures, in 2007 the Customs authorities issued a notification that prohibits imports of goods infringing intellectual property rights and promulgated the Intellectual Property Rights (Imported Goods) Enforcement Rules 2007. These Rules lay down a detailed procedure for right holders or their authorized representatives and for Customs to seek suspension of release of suspect imported goods. The Rules allow right holders to record their registered intellectual property, including patents, with Customs. After the grant of the registration by the Commissioner on due examination, imports of allegedly infringing goods into India may be prohibited. The Rules also permit suo moto action by Customs when infringing goods are found through random checks and the disposal of the confiscated goods. However, the Rules do not call for any action against goods of non-commercial nature contained in personal baggage, sent in small consignments intended for personal use of the importer, or goods in transit. In 2008-09, there were 23 instances of imports confiscated because of IPR infringement. In 2009-10 the number of cases increased to 56.

India has made important efforts in the field of enforcement such as having specially trained IP judges in general courts, training judges on issues specific to IP litigation and increased efforts by Indian customs officials to stop infringing goods from entering the country. In addition to the Government's efforts to enforce IPR, industries in India have become more proactive. The Ministry of Information and Broadcasting set up a Committee on Piracy and IPR holders have created associations and IPR committees to generate awareness on issues relating to counterfeit, fake and spurious products. For example, the music and film industry, through the Film Federation of India, Motion Picture Association and Indian Music Industry Association, cooperates and collaborates with the police in the design and implementation of anti-piracy programmes. To support the efforts of the industry, the state governments of Andhra Pradesh, Kerala, Maharashtra and Tamil Nadu, where the film and music industry is prominent, have introduced legislation stipulating that video piracy is an offence.

2.4 Economic Policies affecting Trade

2.4.1 Monetary and Fiscal Policy

Monetary Policy: The Reserve Bank of India (RBI) formulates, implements and monitors monetary policy. The RBI's objective is to maintain price and financial stability and ensure an adequate flow of credit. The Technical Advisory Committee (TAC) on Monetary Policy, created in July 2005, provides advice on monetary policy formulation. The RBI also acts as the Central Government's banker and debt manager and acts as banker for the states that require it to do so.

The RBI implements monetary policy through the use of several direct and indirect instruments based on an assessment made that takes into account indicators such as interest rates, inflation rate, money supply and credit levels, exchange rate fluctuations, trade and capital flows, output trends and the fiscal position. The main direct instrument used to conduct monetary policy is the cash reserve ratio (CRR), followed by the statutory liquidity ratio (SLR) and refinance facilities. The RBI uses the liquidity adjustment facility (LAF) as its main indirect instrument which enables it to adjust short-term liquidity through repo and reverse repo auctions. The RBI also makes use of open market operations and the Market Stabilization Scheme (MSS) to sterilize foreign inflows. Under the MSS, the RBI auctions government securities and keeps the equivalent cash balance in a special account.

Until May 2011, the RBI fixed three policy interest rates - the repo rate, reverse repo rate and the bank rate which is the rate at which the RBI will buy or rediscount bills of exchange or other commercial papers. The first two rates signalled the short-term monetary policy stance, while the bank rate signalled the medium term stance. As of 3 May 2011, the repo rate is the only independently varying policy rate. The RBI expects that a single independently varying policy rate will more accurately signal the monetary policy stance. The reverse repo was pegged to the repo rate at a rate fixed at 100 basis points below it and a new Marginal Standing Facility (MSF) rate was created.

During 2010-11, the RBI refocused monetary policy on containing inflation and inflationary expectations. The RBI raised its policy rates seven times until April 2011, with the repo rate cumulatively rising by 200 basis points (bps) to 6.75% and the reverse repo rate by 250 bps to 5.75%. The CRR was kept at 6%, at which it stood in May 2011. In May 2011, following the change in policy stance to fix only one rate, the repo rate was increased to 7.25% while the reverse repo was adjusted automatically to 6.25%. The persistent liquidity pressure led the RBI to provide additional liquidity support to scheduled commercial banks in November 2010. The RBI has fixed a liquidity comfort level of +/- 1% of net demand and term liabilities. When liquidity departs too much from this range, the RBI intervenes through open market operations or the MSS. The liquidity pressure observed in 2010 stemmed from a large build-up of Government cash balances, accompanied by a strong demand for credit. Subsequently, in December 2010 the RBI reduced the SLR of scheduled commercial banks from 25% to 24%.

Fiscal Policy: To counter the effects of the global financial crisis, India engaged in a policy of fiscal expansion, which was one of the largest among emerging economies, estimated at about 10% of GDP in both 2009 and 2010. As growth resumed at a faster pace than expected, the authorities, following the recommendations of the Thirteenth Finance Commission, changed policy course and returned to focusing on fiscal consolidation in the 2010-11 Budget, including through a partial withdrawal of the stimulus measures put in place during the crisis. The policy stance was shifted to addressing long run sustainability concerns, while continuing to support growth in the short run.

After two years of increasing deficits, the consolidated deficit declined to some 7.3% of GDP in 2010-11, as both central and state government deficits fell to 5.5% and 2.5% of GDP, respectively. Fiscal policy has been conducted within the framework of the Fiscal Responsibility and Budget Management Act (FRBMA), notified in 2004, which calls for the Central Government to take measures to reduce the revenue (current) and overall fiscal deficits with a view to eventually eliminating them. Gross tax revenue rose as a proportion of GDP, from 9.2% in 2003-04 to a peak of 12% in 2007-08, before falling to 9.5% in 2009-10. Tax revenue net of states' shares was only 7% of GDP in 2009/10, down from a pre crisis level of 8.8%, partly on account of lower excise and customs duty collection.

When India embarked on the path of economic reform in 1991-92, the ratios of direct and indirect taxes to gross tax revenue were 22.6% and 77.4%, respectively. In 2009-10 these ratios were of 60.5% and

39.5%, respectively. This was partly a result of the gradual reform of the tax structure to reduce customs and excise duties and rely more on direct taxes, particularly corporate income tax and on service tax revenues. The 2010-11 Budget reduced the surcharge on corporate income tax from 10% to 7.5%.

For several years, the Government has been intent on introducing a goods and services tax (GST) and on consolidating the Income Tax Act 1961 and the Wealth Tax Act 1957 in a single law. With respect to the consolidation of the two tax acts, a Direct Taxes Code Bill was introduced in Parliament in August 2010, envisaged to be effective from 1 April 2012. The Direct Taxes Code Bill seeks to establish a more effective and equitable direct tax system and help increase the tax to GDP ratio. The proposed Code would do away with the current system of determining tax rates every year through an approved Finance Act, even if no tax changes take place, and replacing it by fixed Schedules (to the Code) containing the relevant tax rates. New legislation would only be required when a change of rates is decided, thus enhancing the stability and predictability of the tax system.

The 2011-12 Budget seems to have placed more emphasis on growth. It contains provisions to lower customs duty rates (for example, on imports of certain inputs and of agricultural machinery) to promote the development of agricultural and manufacturing production as well as exports.

2.4.2 Foreign Exchange and Balance of Payments

Foreign Exchange: India has had a managed float since 1993, with the exchange rate determined in the interbank market. The degree of intervention of the RBI to stabilize the market has varied over time. The RBI does not have a fixed or pre announced target or band and has intervened in the market when deemed necessary in accordance with its general monetary policy stance. The exchange rate policy in recent years has approached more a pure float, with the RBI intervening very little in the market. Maintaining a floating exchange rate helps India absorb external shocks and large inflows of capital.

After appreciating sharply in FY 2007-08 as a result of large capital inflows, the nominal effective exchange rate (NEER) depreciated in the aftermath of the global financial crisis. NEER and REER baskets comprise US dollar, euro, yen, pound sterling, HK\$ and the renminbi. The real effective exchange rate (REER) depreciated in 2008-09, but started appreciating in 2009-10. This appreciation has been modest even though inflation in India has been considerably higher than in countries whose currencies comprise its REER basket.

Balance of Payments: Strong domestic demand and rising oil and food prices resulted in a widening of the trade deficit, leading to a current account deficit in recent years. The trade deficit peaked at US\$119.5 billion in 2008-09 (some 10% of GDP), before declining somewhat in 2009-10. While posting a structural trade deficit, India has a sizeable surplus in the services balance. The financing of the current account deficit has not been a problem. Although unevenly spread, there have been large capital inflows, both as foreign direct investment (FDI) and as portfolio investment, attracted by expanding domestic demand and the good prospects of the economy. Foreign institutional investor (FII) investment, external commercial borrowing (ECBs), and trade credit account for most capital flows, with FII being the largest.

Foreign institutional investors, non-resident Indians (NRIs) and persons of Indian origin (PIOs) are allowed to invest in the primary and secondary capital markets in India. FIIs/NRIs can acquire shares/debentures of Indian companies through the stock exchanges in India. The ceiling for overall investment for FIIs is 24% of the paid-up capital of the Indian company and 10% for NRIs/PIOs. The limit is 20% of the paid-up capital in the case of public sector banks. The ceiling for FIIs is independent of the ceiling for NRIs/PIOs.

2.4.3 Foreign Investment Regime

The Companies Act 1956 regulates the incorporation and the functioning of domestic and foreign companies. Other laws that have a bearing on the business environment are the Indian Partnership Act 1932, the Arbitration and Reconciliation Act 1996, the Competition Act 2002, the Foreign Exchange Management Act 1999 and various tax and intellectual property laws and regulations.

A foreign company may operate in India either as an Indian company or as a foreign company. However, incorporation facilitates a company's access to credit and to the Indian financial market, as well as entering into contracts in its own name, and acquiring and disposing of immovable property. Foreign companies may set up operations through any of the forms of business establishment used in India, subject to the approval of the Reserve Bank of India and other dispositions of the Consolidated FDI Policy. A company may be incorporated in India as a private limited company, a public limited company, a partnership, a joint venture, a sole proprietorship, a trust, a foreign branch or a limited liability partnership. Wholly owned subsidiaries may be set up in sectors where 100% FDI is permitted under the Consolidated FDI Policy. Foreign investors may form joint ventures to invest in sectors where 100% FDI is not permitted. A foreign branch office represents the parent company in India. It may export/import, coordinate with local buyers and sellers, provide technical support for products sold in India, develop software and engage in the airline/shipping business. A branch office is not allowed to manufacture in India but it may subcontract with an Indian manufacturer. The role of a liaison office is to collect market information and provide information about the company and its products to prospective Indian customers. A project office may be set up by foreign companies planning to execute specific projects in India. At least 12 procedures are required to set up a business in India. These apply in most of India but may vary due to differences in rules at the state level.

Since 1 April 2010, foreign direct investment (FDI) has been regulated by the Consolidated FDI Policy issued by the Department of Industrial Policy and Promotion (DIPP). It reflects the current regulatory framework by consolidating all prior regulations on FDI. The three main institutions that handle FDI related issues in India are the Foreign Investment Promotion Board (FIPB), the Foreign Investment Implementation Authority (FIIA), and the Secretariat for Industrial Assistance (SIA). The FIPB, under the Ministry of Finance, chaired by the Secretary of Economic Affairs and consisting of senior secretaries, is in charge of examining and approving foreign investment proposals in sectors where investment is not allowed through the automatic route. Investment above a specific threshold requires additional approval from the Cabinet Committee on Economic Affairs. The SIA, under the DIPP, acts as the Secretariat of the FIIA. The Secretariat is the single window for investors. It processes all applications that require Government approval, assists entrepreneurs and investors in setting up projects (including liaison with other organizations and the state level) and monitors their implementation.

FDI is allowed in Indian companies (including micro and small enterprises), partnership firms, venture capital funds and in limited liability partnerships (LLPs) firms. FDI in LLPs has been allowed since May 2011, with FIPB approval, in sectors where 100% FDI is allowed through the automatic route and where FDI is not linked to any performance conditions. FDI may be freely repatriated.

There are two entry routes for FDI in India. In sectors where FDI is allowed up to 100%, FDI enters under the automatic route, subject to sectoral regulations and other conditions. In this instance, no approval is required from the Reserve Bank of India (RBI) or the Government; however, the investment must be notified to the RBI's regional office within 30 days. In sectors where FDI is capped, prior approval from the FIPB is required. FIPB recommendations must be cleared by the Ministry of Finance for FDI proposals

below or equivalent to Rs.12 billion and by the Cabinet Committee of Economic Affairs for FDI proposals above Rs.12 billion.

India restricts investment from companies or nationals of certain countries. Pakistani citizens or entities incorporated in Pakistan, may not invest in India. In addition, Bangladeshi citizens or entities incorporated in Bangladesh are allowed to invest, subject to governmental approval. Non resident Indians living in Nepal and Bhutan as well as citizens of Nepal and Bhutan are allowed to invest on a repatriation basis, on condition that the investment amount is paid by way of inward remittances in free foreign exchange through normal banking channels. India has signed 79 bilateral investment promotion and protection agreements (BIPA), of which, 70 have entered into force (31 October 2010). It is negotiating 20 bilateral investment protection agreements.

Measures to attract foreign direct investment (FDI) have gradually increased the number of sectors in which FDI is permitted, thus reducing sectoral restrictions. Therefore, most sectors are currently at least partially open to FDI, subject to a cap and specific conditions. However, FDI is prohibited in a number of sectors/activities such as retail trading, some real estate activities, manufacture of tobacco and tobacco substitute and some agriculture activities.

A recent consolidation of all prior regulations on FDI is aimed at clarifying India's FDI policy and provides for better understanding and predictability of the foreign investment rules among foreign investors and sectoral regulators. Annual FDI inflows grew from US\$22.86 billion in 2006-07 to US\$37.76 billion in 2009-10. FDI inflows have been strong in telecommunications (reflecting partly large auctions of licenses) and in other services. Inflows have also been robust in housing and real estate, construction, power related activities and the automobile sector. Mauritius remains the largest source of FDI, accounting for approximately 40.2% of inward FDI flows in 2009-10. Other major sources were Singapore, the United States, Cyprus and Japan. India's total FDI outflows increased from US\$10,447 million in 2006-07 to a peak of US\$18,442 million in 2007-08. Outflows began to rise again in 2010-11.

2.4.4 Pricing Policy

The Government maintains minimum support prices (MSPs) for major agricultural commodities. The MSPs and products subject to MSPs are reviewed annually. MSPs are announced prior to each planting season. India maintains MSPs for 25 major agricultural commodities, namely paddy, jowar, bajra, maize, ragi, arhar (tur), moong, urad, cotton, groundnut in shell, sunflower seed, soybean, sesamum, niger seed, wheat, barley, gram, masur (lentils), rapeseed/mustard, safflower, toria, copra, de husked coconut, jute and tobacco. MSPs are fixed by the Government following the recommendations of the Commission for Agricultural Costs and Prices (CACP), which takes into account several factors such as cost of production, changes in price of inputs, input/output price parity, market prices, inter-crop price parity, effect on industrial costs, effect on cost of living, effect on general price level and international price, etc. MSPs are the same throughout the country even though the cost of production varies according to region.

The Price Support Scheme (PSS) is a procurement system to ensure that farmers of specific commodities (e.g. cereals, pulses and oilseeds, cotton and jute) can sell their produce at the MSP. Designated agencies purchase the produce from farmers at the MSP. The Food Corporation of India (FCI) is designated under the PSS to purchase cereals. The National Agricultural Cooperative Marketing Federation of India (NAFED), Central Warehousing Corporation (CWC) and National Cooperative Consumer Federation of India Ltd (NCCF) are designated to purchase pulses and oilseeds. The Cotton Corporation of India and NAFED is designated to purchase cotton and the Jute Corporation of India to purchase jute.

The Market Intervention Scheme (MIS), in place since 2001, covers agricultural commodities that are not covered by MSPs. The Department of Agriculture and Cooperation implements the MIS at the request of state/union territory (UT) governments to protect farmers from a price decline when there are bumper crops. In these instances, a market intervention price (MIP) is fixed. The MIP is set taking into account of the cost of production and a “small” margin to support farmers. The National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) and other state designated agencies purchase at this fixed prices and distribute the products.

Under the Targeted Public Distribution System (TPDS), a programme that focuses on reducing poverty, the price of some essential commodities, i.e. wheat, rice, coarse grains, sugar and kerosene, are subsidized for a targeted population living below the poverty line. These products are distributed by the state governments/UTs through the fair price shops and kerosene oil depots.

In 2009, the statutory minimum price (SMP) for sugarcane was replaced by the fair and remunerative price (FRP). The FRP is fixed by the Central Government on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP), which consults with the state government and sugar associations. The FRP is a minimum price, below which no sugar mill may purchase sugarcane from a farmer. Factors taken into account to fix the FRP include the cost of production of sugarcane, the return that growers would have if planting alternative crops, the general trend of prices of agricultural commodities, supply of sugar to consumers at a “fair” price, price of refined sugar (made with sugarcane) at the mill, earnings made from selling by products (e.g. molasses, bagasse, and pressed mud) and a “reasonable” profit margin for sugarcane producers to also account for risk. The main difference between the SMP and the FRP is that an additional factor (i.e. a “reasonable” profit margin for sugarcane producers taking into account the risk factor) is considered when setting the FRP. State governments also set a state advisory price (SAP) for sugarcane. If the SAP is higher than the FRP set at the central level, then the state governments have to bear the loss.

Although the Administered Pricing Mechanism (APM) was in principle dismantled in 2002, India did not actually end state control over petrol prices at the refinery and retail level until June 2010 and allow them to vary according to international prices. For kerosene and LPG, the PDS Kerosene and Domestic LPG Subsidy Scheme 2002 and the Freight Subsidy (for Far Flung Areas) Scheme 2002 were put in place after administered pricing was dismantled. These schemes, which were to be phased out by 2008, have been extended until 31 March 2014. The retail price of diesel is still under control and is set according to “trade parity.” “Trade parity pricing” is based on the weighted average of import and export prices taking into account the inland freight, marketing margin, dealers’ commission, excise duty, VAT, state entry taxes, and local levies. At present, a two price regime system is in place for natural gas - gas priced under the APM and non APM gas. The APM applies to gas produced in fields awarded to India’s national oil companies (ONGC and OIL) prior to the implementation of the New Exploration Licensing Policy (NELP) in 1999. The non APM applies to (i) gas produced in field awarded under the NELP for which the price is determined by the production sharing contract (PSC) between the Government and the private contractor, and (ii) imports of liquefied natural gas (LNG) for which the price is determined by an agreement between buyer and seller. The price formula used to determine the prices under the PSC must be approved by the Government. APM gas may only be used by priority sectors, i.e. fertilizers (urea), LPG plants (owned by GAIL and ONGC), power, city gas distribution, steel plants, refineries, and petrochemicals. Other consumers are not allowed to use subsidized gas and must buy it from private companies or LNG importers. The Government closely monitors the price of certain hydrocarbons. In case of high price volatility in the international market, the Government will intervene to stabilize prices.

The New Pricing Scheme (NPS) for urea, in place since 2003, was initially expected to be phased out by 31 March 2010 but it has been extended indefinitely. Thus, the price of urea for agricultural use continues to be controlled. However, price controls on other fertilizers (e.g. phosphatic and potassic fertilizers) were eliminated in 2010 and replaced by a “nutrient based subsidy (NBS) policy,” implemented as of 1 April 2010, which applies to phosphatic and potassic fertilizers including imports. The Nutrient Based Subsidy (NBS) Policy is applicable for muriate of potash (MOP), di-ammonium phosphate (DAP), mono-ammonium phosphate (MAP), triple super phosphate (TSP), single super phosphate (SSP), ammonium sulphate and 16 grades of NPK fertilizers (complex fertilizers containing nitrogen, phosphorus and potash elements together). At present, manufacturers/importers fix the retail price and the Government provides a fixed annual subsidy based on the nutrient content of the fertilizer produced. The subsidy, granted to central public sector enterprises (CPSEs) and to private firms producing fertilizers, is equivalent.

The Drugs Price Control Order (DPCO) 1995 allows for the price of drugs to be controlled, with the stated purpose of ensuring that quality drugs are available at “reasonable prices.” At present, the price of 74 bulk drugs and related formulations are controlled. The Department of Pharmaceuticals (DoP) administers the DPCO. The National Pharmaceutical Pricing Authority (NPPA), an independent office attached to the DoP, fixes and revises the price of controlled bulk drugs and formulations from time to time. It also monitors the price of decontrolled drugs in order to keep them at a reasonable level. The price of drugs for “popular use” is controlled when drugs are produced under a “monopolistic” situation (i.e. a single formulator has at least 90% of the market shares) and a turnover of at least Rs.10 million. For other drugs, the price may be controlled if formulators have a turnover of at least Rs.40 million. The price for bulk scheduled formulations is fixed according to the cost of production plus “maximum allowable post manufacturing expenses” (MAPE). The MAPE must not exceed 100% of the cost of production for national products and 50% of the landed cost for imports. In respect of imported formulations for which equivalent domestic substitutes are available, a 35% margin is allowed by the NPPA. Ceiling prices are also fixed for commonly marketed formulations. The ceiling price for commonly marketed standard pack size of price controlled formulations is obligatory for all producers, including small-scale units. The price for bulk “non scheduled” formulations may be fixed on grounds of “public interest” and monitored.

2.4.5 Competition Policy

Legislation dealing with competition issues in India are the Competition Act 2002, the Competition (Amendment) Act 2007, the Competition (Amendment) Act 2009 and various regulations issued by the Competition Commission of India (CCI). In 2009, the Monopolies and Restrictive Trade Practices Act 1969 (MRTP Act), which had entered into force in 1970, was repealed. The Competition Commission of India (CCI) started operating in May 2009, when the provisions of the Competition Act relating to anti competitive agreements and abuse of dominant position were notified and entered into force. The CCI must take the necessary measures for promoting competition, creating awareness and imparting training on competition issues.

As of December 2010, the CCI had received 130 requests for investigations, many inherited from the MRTP Commission which it replaced, and issued 30 orders. The requests covered insurance, travel, automobile manufacturing, real estate, pharmaceuticals, financial sector and entertainment. Unlike the MRTPC, the CCI has powers of inquiry and enforcement, and may impose penalties for non compliance with its procedures. The CCI may self initiate investigations.

The Competition Act 2002 contains provisions dealing with anti competitive agreements, abuse of dominant position, combinations, cartels etc. The Act prohibits anti competitive agreements related to production, storage, purchase or control of goods and provision of services. These agreements include

cartels, price fixing, limiting production and sharing markets or agreements between manufacturers and distributors. Accordingly, the Commission may take remedial actions to deal and impose penalties of up to 10% of the average turnover of an enterprise. In the case of a cartel, the Commission may impose on each member a penalty of up to three times the profit or up to 10% of turnover, whichever is higher, for each year of the continuation of the agreement. However, an exception to this prohibition applies when these agreements increase efficiency. The law also recognizes intellectual property rights and in order to facilitate their protection, allows reasonable restrictions imposed by their owners. While agreements related to production, supply, distribution and control of goods and services for export may have appreciable adverse effects on competition, they are exempt from prohibition.

Combinations covered by the Competition Act 2002 include mergers and acquisitions involving large enterprises, defined in the Act as those above certain thresholds. Also covered is the category of combinations involving the acquisition of control over an enterprise by a person who already has direct or indirect control over another enterprise producing, distributing or trading similar or substitutable goods or services are also subject to similar thresholds. Exemptions apply when the enterprises to be acquired have assets of less than Rs.2.5 billion or its turnover is below Rs.7.5 billion or when a “group” exercises less than 50% of voting rights in the other enterprise. According to the law, any person/enterprise, who/which proposes to enter into a combination, must give notice to the Commission. If the combination is not notified, then the Commission may inquire into it within one year of merger taking effect. If the inquiry finds appreciable adverse effects on competition, the CCI may order the dissolution of the merger.

The Act also prohibits other practices including restricting the production of goods and the provision of services, denying market access, concluding contracts subject to the acceptance of conditions not related to the contract and using dominant position to enter a market or protect other markets. These practices are not prohibited per se but are dealt with by “rule of reason” when they cause adverse effects.

The Competition Act 2002 covers all commercial activities of government related bodies. However, specific exemptions may be granted on grounds of security or public interest, international treaty, agreement or convention obligations, or if an enterprise is performing a sovereign function on behalf of the Central Government or a state government. No antitrust exemptions are applicable to central public sector undertakings, including price or purchase preferences.

The orders, directions or decisions made by the CCI may be appealed before the Competition Appellate Tribunal (CAT), established in October 2009. Orders issued by the CAT are enforced in the same manner as a decree made by a court.

2.4.6 State Ownership and Privatization Policy

At the end of March 2010, 217 of India's 249 central public sector enterprises (CPSEs) were in operation, 32 were in the process of being established and 59 were sick or loss making. CPSEs continue to play an active role in the economy, holding significant market share in several sectors/subsectors, e.g. petroleum and mining, power transmission and generation, nuclear energy, heavy engineering, aviation industry, storage and public distribution system, shipping, insurance and telecommunications.

India's disinvestment policy is aimed at encouraging people ownership of CPSEs while ensuring that the Government's equity does not fall below 51%, hence maintaining control of the enterprise. The Government approved an action plan for disinvestment in profit making CPSEs in November 2009, which outlines two approaches to disinvestment. First, profit making CPSEs listed on stock exchanges with less than 10% mandatory public shareholding will be divested through a public offering. Second,

unlisted profit making CPSEs will be listed on stock exchanges or will issue fresh equity or a combination of both. Listed profit making CPSEs may use capital markets to finance their capital expenditure and the Government may consider disinvesting part of its shareholding. Proceeds from disinvestment are placed in the National Investment Fund created in 2007. 75% of the proceeds are allocated to the funding of selected social programmes and the remainder is invested in the modernization or expansion of profitable or revivable CPSEs.

3. Multilateral, Regional and Bilateral Agreements

India is a founding and active Member of the WTO and provides MFN treatment to all Members. India accepted the Fourth and Fifth Protocols of the GATS and is a Member of the Information Technology Agreement. India became an observer to the WTO Government Procurement Agreement in February 2010. India has submitted a large number of notifications to WTO committees and bodies mainly relating to anti dumping, technical barriers to trade and SPS measures. India has participated actively in the Doha Development Agenda (DDA) negotiations. India considers that the purpose of these negotiations is to come to a balanced outcome in line with the development mandate and that the development dimension should be the defining feature of all outcomes in the Round. India has submitted proposals individually and also with other developing countries regarding, inter alia, agriculture, non-agriculture market access (NAMA), services, trade facilitation and IPRs.

India signed seven preferential agreements and started bilateral negotiations with the EU (28 June 2007), SACU (5 October 2007), EFTA (6 October 2008), the Gulf Cooperation Council (GCC) (2006), and New Zealand. Signing regional trade agreements is an element of India's overall trade policy objective of enhanced market access for Indian exports. India is a signatory to the Asia Pacific Trade Agreement (APTA) and the South Asian Free Trade Agreement (SAFTA). India has signed an agreement with the Association of Southeast Asian Nations (ASEAN), which entered into force in 2010, and an agreement with MERCOSUR, which was signed in 2004 but entered into force in June 2009. Prior to signing an agreement with ASEAN, India had a bilateral agreement with Thailand which is a member of ASEAN, Comprehensive Economic Cooperation Agreement (CECA) with Singapore (2005) and Malaysia (2011). The bilateral agreements signed since 2007 have also been with countries belonging to a regional agreement to which India is a party. For instance, India renewed a bilateral agreement with Nepal, a member of SAFTA (which entered into force in 2009) and signed new agreements with the Republic of Korea, a member of APTA (which entered into force on 1 January 2010) and with Malaysia (entry into force by 1 July 2011), a member of ASEAN. Tariff concessions under bilateral agreements with countries that also belong to regional agreements to which India is a party are generally wider and deeper than those under the regional agreements and that the trader can choose which preference to use. With respect to rules of origin, product specific rules of origin are not necessarily the same in the bilateral and regional agreements but that the origin criterion for products not covered by specific rules have, by and large, been harmonized. India signed an agreement with Japan in February 2011.

In 2004, the members of the Bay of Bengal Initiative on Multi Sectoral Technical and Economic Cooperation (BIMSTEC) signed a Framework Agreement to form a free trade area by 2012. The members are Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand. The agreement provided for the negotiations to be concluded by end 2005 for goods and by end 2007 for services and investment. However, these deadlines have not been met and negotiations are still underway.

China¹

1. Institutions

1.1 Institutional Framework for Trade Policies

China's overall trade policy aims to accelerate the opening of its economy to the outside world, to introduce foreign technology and know-how, to develop foreign trade, and to promote economic development that is "mutually beneficial" for its trading partners.

China's main laws covering international trade include the Foreign Trade Law, the Customs Law, and the Regulations on Import and Export Tariffs which contain the tariff schedules as well as laws and regulations relating to standards, SPS, anti-dumping measures, countervailing and safeguard measures, and intellectual property rights. Various trade-related laws and regulations have been adopted or amended in recent years, including the Enterprise Income Tax Law which unified income tax rates for all companies (domestic or foreign-invested); the Interim Regulations on Value-added Tax (Amended) which transformed its VAT from production-based to consumption based tax; the Anti-Monopoly Law, the first comprehensive competition law in China; the Patent Law which, inter alia, increased penalties against infringement; and the Administrative Regulations on Foreign Investment in Telecommunications Enterprises (Amended) which lowered the minimum registered capital requirement for foreign-invested basic telecommunication providers.

The Ministry of Commerce (MOFCOM) is responsible for policy coordination and implementation in respect of all trade-related issues. Other key agencies influencing trade policy are the National Development and Reform Commission (NDRC), which is in charge of overall national economic and social development policy; and the Ministries of Finance, Agriculture, Transportation, and Land and Resources. An institutional change in the State Council, conducted in 2008, affected some agencies responsible for China's trade policy implementation. The change involved relocating regulatory functions between some ministries and agencies as well as creation of new ministries and agencies. Consequently, the National Bureau of Energy, the Ministry of Industry and Information Technology (MIIT), the Ministry of Transport and the Ministry of Environmental Protection were established and the Commission of Science, Technology, Industry for National Defence (COSTIND), the Ministry of Information Industry (MII), and the Ministry of Construction were abolished.

Several industry associations also collect and share information to identify and deal with problems related to industries, discuss trade policy issues that affect their industries, and represent their sectors

1 This chapter has been compiled by Prof. Sajal Mathur, Meghna Dasgupta and Pallavi Sirohi at the Centre for WTO Studies, Indian Institute of Foreign Trade, New Delhi. Material for the chapter has been mainly drawn from the 2010 WTO Trade Policy Review of China (WT/TPR/S/230 and WT/TPR/G/230) and 2008 WTO Trade Policy Review of China (WT/TPR/S/199 and WT/TPR/G/199).

to the Government. These include the China Coal Industry Association, China Iron and Steel Association, China National Textiles and Clothing Association, China Machine Industry Federation, China Petroleum and Chemical Industry Association, China Light Industry Federation, China Building Material Industry Association, and China Nonferrous Metals Society.

1.2 Executive, Legislative and Judicial Branches of the Government

Executive: The executive power is vested with the State Council. The Premier is approved by the National People's Congress (NPC) upon nomination by the President. The term of the State Council is five years, and the Premier, Vice Premiers, and State Councillors may serve no more than two consecutive terms. The State Council's functions include formulation, adoption and enactment of 'administrative regulations' in accordance with the Constitution and other laws, submission of proposals to the NPC or its Standing Committee, the exercise of leadership over the work of local organs of state administration, and determination of the functional divisions between central and local authorities; drafting and implementation of national economic and social development plans and the state budget, the administration of urban and rural development work; and the conclusion of treaties and agreements with other states. The State Council reports to the NPC. When the NPC is not in session, then it reports to the Standing Committee of NPC.

Legislature: The National People's Congress (NPC) and its Standing Committee are the highest organs of State power and exercise the legislative power of the State. The NPC is composed of deputies from provinces, autonomous regions, municipalities directly under the Central Government, the special administrative regions, and the armed forces. It has a term of five years, meets in session once a year, and is convened by its Standing Committee. There are a maximum of 3,000 deputies. The NPC enacts and amends, inter alia, criminal, civil, and other 'basic' laws. These include, for example, the Organic Law of the State Council, and the Organic Law of the Local People's Congresses and Local People's Governments. The Standing Committee enacts and amends laws, except laws such as the Foreign Trade Law and the Customs Law which are enacted by the NPC. The NPC has the power to elect and remove from office the President and Vice President of the People's Republic of China. The term of office of the President and Vice-President is five years and they can serve not more than two consecutive terms. The NPC's other functions include amending the Constitution, approving the Premier of the State Council upon nomination by the President, examining and approving the national economic and social development plan, the state budget, and their implementation reports, altering or annulling inappropriate decisions of its Standing Committee, electing the President of the Supreme People's Court and the Procurator-General of the Supreme People's Procuratorate, approving the establishment of provinces, autonomous regions, and municipalities directly under the Central Government, and making decisions on the establishment of special administrative regions and their institutional systems. The functions of the President include promulgating statutes (ordinances) adopted by the NPC or its Standing Committee, appointing and removing, inter alia, the Premier, Vice-Premiers, State Councillors, Ministers in charge of ministries or commissions, and the Auditor-General of the State Council, in accordance with the decisions of the NPC and its Standing Committee. The President ratifies or abrogates treaties and 'important' agreements concluded with foreign countries, in accordance with the decisions of the NPC Standing Committee. The President does not have the power to veto laws that have been adopted by the NPC or its Standing Committee.

Judiciary: China's judicial system consists of the Supreme People's Court, the local people's courts at different levels, and special courts e.g. military, railway, and maritime courts.

2. Trade Policies

2.1 Trade in Goods

2.1.1 Import Policy

A) TARIFFS

Structure: China's tariff is set by the Customs Tariff Commission of the State Council, an inter-ministerial body composed of, inter alia, the Ministry of Finance, Customs, MOFCOM, NDRC, and the State Council General Office. China has MFN tariff rates, non-MFN tariff rates ("agreement" tariff rates, "special preferential" tariff rates, "general" tariff rates), and tariff-quota rates. China provides at least MFN treatment to all WTO Members except El Salvador and some territories of EU Member States. Applied rates are close to bound rates, thereby imparting a high degree of predictability. Nonetheless, China's tariff structure is apparently complex as it applies multiple MFN tariff rates.

In 2009, China's applied MFN tariff (including interim rates) consisted of 7,867 lines at the HS 8-digit level (HS 2007). Some 7,815 lines (99.3%) were ad valorem rates. The applied MFN tariff contained 60 different ad valorem rates, ranging from zero to 65%. The average applied MFN tariff rate was 9.5% in 2009 with the average for agricultural products (WTO definition) at 15.2 % and that of non-agricultural products (WTO definition) at 8.6%. By HS section prepared food, footwear and headgear had the highest MFN rates applied to them. In agriculture, protection varied considerably from one product to another, with higher-than-average tariffs on, inter alia, some cereals (40%-65%), sugar (50%), tobacco (57%), and some beverages (42.3%-65%). The dispersion in applied MFN rates, indicated by the coefficient of variation, has remained unchanged since 2005 at 0.8%. Also, China's applied MFN tariffs are subject to positive escalation between semi-processed and fully processed products, and in some cases negative escalation between unprocessed and semi-processed products. Non-ad valorem MFN rates applied to 52 tariff lines - 44 at specific rates, 5 at rates involving either an ad valorem rate or a compound rate, and 3 alternate rates (ad valorem rate or specific rate, whichever was lower).

China has bound all its tariff lines at ad valorem rates which vary from zero to 65% for agricultural products, and from zero to 50% for non-agricultural products. The average bound rate was 9.9% (15.3% for agricultural products and 9 % for non-agricultural products).

"General" tariff rates are applied to imports whose origin cannot be determined, or if they originate in the countries and regions that are not subject to MFN tariff rates, agreement rates, or special preferential rates (e.g. El Salvador and some territories of EU member states, as well as WTO non-members). The General rates are higher than or at least equal to MFN rates. The simple average of the general rates was 57%, higher than the applied MFN rate (9.5%).

Apart from the "general" tariff rates, the Customs Tariff Commission of the State Council may set "interim" tariff rates, which are implemented on specific products for a certain period of time. Where there are interim tariff rates on imported goods to which the applied MFN tariff rates are applicable, and rates are no higher than applied MFN tariff rates, the interim tariff rates apply. Where there are interim tariff rates on imported goods to which agreement tariff rates or special preferential tariff rates are applicable, the lower tariff rates apply. Where there are interim tariff rates on imported goods to which tariff-quota rates are applicable, the interim tariff rates apply.

Tariff-quotas: Tariff-rate quotas (TRQs) continue to be applied to eight categories of imported goods - wheat, maize, rice, sugar, wool, wool tops, cotton and chemical fertilizers. These TRQs are applied to imports from all countries.

Preferences: “Agreement” tariff rates are China’s preferential tariff rates under various bilateral/regional trade agreements or arrangements. China also offers special preferential tariffs (zero rated) unilaterally to import of some goods from 41 least developed countries (LDCs) with which it has diplomatic relations. In November 2009, China announced that by 2015, it would gradually eliminate tariffs on 95% of its tariff lines (at the HS 8-digit level) on imports from these LDCs. In 2010, tariffs were eliminated on about 60% of tariff lines.

Exemptions: Tariff exemptions apply to goods whose value per unit including the tariff is Yuan (Y) 50 or less, advertising materials and samples of no commercial value, goods and materials provided free by international organizations or foreign governments, goods damaged prior to Customs release, and fuels, stores, beverages, and provisions for use en route, loaded on any means of transport in transit across the frontier. Tariff exemptions and reductions also apply to goods imported by designated enterprises, as specified, in policies. Tariff exemptions also apply to goods imported in bond under processing trade into Customs controlled areas, if they are exported within a certain period. Since November 2008, residents within 20 kilometres of the border may import products worth up to Y 8,000 (increased from Y 3,000) per person per day, duty free, through designated places or trade fairs.

B) INTERNAL TAXES ON IMPORTS

VAT and excise taxes are also collected at the border on imports. The rates for imports and domestically produced goods are generally the same. The current VAT rates are 17% or 13% for most goods. Imports of agricultural products are subject to lower VAT (13%) than other products (17% - general VAT rate). Agricultural products produced and sold directly by small-scale farmers are exempted from VAT (on grounds of administrative simplicity). Some imports, such as those destined for export processing zones, may also be subject to VAT reductions or exemptions.

C) QUANTITATIVE RESTRICTIONS

Prohibitions: China maintains import prohibitions on grounds of public interest, environmental protection or international commitments. In general, prohibited products are listed in Catalogues of Commodities subject to Import Prohibitions, issued by MOFCOM and other relevant bodies such as the General Customs Administration, AQSIQ or the Ministry of Environmental Protection. In 2009, imports of 52 tariff lines (at the HS 8-digit level) were totally prohibited and 528 lines were partially (ex-lines) prohibited, covering some products of animal origin, opium, mineral products, chemicals, raw hides, waste of skins and leather, used clothes, ash of precious metals, used articles of machinery and electronic equipment, and second-hand transport equipment. Imports may also be prohibited on grounds of animal health, plant health, or human safety. For example, China prohibited imports of some meat products from countries with avian flu and/or other animal diseases.

Licensing: The import licensing regime is regulated by the Foreign Trade Law, the Administrative Permission Law, the Measures on Administration of Import Licences for Goods, and the Measures on Administration of Automatic Import Licensing for Goods. Automatic import licences are applied to monitor certain imports for statistical purposes. These concerned mainly poultry, vegetable oil, tobacco, chemical fertilizers, coal, natural rubber, iron ore, crude and processed oil, steel, machinery products, automobile components, and ships. In 2009, 95 tariff lines were subject to non-automatic import licensing. These

lines covered ozone-depleting substances and specific old mechanical as well as electronic products. Non-automatic licences are also required for imports of chemicals used for military purposes, toxic materials and radioactive isotopes and their compounds. Applicants are required to apply for an import permit prior to applying for an import licence. Import permits are issued by the Ministry of Environmental Protection or MOFCOM, depending on the product. Once the permit is obtained, a licence is granted automatically by MOFCOM to the importer. The licence is valid throughout the calendar year, but can be extended once, for a maximum of three months.

D) STANDARDS

- TECHNICAL BARRIERS TO TRADE

Institutional and Legal Framework: The major legislation on standards is the Standardization Law of 1988 and its Implementing Regulations. The General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) is the enquiry point for the SPS and TBT Agreements under the WTO. Other AQSIQ functions include quality management, metrology management, food safety, certification and accreditation, and standardization. Through its 31 provincial Bureaus of Quality and Technical Supervision, AQSIQ is in charge of quality management. The Standardization Administration of China (SAC), under the AQSIQ, administers standardization in China. The SAC is in charge of unified management, supervision, and overall coordination of standards in China. It organizes, coordinates and drafts programmes on the development and revision of national standards and examines, approves and publishes national standards. It submitted 184 notifications to the WTO on technical regulations in 2008 and 199 in 2009. The SAC also represents China in international and regional standardization organisations.

Technical Regulations and Standards: China has four types of standards - national, professional, local and at the enterprise level. Within the national, professional and local standards categories, there are voluntary and mandatory standards. In 2007, around 14.5% of national standards, 15% of professional standards (2006) and 19% of local standards were mandatory. Voluntary standards, however, can become mandatory if they are referenced in mandatory conformity assessment procedures.

National standards are developed for technical requirements that need to be adopted nationally. When there are no national standards available, but unified technical requirements are needed in a certain professional field at a national level, professional standards are developed. Local standards may be developed where neither national nor professional standards are available but unified requirements for safety and hygiene of industrial products are needed within a local area. When national, professional or local standards are not available, an enterprise may develop its own enterprise standards, although it is encouraged to adopt national, professional, or local standards if they are available. National standards take precedence over professional and local standards. Once equivalent national standards are developed, they replace the professional and local standards automatically. In addition, there are national advisory technical documents, which are developed in areas where technology is changing fast and standards need to be developed rapidly. The process of drawing up these documents is the same as that for developing standards but the review period is three years for national advisory technical documents while it is five years for standards.

In January 2009, the SAC announced that foreign-owned companies established in China would be allowed to participate as voting members in technical committees responsible for the promulgation of national standards. The authorities emphasized that foreign companies registered in China could always participate in standardization activities. Before 2009 they could participate as observers only. Once a standard is published, relevant technical committees are responsible for initiating a periodic review of the standard.

Certification and Accreditation: China's compulsory product certification system is applied to products related to health and safety of human, life and health of animals and plants, environmental protection and national security. The Certification and Accreditation Administration of China (CNCA) under AQSIQ administers China's compulsory product certification system and the China Compulsory Certification (CCC) mark. The Catalogue of Products Subject to Compulsory Certification, which is revised whenever necessary, lists products requiring the CCC mark. Without a CCC mark, these products cannot be marketed in or imported into China. In 2009, the Catalogue contained 23 groups and 172 subcategories of products covering, inter alia, electrical wires and tools, household electrical appliances, motor vehicles, safety parts and accessories and toys. Certain products listed in the Catalogue may be exempted from CCC mark, if they are, inter alia, goods for personal use by diplomatic staff, goods for commercial exhibition or products for research and tests. Exemption from CCC does not necessarily mean exemption from import inspection.

Voluntary certifications may be applied for products not requiring a CCC mark. For example, the China Quality Certification Centre (CQC) is responsible for the CQC voluntary certification system (the CQC mark), covering more than 500 products. Other voluntary certifications include certification of feeds, good agricultural practices (GAP), hazard-free agricultural products, organic products, as well as certifications on management systems such as the hazard analysis and critical control points (HACCP) system, the ISO-9000 system, and the ISO-14000 system. China has been participating actively in regional and international fora on certification and accreditation. These include the International Laboratory Accreditation Cooperation (ILAC); the Asia Pacific Laboratory Accreditation Cooperation (APLAC); the Pacific Accreditation Cooperation (PAC) pertaining to quality management systems; the International Accreditation Forum (IAF); and the International Auditor and Training Certification Association (IATCA). China National Accreditation Committee for Laboratories (CNACL) and the Laboratory Accreditation Committee on Import and Export Commodity Inspection of China (CCIBLAC) are both members of ILAC and APLAC. China has established its national accreditation system for certification and inspection bodies and laboratories, in accordance with the ISO17020, ISO17021 and ISO17025 standards.

- SANITARY AND PHYTOSANITARY MEASURES

Legislative and Institutional framework: China's main SPS legislation includes the Law on Quality and Safety of Agricultural Products, the Law on the Entry and Exit of Animals and Plant Quarantine, the Food Hygiene Law, the Law on Animal Disease Prevention, the Law on Import and Export Commodity Inspection, the Law on Frontier Health and Quarantine as well as accompanying implementing regulations and rules. A new Food Safety Law, entered into force on 1 June 2009 and involves, inter alia, the promulgation of "unified" national food safety standards.

MOFCOM is in charge of submitting notifications on SPS measures to the WTO and the AQSIQ is the Enquiry Point under paragraph 3 of Annex B of the SPS Agreement. The State Food and Drug Administration supervises safety of food, cosmetics and pharmaceuticals. Specific supervision of food products and processed food products is done by the Ministries of Agriculture and Health, and the State Administration of Industry and Commerce (SAIC).

China participates in international organizations related to SPS. It is a member of the World Organization for Animal Health (OIE), the Codex Alimentarius Commission (Codex) and the International Plant Protection Convention (IPPC). In 2007 and 2008, China signed 60 bilateral or regional agreements on standards and SPS measures with WTO Members, including the EU, Japan and the United States.

Implementation: China submitted 90 notifications to the WTO on its SPS measures in 2009. China notified the SPS Committee of a large number of measures that had the objective, inter alia, of strengthening product testing of dairy products for domestic consumption as well as for export. In 2009, China also revised its food safety regime for export of poultry and related products. However, concerns were raised in the SPS Committee about the lack of notification of the new Food Safety Law before its implementation.

Entry/exit inspection on SPS grounds is required for products listed in the Catalogue of Entry-Exit Commodities Subject to Inspection and Quarantine, which is formulated by AQSIQ and revised whenever needed to reflect consumer concerns. A total of 4,815 tariff lines (at the HS 8-digit level) were listed in the Catalogue in 2009. AQSIQ, through its 35 provincial level Inspection and Quarantine Bureaus (CIQs), is in charge of entry/exit inspection as well as quarantine. Some products not listed in the Catalogue may also require entry-exit inspection. Spot checks may be carried out on grounds of safety, sanitary and environmental protection or on products about which consumers constantly complain. In addition, China issued its Catalogue of Pests for Entry Plant Quarantine in May 2007 and formulated the Administrative Rules on the Inspection and Quarantine of Imported and Exported Feedstuffs and Feed Additives in 2009 to strengthen inspections on imported and exported plants and feedstuffs.

Since July 2008, AQSIQ has been reforming its entry-exit inspection procedures by introducing a direct release system with a view to facilitating trade. Prior to the reform, importing (and exporting) enterprises were subject to inspections only at the ports. After the reform, some enterprises importing certain goods may undergo inspections at the destination subject to certain pre-conditions. However, not all goods can be inspected at their destination. Products corresponding to 1,895 tariff lines listed by the AQSIQ, mainly live animals and live plants and feedstuffs, must be inspected at the ports.

Some products (including commodities listed in the Catalogue) are exempted from entry/exit inspection and quarantine requirements. These products must have their own brand names and have a leading position in the industry in their country/region of origin in terms of product ranking and quality; must have “good reputation” in the international market; must not have any quality defect or claim; and must have 100% product inspection pass rate for the previous three consecutive years. Food, animals and plants and their products, dangerous goods and their packaging, products with a highly variable quality, and bulk goods (such as mineral ores) are not eligible for exemption.

Labelling: China’s labelling requirements are maintained under the Standardization Law, the Food Hygiene Law, the Law on Product Quality, and various regulations on food, drugs, cosmetics, etc.

Labels must be written in Chinese and state, inter alia, name and trade mark of the product, type of product, the manufacturer’s name and address, place of origin, usage instructions, batch number and the relevant standard code. The SAC is in charge of food labelling. For food, the label must also include ingredients in descending order by weight or volume, net weight and solid content, date of manufacture and best before or expiry date. Until April 2006, food importers had to submit the certificates for sale issued by the authorities in the manufacturing country or region when applying for Chinese-language labels for the imported food.

Examination of labelling of imported and exported food is now conducted together with quarantine procedures, and the certificates for sale and prior approval by the AQSIQ are no longer required. Apart from a few sectors, China’s labelling requirement is in general product-based (rather than sector-based). Exceptions include some sector-specific requirement for food, pharmaceuticals, cosmetics and GMOs.

The AQSIQ released its draft Provisions of the Contents of Food Labelling in June 2007, and is soliciting public opinion. The labelling requirement for pharmaceuticals is specified under the Rules on Administration of Instructions and Labelling for Drugs issued by State Food and Drug Administration (SFDA) and in force since 1 June 2006. The labelling requirement for Chinese medicines is provided in three separate documents issued by SFDA. The Ministry of Health is soliciting opinions on the Rules on the Administration of Labelling for Cosmetics drafted in October 2006 under which labelling for cosmetics sold in China needs to be in Chinese. This requirement does not apply to cosmetics manufactured in China for export only. In addition, based on the Regulations on the Safety Administration of Agricultural GMOs (State Council, 23 May 2001), the Ministry of Agriculture (MoA) issued the Rules on Administration of Labelling of Agricultural GMOs (revised on 1 July 2004). Under the rules, “GMO” should be specified clearly in the labelling for GMO and products processed using GMOs. The labelling should be in Chinese. Without proper labelling, GMOs and their products cannot be imported or sold in China. The MoA is in charge of the labelling issues for GMOs and their products and the AQSIQ is responsible for labelling inspection at the border for imported GMOs.

E) CUSTOMS MEASURES

Customs Valuation: Customs value is determined on the basis of transaction value which includes the costs of transport and insurance and other related charges. Under the Rules Regarding Determination on Customs Value of Imported and Exported Goods, where it is impossible to determine the transaction value, the customs value is based on (in sequential order) - the transaction value of identical goods, the transaction value of similar goods, the deductive value, the computed value and the value determined on a “reasonable” basis.

Rules of Origin: For goods produced or manufactured wholly within one country or region, origin is defined as that country or region; for goods produced in two or more countries or regions, the place of origin is the country or region where substantial transformation has occurred. Substantial transformation is defined either as a change in the tariff heading of the good according to China’s tariff classification, or where the value added is no less than 30% of the total value of the product. Preferential rules of origin are applied in accordance with the various regional and bilateral trade agreements China has concluded, and to certain imports from LDCs. Preferential rules of origin tend to vary from agreement to agreement, and sometimes across product groups, which could add to the complexity of China’s import regime.

Pre-shipment Inspection and other custom formalities: China’s pre-shipment inspection (PSI) requirements, introduced in December 2005, remain unchanged. PSI is required for imports of certain commodities related to national security, with high value or complicated technology; equipment exceeding certain height, length or volume; solid waste used as raw materials; and certain used electronic products that are deemed to affect public health and environment. China introduced PSI requirements with a view to, inter alia, protecting public health, improving the phytosanitary situation, protecting the environment, and preventing counterfeit goods from entering China. China has designated some foreign institutions to conduct PSI and to issue certificates.

China has continued to reform its Customs transit system to simplify Customs declaration procedures. Before the reform began in 2005, importers in inland areas of China had to first go through Customs transit procedures at the entry port, before declaring the goods at the Customs in the destination port. Following the reform, importers declare only at the place where they are registered. The reform has been expanded nationwide in mainland China. Importers (and exporters) must register with MOFCOM or its authorized bodies before filing Customs declarations. Import (and export) declarations must be

made in paper and electronic form, and can be made either in person or by an authorized enterprise. Declarations must be made to Customs at the port of entry within 14 days of the arrival of goods.

F) TRADE REMEDIES AND CONTINGENCY MEASURES

Anti-dumping Duties: Between 1 January 2007 and 31 December 2008, China adopted 16 anti-dumping measures, making it the sixth most frequent user of such measures during that period. These measures involved mainly imports from Japan (4), Chinese Taipei (4), Singapore (3) and most products were chemical and products thereof (87.5%). On the other hand, China also remains the most frequent target of anti-dumping measures. 100 anti-dumping measures were adopted against China during the same period (48 in 2007 and 52 in 2008), partly reflecting China's pre-eminent position as a big exporter.

Countervailing Measures: China initiated its first countervailing investigation on 1 June 2009. By the end of 2009, it had initiated three investigations, involving grain-oriented flat-rolled electrical steel, chicken meat, and saloon and cross-country cars, all originating in the United States. On 11 December 2009, China imposed provisional countervailing measures on grain-oriented flat-rolled electrical steel.

Safeguards: Safeguard actions may be taken under the Foreign Trade Law and the Regulations on Safeguards. Safeguard measures are applied on imports irrespective of their source. China has not initiated any safeguard investigations pursuant to the WTO Agreement on Safeguard. Appeals cannot be made against safeguard decisions taken by the authorities.

China's Protocol of Accession to the WTO specifies that transitional product-specific safeguard measures may be adopted by WTO Members against imports from China till 2013. Since 2005, five provisional safeguard measures and one final measure have been adopted. Products covered are mainly textiles and clothing, ceramic tiles, float glass and polyvinyl chloride (PVC).

2.1.2 Export Policy

A) EXPORT DUTIES AND TAXES

China's export taxes, in the form of statutory rates and interim rates (applied for a specific period), are levied on an MFN basis. Interim export duty rates can be higher than statutory export tax rates. Where there are interim export duties on export goods to which the statutory export taxes are applicable, the interim rates apply. Thus, in 2009, statutory export taxes were applied to 95 tariff lines (at the HS 8-digit level), of which, 66 lines were subject to lower and 3 to higher interim export taxes. Interim export taxes also applied to 258 tariff lines that were not subject to statutory export taxes. Most export duties involve ad valorem rates ranging from 0 to 40%, averaging around 13.5%.

From time to time, China has been revising its export tax rates or adjusting the list of commodities subject to export taxes or levying special export taxes with a view to curtailing exports of certain products, restricting exports of highly polluting and high-energy-consuming products, promoting environmental protection, improving sustainable economic development and conserving natural resources. From 2008, China started to levy special export duties, mainly on some chemical fertilizers. In 2009, 35 lines (at the HS 8-digit level) were subject to special export duties. They included mainly chemical fertilizers and their raw materials. Including special export duties, the average export tax rate was around 20% in 2009. China also removed or lowered export taxes on some products to mitigate the negative effects of the global crisis on its exports. For example, as on 1 July 2009, China removed or lowered export taxes on wheat, rice, fertilizers, steel, some non-ferrous metals etc.

B) EXPORT RESTRICTIONS

Prohibitions: Products listed in the Catalogues of Products subject to Export Prohibitions are prohibited from being exported under normal trade, mainly because of China's international obligations and domestic considerations relating to protection of environment and human health as well as preservation of natural resources. Recently, three tariff lines at the HS 8-digit level were added, covering some peat and animal or vegetable fertilizers. In total, China maintained general export prohibitions on 45 items at the HS 8-digit level in 2009. Eight agricultural products are currently subject to export prohibitions. These products are ivory, bezoar, musk, liquorice roots of the kind used in perfumes, peat, some plants of medicinal use and blackmoss (a seaweed). Only state-trading enterprises are allowed to export cotton, rice, maize and tobacco.

Licenses: China's export licensing requirements are implemented mainly to fulfil its obligations under international agreements, including the Montreal Protocol on ozone layer depletion; the Conventions on the use of chemical weapons; the Convention against illicit traffic in narcotics and psychotropic substances; and the Basel Convention on the movement of hazardous waste. In 2009, 231 lines at the HS 8-digit level were subject to export licensing. These do not cover lines subject to global export quotas. Of the 231 lines, exporters of products corresponding to 139 tariff lines can obtain a licence from MOFCOM or its authorized agencies if they have the relevant export contracts. For the remaining 92 tariff lines (covering mainly ozone depleting substances and some metals and their products), exporters must obtain a permit prior to applying for a licence. Export permits are granted by the Ministry of Environmental Protection (for ozone-depleting substances) and MOFCOM (for others). After the exporter obtains the permit, an export licence is issued automatically by MOFCOM or its authorized agencies.

Quotas: China continues to impose global (i.e. irrespective of destination) and destination-specific export quotas. In 2009, global export quotas applied to cotton, grains (maize, rice and wheat) and tea, some of which are subject to state trading. China, the largest producer of rare earths, also imposes a number of restraints on exports of rare earths on grounds of protecting the environment and exhaustible natural resources. However, the measure has been opposed by many of its trade partners including US, EU and Japan.

Destination-specific quotas remain in place for exports of live cattle, live swine and live fowl to the Special Administrative Regions of Hong Kong and Macao.

C) EXPORT SUBSIDIES

China made commitments, when it joined the WTO, not to maintain or introduce any export subsidies for its agricultural products.

D) OTHER EXPORT FORMALITIES

China has continued its reform on Customs transit procedures for exports to simplify procedures for enterprises located in inland areas. Exporters now go through Customs transit procedures only at the place where they are registered. Earlier, exporters from inland areas had to go through Customs transit procedures at the inland Customs before declaring goods at Customs at the departing port.

Exports of animals and plants and their products are subject to SPS requirements similar to those on imports and to the requirements of the importing country. Goods that do not meet the SPS requirements are not allowed to leave the country.

Exporters must register with Customs before making customs declarations which must be made after the goods arrive at the customs surveillance zone and 24 hours before loading, unless otherwise approved by Customs. China does not require pre-shipment inspection (PSI) for exports. Its PSI agencies inspect exports for its trading partners that require PSI. Licences are required for exports subject to restrictions.

2.1.3 Sectoral Policies

A) AGRICULTURE

China is the world's top producer of agricultural products by value, with total production of about Y 4,078 billion (US\$536 billion). Despite rising value of production, the contribution of agriculture to GDP has continued to decline over the years. It was recorded at 10.6% in 2009 because of even more rapid growth in other sectors of the economy. Agriculture's share of employment stood at 39.6% in 2008. Agricultural exports increased by 8.7% and imports by 32.8% in 2008. However, agricultural products accounted for only 2.5% of total merchandise exports and 4.4% of imports. China's top market for agricultural exports continues to be Japan which accounted for 18.8% of total agricultural exports in 2008. In that year, the main imports were soybeans from the United States and palm oil from Malaysia.

The agricultural sector in China is characterised by low labour productivity which reflects its high labour intensity, low average size of farms and the lack of mechanisation. The Government has been implementing agricultural reform to improve farmers' welfare and mitigate rural-urban disparities, and more recently to stimulate domestic demand in the face of the global economic slowdown since late 2008. The Government's key objectives in agriculture sector are attaining food security for its citizens and maintaining stable domestic production to protect farmers' interests.

Agricultural production in China is supported by a broad range of domestic programmes, including minimum prices for grains, purchases by state trading enterprises, direct payments, favourable taxation, input subsidies and preferential loans. Support to specific commodities (the Single Commodity Transfer or SCT) made up about 32% of the total Producer Subsidy Estimate and varied widely from one commodity to another. Support was concentrated on cotton (43% of farm receipts), sugar (35%) and maize (22%). All product-specific support was provided through market price support. The SCT figures do not include support generally available to agriculture, such as input subsidies.

B) INDUSTRY/ MANUFACTURING

Industrial policies remain important aspects of Government's policies to "guide" the allocation of resources. China uses industrial policies, combined with expansionary fiscal and monetary policies, to boost the development of the manufacturing sector. In early 2009, the Government identified ten sectors (nine manufacturing) which were the most affected by the reduced external demand due to the global crisis. To boost their development, sector-specific policies were issued. The major steps include lowering the taxes levied on enterprises such as by adjusting VAT rebate rates and providing preferential loans or other financial assistance to enterprises in these industries to encourage innovation. For example, Y10 billion was allocated to the automobile industry in a three-year period to facilitate R&D activities. The Government also aims to consolidate industry structures by encouraging mergers and acquisitions. Through these measures, the Government intended to achieve 12% growth rate in manufacturing sector in 2009. China's secondary industry (which comprises mainly manufacturing) grew by 9.5% in 2009.

Manufactured exports have traditionally been the engine of growth in China. In general, manufacturing is relatively open to both trade and foreign investment. The import tariffs for manufactured products are

low. In 2009, the average applied tariff for manufacturing products (ISIC Rev.2) was 9.5%. Nonetheless, the average tariff for China's automotive sector was 16.2% in 2009 (compared with 15.3% in 2007), due mainly to the change in the number of tariff lines.

China's exports of manufactured products are subject to less-than-full rebate of VAT. A few manufacturing products are also subject to export taxes.

C) MINING AND ENERGY

China's energy sector continues to be characterized by a high level of state ownership, regulation and limited competition. Energy security remains at the core of China's energy strategy. Another major policy goal is to reduce energy intensity and thus protect the environment. China aims to reduce carbon emissions per unit of GDP by 40% - 45% from their level in 2005. Despite low tariffs, trade restrictions (both import and export) remain on energy products. Imports often require state trading and import volumes of crude and processed oil by non state-trading enterprises are limited. To improve coordination across industries and ministries, the Government restructured the regulatory framework by setting up a National Energy Administration (NEA) in 2008. However, it remains unclear how much autonomy the NEA is to have from the National Development and Reform Commission (NDRC). The Government also began its pricing reform on energy and resource products so that prices can reflect the market demand and supply, the scarcity of resources and the cost of environmental damage.

2.2 Trade in Services

China's Schedule of Specific Commitments under the GATS covers 9 of the 12 services categories – Business, Communication, Construction, Distribution, Education, Environment, Financial, Recreational and Transportation services. As regards horizontal commitments, China has limitations on entry and temporary stays of natural persons. The presence of state-owned enterprises (SOEs) is considerable in several key services sectors such as banking, telecommunications and civil aviation. There are also significant restrictions on foreign investment and private-sector activities, although China has adopted some measures to further liberalize services, particularly financial services, telecommunications and tourism.

2.2.1 Financial services

While financial reforms continue, China's capital market remains heavily dependent on loans provided by state-owned banks which have lent mainly to SOEs. Lack of access to external financing through the capital market, particularly for small domestic private companies, continues to result in these companies relying heavily on retained earnings (or funds raised from personal contacts).

The stock market in China continues to develop and the process of converting shares of SOEs to be traded in the market has progressed. The reform to convert the Agricultural Bank into a shareholding bank has made some progress. China has recently introduced various measures to strengthen supervision and further develop the capital market, including the establishment of a new board (ChiNext) for start-up businesses and conversion of non-tradeable shares to tradeable shares.

Restrictions on foreign investment in financial services remained largely unchanged. Stringent qualification requirements still apply to foreign-funded banks. These include comparatively high minimum asset requirements and high minimum paid-in capital amounts, restrictions on the supply of credit-card services

and restrictions on the business scope of foreign banks branches. There have been no significant changes to requirements concerning the establishment and operation of foreign insurance companies.

2.2.2 Telecommunications

The telecoms sector is regulated by the Ministry of Information Industries and Technology (MIIT) which sets tariffs and tariff caps for basic services and supervises their implementation. In addition, the relevant provincial telecom administration authorities are responsible for supervising and managing prices on local telecom services in cooperation with the local authorities in charge of pricing. They are also responsible for the approval and registration of telecom pricing in the region, supervising the market and dealing with violators. Internet activities and services are regulated, supervised and administered by several departments such as the ministries and agencies dealing with the press, publications, education, health, drug administration and industry and commerce. Telecommunication services that convey radio and television programming are regulated by the State Administration of Radio, Film and Television (SARFT). MIIT is an independent regulator, independent from any telecommunications enterprises as it is financed by State fiscal budget and its personnel are public servants.

China has continued to liberalize telecommunication services and promote competition in the sector. New players and technology have been introduced and prices have come down. The basic telecom market was restructured in 2008. China Telecom entered the mobile telecom service market in January 2009. Currently, there are three basic services providers, all providing fixed-line service, mobile telephone service, data, IP telephony and satellite service.

In September 2008, the minimum registered capital requirement was lowered from Y2 billion to Y1 billion for foreign-invested telecom enterprises engaging in basic telecom across the country, or across provinces, autonomous regions and municipalities directly under the central government. The minimum requirement for basic telecommunications provided within a province, city, autonomous region or municipality directly under the Central Government was also lowered from Y200 million to Y100 million.

2.2.3 Transport

Civil Aviation: Administration of China (CAAC) is the main agency responsible for governance of the civil air transport sector. The sector is regulated by the Civil Aviation Law, administrative regulations issued by the State Council and related rules formulated by the CAAC.

In 2008 and 2009, the authorities approved ten FDI projects worth US\$94.93 million, concerning, inter alia, investment in air traffic companies, training of pilots and airport services. Foreign investors are allowed to invest in or to manage all businesses related to civil air transport, except for those concerning air traffic control systems. Foreigners may invest by establishing an equity joint venture or contractual joint venture or through the purchase of shares of civil aviation enterprises including shares issued overseas and foreign shares issued in China by the aviation enterprises. Foreign investors must be qualified as a Chinese legal person to invest in the form of contractual joint venture in public air transport and general aviation enterprises engaging in business flights and air sight-seeing. Foreign investors in all-cargo, all-passenger, or combined airlines in China, are allowed to hold 49% of the capital, while the individual shareholding of a foreign investor and its affiliates must not exceed 25%. CAAC Decree 110 stipulates that a single foreign investor (including its affiliate companies) may hold not more than 25% of the shares of an airline and total foreign shares in an airline must not exceed 49%.

International airports are mainly owned and managed by the Government. There is some foreign investment through joint ventures. China allows service providers from the Special Administrative Regions of Hong Kong and Macao to provide management services for medium and small airports in the form of a contractual joint venture, equity joint venture or solely-funded enterprise.

Shipping: The Ministry of Transport (MOT), the Ministry of Communications (MOC) until March 2008, is in charge of formulating shipping and port policies. The Maritime Code and the Regulations on International Maritime Transportation provide the general regulatory framework and encourage multimodal transport. Examination and verification by the MOT is required for an international shipping operator to engage in international liner services. Bulk shipping is also covered by the Regulations.

In October 2007, China eliminated the approval requirement for the establishment of permanent representative offices in China by foreign-funded enterprises engaging in international shipping and auxiliary services to international maritime transportation. China does not have any cargo reservation or preference measures. All commercial cargo is accessed freely, unless covered by cargo-sharing arrangements. There are no financial subsidies or cargo preferences for domestic shipping companies. Domestic and foreign companies enjoy equal market access with regard to international maritime transport services. An Ad-hoc Tax-free Registration Policy for the Chinese-flagged ocean shipping fleet, introduced on 1 July 2007, remains in place.

Wholly foreign-owned enterprises are allowed in maritime cargo storage and warehousing services, Sino-foreign equity joint ventures or Sino-foreign contractual joint ventures. The majority share of foreign partners is allowed for international ship management, international maritime container freight stations and container yard services.

China is a Category-A member of Council of the International Maritime Organization (IMO). It is party to the International Convention for the Safety of Life at Sea of 1974 (SOLAS) and the International Ship and Port Facility Security Code (ISPS). The port administration authorities and maritime safety administrations in China are responsible for the security of ship and port facilities across the country in accordance with the Regulations on Ship Security and the Regulations on Port Facility Security.

China has concluded bilateral maritime transport agreements with 60 countries/economies. Bilateral agreements with Argentina, Brazil, Thailand and Zaire have cargo-sharing provisions. A consultation mechanism has also been set up between China and several WTO Members, including the United States, the European Union, Japan and the Republic of Korea.

Ports: The MOT is responsible for overall national port administration, including formulation of policy, while local governments designate a department (port administration authority) to implement port-related regulations and policies. The main legislation is the Port Law, under which domestic and foreign investment in port construction and operation is “encouraged”. To engage in port operations, enterprises must obtain an operating licence from the port administration authorities.

Foreign investment in construction and management of port infrastructure (public wharf) is listed as “encouraged” in the Catalogue for the Guidance of Foreign Investment Industries. Foreign investors may establish wholly owned port operators or set up joint ventures. Port administrative functions are under the port administration authorities. Port enterprises are responsible for daily operation.

2.3 Trade in Intellectual Property

China has been strengthening the administration of all main categories of Intellectual Property Rights (IPRs). As such, China has been progressively improving and updating its legislative framework on IPR protection. It formulated and promulgated major components of IPR related legislation such as the Trademark Law, the Patent Law and the Copyright Law in the 1970s and 1980s. Since then, China has been revising its legislation in accordance with its emerging needs. For example, the Regulations on the Protection of the Right of Communication through Information Network (formulated in 2006) clarified the scope of copyright protection in the digital environment under the Copyright Law. Also, the third revision of the Patent Law was completed in December 2008, responding to emerging policy needs. China is also preparing to revise the Trademark Law, the Copyright Law and the Anti-Unfair Competition Law.

China has identified building an innovative country as a national development strategy. When in June 2008 the State Council issued the Outline of the National Intellectual Property Strategy, it sought to enhance China's capability of creating, utilizing, managing and protecting intellectual property. The Outline identifies the strategic goal of China becoming, by 2020, "a country with a comparatively high level in terms of the creation, utilization, protection and administration of IPRs". In particular, over the next five years, China aims to promote the level of domestic applications of IPRs, increase the utilization of IPR-rich products, improve IPR protection and promote the awareness of IPRs in the society. In addition, China participates in IPR-related activities in APEC, WIPO and the WTO, and is a member of various multilateral IPR conventions. China has set up IPR working groups and information-exchange mechanisms with various countries and regions to enhance IPR protection.

For much of the past decade, China had double-digit annual growth in its use of the PCT system. Other areas of IP, such as trademarks, had similar growth levels, and the proportion of domestic use of the IP system is among the highest in the world. Such an increase in innovation can be expected over time to increase public awareness of the need to protect IPRs and to make effective use of the IP system as a tool for economic growth. In addition, better protected IPR could encourage technology transfers from those FIEs with more advanced technology.

2.3.1 Patents

The State Intellectual Property Office (SIPO) under the State Council is in charge of patent administration nationwide. The State Patent Office under SIPO is in charge of receiving patent applications and granting patents while local IPR administrative offices are responsible for patent disputes. Patent rights (for inventions, utility models and industrial designs) are protected by the Patent Law, its Implementing Regulations and rules promulgated by SIPO. Patent rights for inventions are granted for 20 years from the date of filing and 10 years from filing for utility models and industrial designs.

Under the revised Patent Law, thresholds for granting patents are changed from "relative novelty" to "absolute novelty." A patent is granted only if the invention, utility model or industrial design has not been publicized anywhere in the world. Further, the revision explicitly allows parallel imports regarding patents. The revised Law further enables the grant of compulsory licences in certain circumstances for patented pharmaceutical products. This amendment gives effect to the WTO General Council Decision on the Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health and subsequent Decision on the Amendment of the TRIPS Agreement in providing for compulsory licensing to enable third parties to manufacture patented drugs for export to recipients under the WTO "paragraph 6" mechanism. Moreover, it allows for a compulsory licence if the patent owner, without justification, has failed to "sufficiently" exploit patent rights for three years or uses the rights in a manner that eliminates

or restricts competition. Penalties now include the patent owner's expenditure in protecting the patent, fines as well as legal compensation. Higher penalties have been stipulated for patent counterfeit and infringement cases. The revised Patent Law also requires patent applicants to disclose the direct and original source of genetic resources when the completion of an invention depends upon such genetic resources, a measure implemented in the light of the Convention on Biological Diversity. For inventions depending upon genetic resources the access or use of which is against law and/or administrative regulations, the invention should not be granted patent rights.

In 2008, there were 828,328 applications, up 19.3% from 2007. Domestic applications increased by 22.2% and foreign applications by 3.5%. Most foreign applications were for inventions (85.7%), while domestic applications were mostly for industrial designs (42%) and utility models (31%). In the same year, 411,982 patents were granted, 17% more than it was in the year 2007.

2.3.2 Copyright and Related Rights

The National Copyright Administration of China under the State Council administers copyright on a national scale. Local copyright registration and administration is carried out by local copyright administration offices. Protection is granted under the Copyright Law, its Implementing Rules and accompanying regulations. Protection for cinematographic and photographic works is for 50 years and typographical designs for 10 years. Protection for computer software is granted from the date on which its development was completed and the term of protection is for a minimum of 50 years. The National Copyright Administration has been speeding up registration for computer software. In 2008, 49,087 items of computer software were registered, an increase of 91.25% from 2007.

2.3.3 Trademarks

Trademarks are protected under the Trademark Law, its Implementation Regulations and various rules issued by the SAIC. The Trademark Law 1982 is being revised for the third time. The revision seeks to shorten the examination period and enhance trade mark protection. Trademarks are issued for ten years and can be renewed after every ten years for indefinite period. Trademarks must be registered with the Trademark Office to be protected under the Trademark Law. Foreign applicants must file applications in accordance with any agreements concluded between their country of origin and China, or any international treaty to which both are parties, or on the basis of reciprocity. Trademarks may be registered through an agent recognized or designated by the SAIC. If the Trademark Office refuses registration, then appeal may be made to the Trademark Review and Adjudication Board, or further to a people's court.

2.3.4 Plant Varieties

Plant varieties are protected for 20 years from the date of authorization of vines, forest trees and ornamental trees and 15 years for other plants. Applications for the protection of new plant varieties are made to the Ministry of Agriculture or the State Forestry Administration. Compulsory licences may be granted by the approval and examination authority for exploitation of the protected plant variety where it is in the national or public interest.

2.3.5 Geographical Indications

Geographical indications (GIs) are currently regulated by the State Trademark Office, the AQSIQ and the Ministry of Agriculture. A law on geographical indication was to be issued in 2010.

From 2003, GIs can be registered as collective marks or certification marks with the State Trademark Office under the same procedures as for trademarks. From 2008, the Trademark Office accelerated its examination of applications for protection of GIs. From 1994 to 2007, the Trademark Office approved 301 GIs, while in 2008 and the first half of 2009, 321 GIs were approved. Protection of GIs registered with the State Trademark Office is the same as for other trademarks, i.e., ten-year protection, renewable for ten years, indefinitely.

From 2005, GIs can also be registered with the AQSIQ. By the end of September 2009, 932 geographical indications had been approved by the AQSIQ. Once registered with the AQSIQ, these GIs are protected permanently. From February 2008, GIs for agricultural products may also be registered with the Ministry of Agriculture. Agricultural products' GIs from foreign countries must be registered in China to be protected. At end-October 2009, 185 GIs had been approved by the Ministry of Agriculture. Once registered, these GIs are protected permanently.

2.3.6 Other IPRs

Integrated Circuits: Layout-designs of integrated circuits are protected for 10 years from the date of filing or the date of first commercial exploitation anywhere in the world, whichever expires earlier. The maximum duration of protection is 15 years from the date of creation. In special circumstances (such as national emergencies) or to remedy unfair competition practices, a "non-voluntary" licence can be issued to exploit a layout design.

Trade Secrets: Undisclosed information and trade secrets are protected by, inter alia, the Criminal Law, the Anti-Unfair Competition Law, the Labour Law, and regulations issued in accordance with these laws. The SAIC is in charge of protecting trade secrets, while the public security agency is responsible for criminal investigation in cases involving severe damage or criminal activity related to undisclosed information or trade secrets. According to the Implementation of the Law of Drug Control, China protects test data and other data that are self-obtained, undisclosed, and submitted by manufacturers or sellers to obtain an approval for manufacturing or selling a drug that contains new chemical entities. No one should use such undisclosed test data and other data for improper commercial purpose. Within six years from the date the manufacturer or seller obtains the approval for manufacturing or selling the drug, the drug supervision and administrative authorities should not grant another approval to others who apply for approval using the same data.

2.3.7 Enforcement of IPRs

China has also been intensifying the enforcement of IPR protection, for which it has a double-track system - administrative actions (consisting of mediation by the authorities) and judicial measures (including civil actions and criminal prosecutions through the courts). Regarding criminal penalties, the Supreme People's Court and the Supreme People's Procuratorate promulgated two judicial interpretations on the application of criminal law in IP Cases in 2004 and 2007, respectively. Since then, the number of intellectual property-related criminal cases has increased considerably. In addition, the Chinese government at different levels conduct special operations such as campaigns targeting on specific areas of IPR protection to increase the public awareness of IPR protection. Supervision and coordination of IPR protection have been enhanced since 2006 through the annual IPR Protection Action Plans and other measures. China also set up reporting and complaint centres in 50 large and medium-sized cities, opened a hotline, "12312", and online reporting and complaint windows.

2.4 Economic Policies affecting Trade

2.4.1 Monetary and Fiscal Policy

Monetary Policy: The Chinese government responded to the global economic crisis with expansionary monetary policy and the introduction of a large economic stimulus package designed collectively to boost domestic demand and help sustain economic growth in the face of the sharp decline in external demand. Since then, interest rates and reserve requirements have been cut several times and foreign exchange sterilization operations have been reduced. A large part of the stimulus package is to be implemented through increased bank lending (only Y1.18 trillion of the package will come from the Central Government budget). Moreover, in 2009, while keeping benchmark lending costs unchanged, the People's Bank of China (PBC) has been encouraging banks to provide loans through "window guidance." New bank lending increased rapidly in 2009, almost doubling from the previous year to Y9.6 trillion. Conscious of the risks of excessively loose monetary policy contributing to inflationary pressures and compounding the misallocation of credit in the economy, the PBC began to reduce monetary stimulus in 2010 by increasing the reserve requirement ratio.

Fiscal Policy: The Chinese government responded to the recent global economic crises with expansionary fiscal policy. Building on the strength of its fiscal position, China announced an economic stimulus package in November 2008 involving the injection of an additional Y 4 trillion for investment in the economy in 2009-10.

In 2009, total Government revenue increased by 11.7% while total Government expenditure rose by 21.2%, leading to an increase in the budget deficit from 0.4% of GDP in 2008 to 2.8% of GDP in 2009. Part of the increase in budget expenditure was directed to education, medical care and social security. In April 2009, the Government announced an additional three-year healthcare reform amounting to a Y850 billion investment that aims to lay the foundation for equal access to essential healthcare for all in China by 2020. The 2009 budget also forecast a central government debt to GDP ratio of not more than 20%. The central Government debt is around 60% of GDP when off-budget Government debts such as debt owed by policy banks, local governments, asset management companies, pension and banks' non-performing loans, etc are included.

Recent reforms to improve fiscal transparency include the "Golden Fiscal Project" (launched in 2006) which aims to computerize the budgeting and public expenditure processes in five years and a new budget classification system introduced in 2006. Besides, the budget committee of the National People's Congress (NPC) is formulating a new law on inter-government fiscal transfers and is revising the Budget Law.

2.4.2 Foreign Exchange and Balance of Payments

Foreign Exchange: The PBC maintains that under China's "managed floating" exchange rate regime, the Renminbi (RMB) rate is based on supply and demand of the market and is adjusted with reference to a basket of currencies. According to the Chinese Government, "with respect to the foreign exchange administration, the Regulations on the Administration of Foreign Exchange was amended in August 2008 to further improve the managed floating foreign exchange rate system based on market demand and supply and in reference to a basket of currencies." In 2008, a pilot program of domestic and foreign currency exchange franchise business to serve individual customers began to be implemented in Beijing and Shanghai, which was expanded to include more cities in 2009. In 2009, settlement of cross-border trade in RMB also began on an experimental basis.

Balance of Payments: In 2009, China's balance of payments surplus stood at 8% of the GDP. Net merchandise trade had declined and in 2009 accounted for 5.1% of the GDP while China remained a net importer of services. Its current account surplus stood at 5.8% of its GDP. China's capital account surplus in 2008 was at 0.1% of the GDP, having remained relatively stable for some years.

2.4.3 Foreign Investment Regime

In 2008, China was the third largest recipient of FDI in the world, after the United States and France. Foreign investment has been encouraged mainly in manufacturing with particular emphasis on high-value-added production. Recently, FDI in services has been encouraged by easing of restrictions in certain sectors such as telecommunications and tourism. China had adopted a few measures to further facilitate FDI in China, including an amendment to the Catalogue of Priority Industries for Foreign Investment in the Central-Western Region which further opened up the coverage and scope of sectors for foreign investment.

MOFCOM promotes foreign investment in China mainly through its Investment Promotion Agency. Many provinces provide one-stop services to foreign investors and each province has set up an investment promotion centre. China also promotes investment through International Fair for Investment and Trade, Hi-Tech Fair, Central China Investment and Trade Fair, etc.

In 2005, the Central Government began delegating to local governments licensing authority for the establishment and modification of operations of "encouraged" foreign invested enterprises (FIEs) and certain selected sectors (e.g. distribution, whose licensing process was fully decentralized in September 2008) as well as certain types of FIEs such as foreign-invested joint-stock companies. The authorities expect this to facilitate FDI approval. There was also FDI liberalization in the context of the bilateral agreements (CEPAs) between Hong Kong, China and Macao, China. Furthermore, since 2007, China has promoted the online licensing system for FDI.

China also encourages outward FDI in areas such as research and development, production and marketing, and energy. The authorities maintain that outward FDI is encouraged in order to expand the width and depth of opening up to the outside world, promoting international economic and trade cooperation, and achieving common development on the basic principle of "mutual benefit, all-win, and common development." Since 1 May 2009, the Ministry of Commerce has officially delegated the authority of examination and approval of overseas FDI to the local commerce authorities of various provinces, autonomous regions and municipalities directly under the Central Government. In accordance with the Circular on the Adjustment of Foreign Exchange Management Policy concerning Overseas Investment issued by the State Administration of Foreign Exchange (SAFE), there are no restrictions on the purchase of foreign currency for the purpose of outward FDI. China's sovereign wealth fund, China Investment Corporation aims to invest a part of the country's large foreign reserves. The fund's operational assets amount to about US\$200 billion.

Measures for Administration of Establishment of Partnership Enterprise by Foreign Enterprises or Individuals within China were to enter into force on 1 March 2010. The current Catalogue of Advantaged Industries for Foreign Investment in Central-Western China entered into force in January 2009 to further promote FDI in the central and western regions of China. The new catalogue includes about 410 subsectors and projects. The Government encourages foreign investment in the subsectors and projects which are eligible for certain preferential measures. The Catalogue of Investment Projects approved by the Government clarifies the scope and the level of authorities verifying foreign investment project. For some industries, the NDRC must verify projects above certain thresholds (US\$100 million for "permitted"

and “encouraged” industries and US\$50 million for restricted industries). Those valued at or below the threshold must be verified by the local DRCs.

On 1 January 2009, the State Council abolished the urban real-estate tax (FIEs and domestic enterprises are subject to the house property tax). As a result, domestic enterprises and FIEs are now subject to equal tax treatment except that FIEs do not need to pay city maintenance tax and construction tax which have to be paid by domestic companies. Since 2007, land allocation has been through tendering and bidding procedures for domestic firms and FIEs. Since 2008, a statutory rate of 25%, set in accordance with the Enterprise Income Tax Law, has been applicable to all enterprises, except for some “grandfathering” of incentives during a transitional period of five years.

2.4.4 Pricing Policy

The Government provides “guidance” regarding some prices of commodities and services deemed to be of great importance to the national economy and people’s livelihood (such as electricity and certain medicines), scarce natural resources (processed petroleum products and natural gas), operations of natural monopolies (water supply), important public utilities (public transport) and public welfare services (education fees). These “guidance” prices account for 3% of all prices in the economy.

Under the Price Law, there are government-set prices and government-guided prices. Government-set prices are fixed prices, and government-guided prices are usually set at a basic level and a range within which prices can fluctuate. Some products and services are subject to price “guidance” at the central level and some at the local level. At the central level, the NDRC is in charge of price “guidance” in respect of, for example, key reserve materials of the State, natural gas, electric power, transport (such as rail and civil aviation) and post and telecom services. For key reserves of the State, designated SOEs stockpile these commodities as required by the State, but their purchase is at market prices. In the case when these SOEs claim losses from the Ministry of Finance, they may refer to government guided prices. These settlement prices extend only to products held by the State as its reserves. At the local level, the Bureau of Commodity Pricing in each province is in charge of price “guidance” concerning health-related services, passenger transport by road, etc. In addition, minimum procurement prices for rice and wheat remain for main grain-producing areas (seven provinces for rice, and six provinces for wheat). These prices were increased several times in 2008 and 2009 to reflect the increasing cost of grain farming.

2.4.5 Competition Policy

With the entry into force of its Anti-Monopoly Law on 1 August 2008, China has taken a major step to promote competition. As the Law is enforced by different ministries, various implementing regulations on different aspects of competition have been issued and implemented by them. However, certain aspects of the Law (e.g. “national security review”) still need to be clarified. Other competition-related legislation include the Anti-Unfair Competition Law, the Price Law, the Law on Bid Invitation and Bidding or Tendering and the Rules on Acquisitions of Domestic Enterprises by Foreign Investors. Regulations for certain sectors such as aviation, electricity, postal and telecommunications services and those issued by local governments also contain provisions on market competition. The Anti-Monopoly Law does not take precedence over other competition-related legislation.

The Anti-Monopoly Commission of the State Council was set up to organize, coordinate, and “guide” anti-monopoly enforcement. The State Council designated the NDRC, MOFCOM and SAIC (State Administration of Industry and Commerce) as enforcement agencies. NDRC supervises the enforcement of price-related monopoly behaviour. MOFCOM conducts anti-monopoly reviews of mergers and acquisitions, including

M&As of domestic enterprises by foreign investors. SAIC enforces the Anti-Unfair Competition Law on issues related to monopoly agreements, abuse of market dominance and abuse of administrative powers (excluding price-related monopolies).

The Anti-Monopoly Law covers all sectors of the economy and all types of enterprises, but it does not apply to alliances or concerted actions among farmers and farmers' economic organizations in producing, processing, selling, transporting or storing agricultural products. Under Article 7 of the Law, the State protects those SOEs which hold dominant position in the economy and affect national security or operate with exclusive rights granted by the Government. The Law covers specifically three types of "monopolistic conduct" - conclusion of monopoly agreements, abuse of dominant market positions and concentration of enterprises that have (or are likely to have) the effect of eliminating or restricting competition.

M&As that lead to change of control or "decisive influence" and are above a certain threshold, must be notified to and obtain approval from the Anti-Monopoly Law Enforcement Authority. The Law also specifies that foreign acquisitions of Chinese companies, if relating to national security, must go through a "national security review" in addition to the competition review. In practice, mergers and acquisitions, including acquisitions by foreign enterprises of domestic companies, are regulated by MOFCOM. The Rules on Acquisitions of Domestic Enterprises by Foreign Investors were issued jointly by CSRC, MOFCOM, SAFE, SAIC, SASAC and SAT and entered into force on 8 September 2006. MOFCOM approval is required for any acquisition transferring control of a domestic company relating to key industries with an actual or potential effect on national economic security or of a company with a famous trademark or "venerable" company registration. Exemptions include transactions which improve competition or where the acquisition target is making a loss and the takeover would preserve jobs, the takeover would improve international competitiveness through transfer of technology and management, or the transaction would improve environmental conditions.

The Anti-Monopoly Law prohibits "administrative monopolies" where administrative departments including local governments adopt measures to stop or discourage competition from other parts of the country. Administrative monopolies might be in the form of designating commodities providers; obstructing the free flow of goods among different regions by, inter alia, setting different prices or standards for products from other regions, imposing different technical or inspection criteria, subjecting them to special licence requirements, or hindering trade through checkpoints; excluding or restricting non-local operators from participating in local bidding activities; excluding or restricting non-local operators from investing or setting up branches and setting out regulations related to the elimination and restriction of competition. Administrative measures are to be adopted as sanctions against such conduct. If an organization or agency abuses its administrative power to restrict competition, then its supervisory body is responsible for correcting the problem. The Anti-Monopoly Enforcement Authority is authorized to recommend actions to the supervisory body.

China has also been making efforts to achieve a balance between protecting intellectual property rights and encouraging competition. This is reflected in Article 55 of the Anti-Monopoly Law which relates to abuse of intellectual property rights causing elimination or restriction of competition. However, the Law neither provides detailed descriptions of such illegal behaviour nor any sanction measures.

The Anti-Monopoly Law applies not only to monopolistic conduct in China but also to activities outside the territory of China that have "eliminative or restrictive effects" on competition in China's domestic market. This extra-territoriality is to be achieved mainly through international cooperation on competition policy. China has participated in competition-policy-related activities of APEC, OECD, UNCTAD and WTO. Bilaterally, SAIC and MOFCOM have signed cooperation agreements. China also engages in exchanges

and cooperation with competition authorities of the European Union, Japan, Republic of Korea and the United States.

2.4.6 State Ownership and Privatization Policy

Based on the ownership structure, enterprises can be grouped into state-owned enterprises and enterprises where the State has controlling shares (SOEs), collectively owned enterprises, joint-stock enterprises, “domestic private” enterprises, individual businesses (sole proprietorships are those with self-owned means of production, are self-operated, and have self-owned output are classified as individual businesses) and foreign-invested enterprises (FIEs). SOEs comprise central-level and local-level enterprises. The number of central-level non-financial SOEs has continued to fall and in December 2009 it stood at 129.

In general, under the “guidance” of the Government, SOEs have been retreating from some more competitive sectors where private enterprises were permitted to operate alongside SOEs. State-Owned Asset Supervision and Administration Commission (SASAC) intended to reduce the number of SOEs subject to its management to 80–100 by the end of 2010. FIEs, whose productivity is usually higher, have also been encouraged.

However, some industries are characterized by state monopolies such as postal services, telecommunications and financial services, which constitute entry barriers for domestic private enterprises. Besides, SASAC explicitly identified seven industries for state control creating entry barriers for private enterprise. These include industries involving national security, major infrastructure and important mineral resources, industries supplying important public goods and services, important backbone enterprises in ‘pillar’ industries and high and new technology industries. According to the authorities, SOEs have comparative advantage in these industries.

Agricultural products subject to state trading are grains (corn, rice, and wheat), sugar, tobacco, cotton and some chemical fertilizers. Imports of tobacco remain under state monopoly.

3. Multilateral, Regional and Bilateral Agreements

China acceded to the WTO on 11 December 2001. It is not yet a signatory to the plurilateral Agreement on Government Procurement (GPA) or the Agreement on Trade in Civil Aircraft. China submitted its initial offer to join the GPA, together with its initial Appendix I offer of coverage, in December 2007 and this was followed with a revised offer. It is an observer to the Agreement on Trade in Civil Aircraft. China is a Member of the Agreement on Information Technology (ITA) which it joined on 23 April 2003. China has been participating in the WTO, including in the Doha Development Agenda (DDA), as a strong supporter of the multilateral trading system.

China has been a member of APEC since 1991. In 2009, 69% of China’s merchandise imports were with APEC members and 61.6% of its merchandise exports went to APEC, reflecting faster growth of China’s trade with Africa and Middle East. APEC members accounted for 64.1% of China’s FDI in 2008.

China, Japan and the Republic of Korea hold regular meetings with ASEAN under the ASEAN+3 framework of cooperation. Under the Framework Agreement on Comprehensive Economic Cooperation between China and ASEAN, which entered into force on 1 July 2003, the two parties agreed to negotiate the establishment of a China–ASEAN Free Trade Area (CAFTA) within ten years by progressively eliminating tariff and non tariff barriers to substantially all trade in goods, progressively liberalizing trade in services,

establishing an open and competitive investment regime to facilitate and promote investment among partners to the CAFTA, simplifying customs procedures and developing mutual recognition arrangements. The CAFTA, involving the original ASEAN 6 (Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand), is to be established by 2010. Flexibility up to 2015 has been provided for Cambodia, Laos, Myanmar and Vietnam. ASEAN and China agreed to strengthen economic cooperation by building upon existing activities and developing new programmes in five priority sectors - agriculture, human resources development, information and communication technology, investment and Mekong River basin development. In accordance with the CAFTA Agreement on Trade in Goods, two rounds of tariff reduction took place on 1 January 2009 and on 1 January 2010. In 2009, the share of duty-free tariff lines applicable to China's imports from individual ASEAN countries ranged from 14.4% to 60.5%. An Agreement on Trade in Goods and an Agreement on the Dispute Settlement Mechanism of the Framework Agreement on Comprehensive Economic Cooperation between ASEAN and China entered into force on 1 January 2005. On 1 July 2007, the Agreement on Trade in Services of the China-ASEAN Free Trade Area entered into force.

China is party to the Asia-Pacific Trade Agreement (APTA), a preferential trading arrangement between developing countries in the Asia-Pacific region. Other members are Bangladesh, India, the Republic of Korea, the Lao People's Democratic Republic and Sri Lanka. Under the agreement, in 2009, 1,662 tariff lines carried rates below the MFN rates. As a result, the overall average tariff applied to parties to the APTA was 8.9%, compared with an MFN rate of 9.5%. In February 2009, at the 31st meeting of the APTA Standing Committee held in Bangkok consensus was reached on such issues as trade in services, investment, framework agreements on trade facilitation and rules of origin. On 15 December 2009, the third session of the Ministerial Council of the Asia-Pacific Trade Agreement was held in Seoul and the Framework Agreements on trade facilitation and promotion, protection and liberalization of investment were signed. In addition, the framework agreement on promotion and liberalization of trade in services was finalized. Ministers declared that the fourth round of APTA negotiations had reached its final stage.

China has concluded several bilateral FTAs and has been negotiating (or seeking negotiations on) free-trade agreements with some other trading partners. Between 2007 and 2009, the fourth, fifth and sixth Supplemental Agreements of the Closer Economic Partnership Arrangements were signed separately with Hong Kong and Macao Special Administrative Regions (SARs). The mainland China also strengthened its cooperation with the Hong Kong and Macao SARs in areas such as promotion of trade and investment, facilitation of customs clearance, electronic commerce, transparency in laws and regulations, commodity inspection and quarantine, food safety, quality standards, cooperation in SMEs, industrial cooperation, cooperation on the protection of IPRs and brand cooperation.

The China-Chile FTA entered into force on 1 October 2006. China's overall average tariff on imports from Chile was 2.3% in 2009, the lowest overall average among China's bilateral FTA partners. The two countries eliminated and reduced tariffs in accordance with the FTA. Negotiations on trade in services and investment were launched in September 2006. In April 2008, the two parties signed the Supplement Agreement on Trade in Services of the China-Chile FTA. By the end of 2009, five rounds of negotiations for the Agreement on Investment of the China-Chile FTA had been concluded.

The China-Pakistan Free Trade Agreement entered into force on 1 July 2007. The FTA was reviewed by the WTO Committee on Regional Trade Agreements on 20 April 2009, with several Members expressing disappointment on the relatively low tariff line and bilateral trade coverage in the Agreement. The Agreement covers trade in goods and investment. It was notified to the WTO in January 2008. Under the Agreement, China committed to liberalize 36.4% of its tariff by the end of implementation in 2012. The Agreement on Trade in Services of the China-Pakistan FTA entered into force on 10 October 2009,

but has not been notified to the WTO so far. Under the Agreement, China has committed to further open its market to Pakistan in 28 subsectors, including healthcare, tourism, sports and transportation.

The Sino-Singaporean Free Trade Agreement on goods and services entered into force on 1 January 2009. The agreement was notified to the WTO on 2 March 2009. While Singapore eliminated all tariffs on imports from China on January 2009, the authorities maintain that China undertook reducing tariffs to zero on 97.1% (in terms of tariff lines) of all imports from Singapore by 1 January 2010. The two countries have also made commitments in health, education and accounting. Improvements in commitments are mainly represented by either a relaxation of requirements for the form of establishment under mode 3 or new commitments in subsectors such as computer and related services, real estate, environment and air and road transport. In addition, China has added certain subsectors such as hospital services, sports promotion services and facility operation services in which it has no GATS commitment. The two countries have also made commitments on the movement of natural persons (to establish transparent criteria and streamlined procedures for temporary entry), customs procedures (to, inter alia, simplify and harmonize customs procedures), SPS (inter alia, notification and information exchange between the parties) and TBT (to, inter alia, enhance cooperation between the regulatory authorities and between standards and conformance bodies).

The FTA between China and New Zealand entered into force on 1 October 2008. On trade in goods, China is to eliminate the tariffs on 97.2% of lines of imports from New Zealand by 1 January 2019. Preferential TRQs started to be applied on 1 January 2009 to some wool and wool top (9 tariff lines at the HS 8-digit level) originating from New Zealand under the FTA. The in-quota rates for these imports were zero. On 1 January 2009, China reserved the right to apply special safeguard measures to 11 agricultural products (at the HS 8 digit level) imported from New Zealand. These agricultural products are milk and cream, butter and other fats and oil derived from milk and cheese. Apart from cheese, by the end of 2009, China took special safeguard measures against the other products originating from New Zealand. On services, China made commitments in 15 subsectors of 4 main services sectors (i.e. business, environment, sports and entertainment, and transportation). As in the GATS, China took no commitments, inter alia, in rental/leasing services without operators, postal services, health and related services and tourist guide services. The two countries made commitments on the movement of natural persons. The FTA contains provisions for the promotion and protection of investment as well as cooperation in customs, SPS and IPR.

The China-Peru Free Trade Agreement was signed on 28 April 2009. The Chinese authorities expect the agreement to enter into force in the first half of 2010. It has not been notified to the WTO. The Chinese authorities maintain that the FTA is to eliminate tariffs on 90% (in terms of tariff lines) of each other's imports. China agreed to further open up sectors such as mining, management consulting, R&D, translation and interpretation, sports and tourism.

China and Australia signed a Trade and Economic Framework Agreement on 24 October 2003. An early announcement of negotiations made to the WTO indicates that they started on 23 May 2005. The 13th round of talks was concluded in December 2008.

In June 2004, China and the Southern African Customs Union (SACU) issued a joint declaration, in which SACU granted market economy status to China. At the same time, FTA negotiations were launched, but no negotiations have taken place so far.

In July 2004, China and the Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE) announced that they had signed a Framework Agreement on Economic, Trade, Investment and

Technology Cooperation and had agreed to launch FTA negotiations. Five rounds of negotiations were held by December 2009.

On 4 December 2006, China and Iceland agreed to start negotiating an FTA. The fourth round of negotiations was held in April 2008.

China and Norway started FTA negotiations in September 2008. Six rounds of negotiations were by December 2009.

Negotiations for a China–Costa Rica FTA began in January 2009. By the end of 2009, five rounds of negotiations were held.

In addition to recent changes in the cross-straits relationship in transport and postal services, China and Chinese Taipei started negotiating a “cross-straits economic cooperation framework agreement (ECFA).” The first round of negotiations took place on 26 January 2010. The scope of the possible agreement remains to be announced.

Feasibility studies on a China–India FTA, China–Korea FTA and China–Switzerland FTA started in April 2005, November 2006 and November 2009, respectively.

China had signed 113 bilateral investment protection agreements and 94 agreements or arrangements on avoidance of double taxation by the end of September 2009. The bilateral investment protection agreements provide protection against expropriation without adequate compensation and include provisions on dispute settlement. Some of the agreements on avoidance of double taxation incorporate “tax sparing” provisions, which stipulate that in respect of certain “taxable income,” tax is to be levied only by one party to the agreement, have no MFN provisions. In addition, China’s CEPAs with the SARs of Hong Kong and Macao provide certain privileges to investors from these SARs.

China has continued to intensify its pursuit of bilateral/regional free-trade agreements. It considers that such agreements are complementary to the multilateral trading system. Two free-trade agreements entered into force (China–New Zealand FTA on 1 October 2008 and China–Singapore FTA on 1 January 2009) and one was signed (China–Peru on 28 April 2009). Furthermore, one agreement on trade in services (China–Pakistan FTA Agreement on Trade in Services) entered into force on 10 October 2009 and one investment agreement (China–ASEAN FTA on Investment) was signed on 15 August 2009. Five further free trade agreements (with Australia, Costa-Rica, GCC, Iceland and Norway) are being negotiated. In 2009, China unilaterally granted preferential treatment to some products from 41 least developed countries (LDCs).

South Africa¹

1. Institutions

1.1 Institutional Framework for Trade Policies

The Department of Trade and Industry (DTI) is responsible for formulating and coordinating the country's trade and industrial policies. However, other departments and agencies also take important initiatives on trade policy, such as the Departments of Finance, Agriculture, Health, and Mineral and Energy Affairs, as well as the South African Reserve Bank. The private sector is quite instrumental in forwarding proposals and recommendations to the DTI, through for example, the National Economic Development and Labour Council (NEDLAC), the International Trade Administration Commission (ITAC) that replaced the Board on Tariffs and Trade (BTT), and the Industrial Development Corporation (IDC). The IDC and Parliamentary Committees continue to play a key role in assisting the DTI in carrying out periodic reviews and assessments of trade policies. The DTI has evolved to become a key player in modernizing and streamlining South Africa's trade and industrial development institutions, and achieving the strategic objectives of sustaining the relatively good growth levels of the economy; contributing to the international competitiveness of manufacturing industries; promoting small, micro, and medium-sized enterprises (SMME); promoting economic empowerment of previously disadvantaged persons ("black economic empowerment" (BEE)); reducing inequality and poverty; promoting organizational efficiency; and contributing to the development of the SADC region and Africa as a whole.

The ITAC is responsible for tariff investigations, amendments, and trade remedies in South Africa and on behalf of SACU. In addition, Trade and Investment South Africa (TISA) is mandated to promote investment, particularly FDI, and export development in South Africa; and the Companies and Intellectual Property Registration Office (CIPRO) is mandated to regulate and service business entities effectively, in order to gain investor confidence, to stimulate economic growth, to create awareness of IPR in South Africa, and to harmonize the country's IPR legislation with international laws.

Over 2006-09, the DTI has refocused on new policy developments, represented by five key medium-term strategic objectives to promote coordinated implementation of the accelerated and shared growth initiative; promote direct investment and growth in the industrial and services sectors, with particular focus on employment creation; promote broader participation, equity, and redress in the economy; raise the level of exports and promote equitable global trade; and contribute towards the development and regional integration of the African continent within the NEPAD framework.

¹ This chapter has been compiled by Prof. Sajal Mathur, Meghna Dasgupta and Pallavi Sirohi at the Centre for WTO Studies, Indian Institute of Foreign Trade, New Delhi. Material for the chapter has been mainly drawn from the 2009 WTO Trade Policy Review of the South African Customs Union (WT/TPR/G/222 and Annex 4 of WT/TPR/S/222/ZAF).

1.2 Executive, Legislative and Judicial Branches of the Government

Executive: The President, elected by the National Assembly from among its members, is the executive Head of State and leads the Cabinet. The President may not serve more than two five-year terms in office. The Cabinet consists of the President, the Deputy President and 25 Ministers. The President appoints the Deputy President and Ministers, assigns their powers and functions, and may dismiss them. All but two Ministers must be selected from among the members of the National Assembly. The members of Cabinet are accountable individually and collectively to Parliament. Deputy Ministers are also appointed by the President from among the members of the National Assembly.

Legislature: Legislative authority is vested in Parliament, which is situated in Cape Town and consists of two houses, the National Assembly and the National Council of Provinces. Parliament is bound by the Constitution and must act within its limits. The National Assembly consists of not fewer than 350 and not more than 400 members elected for a five-year term on the basis of a common voters' roll. It is presided over by a Speaker who is assisted by a Deputy Speaker. The number of National Assembly seats awarded to each political party is in proportion to the outcome of the national election, which is held every five years. Also participating in the legislative process is the National Council of Provinces (NCOP), a body created to achieve co-operative governance and participatory democracy. It is through this body that national and provincial interests are aligned in national legislation that affects the provinces. The NCOP consists of 54 permanent members and 36 special delegates, and elects its own chairperson. Each of South Africa's nine provinces sends 10 representatives to the NCOP - six permanent members, and four special delegates headed by the provincial premier or a member of the provincial legislature designated by the premier. There is a formula to ensure that each province's delegation includes representation by minority parties. In addition, local (municipal) government representatives may participate in the NCOP but not vote. 10 part-time members represent different categories of municipalities.

Judiciary: South Africa has an independent judiciary, subject only to the Constitution and the law. It comprises the Constitutional Court, Supreme Court of Appeal, High Courts, Magistrates Courts, and other courts established or recognized in terms of an Act of Parliament. The Constitutional Court, Supreme Court of Appeal and High Courts have the power to protect and regulate their own processes, and to develop the common law. Judges in the various courts are appointed by the President in consultation with the Judicial Service Commission, the leaders of parties represented in National Assembly, and, where relevant, the President of the Constitutional Court. The Judicial Service Commission includes the Chief Justice, the President of the Constitutional Court and the Minister of Justice. Among its other members are two practicing advocates, two practicing attorneys, six members from the National Assembly (including three from opposition parties) and four from the National Council of Provinces.

2. Trade Policies

2.1 Trade in goods

2.1.1. Import Policy

A) TARIFFS

Structure: South Africa is a member of the South African Customs Union (SACU), which is a customs union among five countries of Southern Africa - Botswana, Lesotho, Namibia, South Africa and Swaziland.

Accordingly South Africa sets the applied MFN tariff for all SACU members after consulting with them. In 2009, the simple average applied MFN tariff rate was 8.1% with the applied MFN average for agricultural products at 10.1 % and that for non-agricultural products at 7.8%. The tariff structure has been somewhat simplified; compound duties are no longer applied. However, the tariff still includes ad valorem, specific, mixed, and variable (formula) duties. The coefficient of variation of 1.4 indicates that there is still relative dispersion of the tariff rates.

The percentage of tariff lines bearing ad valorem rates increased substantially over the last few years to 96.8% in 2009. The tariff comprises ad valorem rates ranging from zero to 96% and the modal rate (the rate occurring most frequently) which is zero, applies to some 54.6% of all tariff lines. Duty-free items include live animals, products of animal origin, ores, fertilizers, cork, pulp of wood, silk, some minerals (e.g. nickel, lead, and zinc), and other base metals. Some 87.4% of all tariff lines carry rates up to 20% (included). The highest tariffs (above 50%) apply to some 0.1% of all tariff lines including dairy products, preparations of vegetables, beverages, and spirits. The ISIC sectors with the highest tariff protection is manufacturing (8.5%, down from 11.8% in 2002), followed by agriculture (3.7%, down from 5.5% in 2002), and mining and quarrying (0.8%, slightly up from 0.7% in 2002).

In number, lines with specific duties stood at 109 in 2009; lines with mixed duties at 98; and those with formula duties at 5. Specific duties (109 tariff lines) apply mainly to agricultural products (94 tariff lines), coal, and some textiles; their ad valorem equivalents range from zero to 60%. Mixed duties apply to agricultural products, coal, and textiles and footwear products.

Tariff bindings covered 95% of the tariff lines at the HS eight-digit level calculated on the basis of the 2008 tariff schedule. All tariff bindings are at ad valorem rates, including lines to which specific, mixed, compound, or formula duties apply. On some tariff lines like tobacco, cherries, certain footwear, the applied tariff appears to be higher than the bound tariff. However, this becomes especially difficult to assess in some of the lines that bear specific non-ad valorem duties and where there is no strict correspondence between nomenclatures.

Tariff-quotas: Tariff quotas (TQs) apply to agricultural products, and to textiles and clothing. In 2007, a number of products were subject to tariff quotas including certain dairy products, vegetables, meat products, cereals, oilseeds, sugar, wines and spirits, sugar, tobacco and cotton. Import permits (i.e. licences) are required for products subject to tariff quotas.

Most quotas (70%) are allocated on a historical basis. 20% are allocated to SMEs and new importers and 10% to BEE importers (i.e. companies that qualify under the Broad-Based Black Economic Empowerment Act). However, many TQs have not been used since the out-of-quota tariff rates on certain products have been less than the in-quota tariff rate. In 2007, tariff quota fill ratios varied substantially; some quotas were filled 100% while others, on potatoes, eggs, and milk showed very low fill ratios.

Preferences: Preferential tariffs apply to imports from SADC and under South Africa's bilateral trade arrangements with the EC, EFTA, Malawi, Mozambique and Zimbabwe.

Exemptions: Imports from other SACU members enter South Africa free of customs tariffs and excise duties. South Africa's duty exemption regime covers a substantial number of goods and appears to be granted on different grounds and under several schemes. Goods temporarily admitted into South Africa for processing, repair, cleaning, reconditioning or for the manufacture of goods exclusively for export are exempt of duties and taxes. Goods temporarily admitted and then exported in the same state are

also exempt of duties. Goods imported to be processed in the industrial development zones (IDZs) are exempt from customs duties and taxes. Imported goods may also be admitted under rebate of duty for use in the Customs Controlled Area (CCA), bonded areas within the IDZs.

Under the Customs and Excise Act of 1964, duty rebates, in most cases of a 100%, continue to be available for imported commodities used as inputs in specific industries. The Act also provides for rebates on any customs duties, fuel levy and Road Accident Fund levy on specific goods imported for domestic consumption for, inter alia, diplomats (based on reciprocal treatment), special events such as international exhibitions, relief in cases of natural disasters and famines; for manufacturing and commercial use; goods re-imported into South Africa; or goods imported from specific countries (e.g. textiles from Mozambique). South Africa also provides “temporary” duty rebates.

B) INTERNAL TAXES ON IMPORTS

All imports to South Africa are subject to internal taxes including VAT. South Africa’s VAT, on domestically produced and imported goods and services, is imposed at a standard rate of 14%. Exports; certain basic foodstuffs (e.g. brown bread, maize meal, eggs, milk, fruit, and vegetables); certain goods used or consumed for agricultural, pastoral or other farming purposes (e.g. animal feed, seed, fertilizers, pesticides, and animal remedies); certain fuels (on lighting paraffin, diesel, and gasoline), and international transport of goods and passengers are zero-rated. Goods and services exempt from VAT include financial services; donated goods or services or any other goods made or manufactured with donated inputs; the supply of residential accommodation; the supply of certain educational services; and the supply of certain transport services. The VAT is not payable on temporary imports and imports for export-processing. On imports, VAT is levied on the duty-inclusive f.o.b. customs value (i.e. the f.o.b. customs value plus the amount of any non-rebated customs duty), uplifted by 10%. The additional 10% is included to adjust for the customs valuation on the f.o.b. value rather than the c.i.f. value.

Excise duties are imposed on, inter alia, wine, spirits, beer and other fermented beverages, tobacco, and fuel. The levies that apply include the environmental levy on certain goods, fuel levy, and the Road Accident Fund (RAF) levy. In 2004, South Africa introduced an environmental levy of 3 cents per bag on locally manufactured and imported plastic carriers and flat bags. The purpose is to reduce pollution, and it is collected by SARS. A specific fuel levy is applied on certain petroleum oils and oils obtained from bituminous minerals. The levy is applied at the same rate on imported and domestic goods.

C) QUANTITATIVE RESTRICTIONS

Import controls are maintained to ensure compliance with health, environmental and safety requirements, and with the provisions of international agreements to curb competition in the domestic market by the importation of second-hand goods and to ensure that used and second hand goods do not erode the SACU manufacturing industry. By notice in the Gazette, import and export prohibitions and other controls may be prescribed on an ad hoc basis. Controls must be in accordance with policies approved by the Minister of Trade and Industry. Prohibitions and controls may be applied according to the goods’ origin, final use, channels of transportation, the manner in which they are imported or exported, the purposes for which they are to be used or the methods or processes of production.

Prohibitions: Under extraordinary circumstances (e.g. food security considerations) and taking into account South Africa’s international obligations, the Minister of Agriculture, Forestry and Fisheries may

prohibit the importation of any agricultural product, or impose conditions with regard to the exportation of agricultural goods.

Licensing: The International Trade Administration Act of 2002 allows for the control, through a permit (i.e. license) system, of certain imports and exports as specified by regulation. The designation of products to be subject to licensing is left to administrative discretion. Applications for an import permit are considered by the International Trade and Administration Commission (ITAC).

The importation of most used and second-hand goods is subject to control (i.e. requires an import permit or license). Unused items including fish and fish products, oils and other fossil fuels, inorganic acids, radio-active chemical elements, hydrocarbons, tyres, base metals, fire arms and ammunition, gambling machines and other miscellaneous chemicals such as ethers and carboxylic acids are also subject to import control measures. Controlled imports also include live plants and animals and products thereof drugs and narcotics; pornographic or objectionable materials; uncut diamonds; and waste and hazardous materials. These measures apply to all imports, including those from other SACU countries. Fertilizers, farm feeds, agricultural remedies or stock remedies may be imported only if they are registered in South Africa and are in compliance with the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act of 1947.

Quotas: In general, South Africa does not apply import quotas. Quotas may apply to used goods; goods controlled under the Montreal Protocol; and under the 1998 Convention against chemicals used in illegal drug manufacturing, the Basel Convention. All these goods are also subject to import permit/licence.

D) STANDARDS

- TECHNICAL BARRIERS TO TRADE

Legislative and Institutional Framework: The legislative framework of the TBT regime in South Africa is governed by the new Standards Act, the Agricultural Product Standards Amendment Act which is the main law regulating the setting of standards for agricultural products, the Compulsory Specifications Act which ensures administration of technical regulations, maintained in the interests of public safety, health and the environment.

Various institutions are responsible for setting technical regulations, including the South African Bureau of Standards (SABS); the South African National Accreditation System (SANAS); the National Metrology Institute of South Africa (NMISA) which is responsible for the maintenance, traceability, and dissemination of national measurement standards; and a wide range of accredited bodies including laboratories, and verification, certification, and inspection bodies.

South African Bureau of Standards (SABS) is the primary institution responsible for the development, promotion, and maintenance of standards, and the provision of conformity assessment services. The SABS has the power to set, issue, amend, and withdraw standards. SABS also furnishes reports and issues certificates in connection with examinations, tests, analyses, administered by the SABS to develop standards. However, the regulatory function previously performed by the SABS now resides with the newly established National Regulator for Compulsory Specifications (NRCS) which administers compulsory specifications. South African National Accreditation System (SANAS) is in charge of accreditation, quality assessment, and calibration. It is responsible for formally recognizing the technical competence of conformity assessment services providers.

Technical regulations: Technical regulations are set for health, safety, and environmental reasons. A standard becomes a technical regulation once “referenced” and any department may make a “reference.” Technical regulations are applied equally to domestic and imported products. The development of technical regulations, and inspection and enforcement are the responsibility of different government departments depending on the subject of the regulation. National departments use a consultation process when technical regulations are developed but there is no consistent national approach. As there is no coordinated system for establishing a technical regulation, there appear to be some gaps as well as areas of overlap between national departments. In addition, the regulatory system is fragmented with myriad laws regulating the process of setting technical regulations.

Standards: The SABS develops and maintains South African national standards (SANS), at the request of interested parties, and details the process to be used to set or amend them. SABS must as far as possible ensure that in setting or amending a SANS the latest technological developments are considered and that the interests of all parties concerned, including manufacturers, suppliers and consumers, are considered. Standards generally comply with internationally accepted norms. As the first option, South Africa reviews applicable international standards for adoption as the basis for a standard and/or technical regulation. Hence, as far as possible, SANS are harmonized with international standards.

South African national standards are drafted by technical committees (TCs), which prepare one or more working drafts. A committee draft (CD) is presented to the TC, which starts a consensus building process entailing comments and voting. The comments are discussed by the committees and, through a consensus, incorporated into the standard prior to finalization. The draft is forwarded to the Standards Approvals Committee (SAC) for ratification. Standards are published in the Government Gazette as national standards. South African national standards may be appealed, and there is a procedure for resolving disputes.

Conformity Assessment Procedures: An imported commodity that is subject to a technical regulation would be deemed to comply if it has been certified by a person or organization recognized by the Minister of Trade and Industry by notice in the Gazette. In the absence of certification, the import may be tested or examined and if found not to be in compliance with the regulation, may be destroyed. The SABS may examine, test or analyse a sample of any imported or domestically produced article to determine whether it complies with or has been manufactured in accordance with the requirements.

SANAS operates an internationally recognized accreditation system for calibration and testing laboratories, quality and environmental management systems, and product and personnel certification and inspection. It is the authority responsible for good laboratory practices. SANAS has mutual recognition agreements (MRAs) with foreign accreditation agencies; in the absence of an MRA, the supplier is responsible for proving the compatibility of its products with the SANS.

- SANITARY AND PHYTOSANITARY REGULATIONS

Legal and Institutional Framework: Several laws regulate the setting of sanitary and phytosanitary measures, such as the Agricultural Pests Act (also referred to as Agricultural Pests Amendment Act) which seeks to control imports of plants, plant products, and other regulated articles to prevent associated pests and diseases; the Fertilizers, Farm Feeds, Agricultural Remedies, and Stock Remedies Act (as amended) that regulates or prohibits the import, sale, acquisition, disposal or use of fertilizers, farm feeds, agricultural remedies, and stock remedies; the Animal Disease Act which provides for the control of animal diseases and parasites to promote animal health and a number of product-specific legislations; and the Meat Safety Act that promotes meat safety and the safety of animal products.

The Department of Agriculture sets and enforces sanitary and phytosanitary standards for agricultural and animal products. The Department is also in charge of implementing inspection and certification requirements. Sanitary and phytosanitary standards are published in the Gazette.

South Africa is a member of international standards setting bodies - the FAO/WHO Codex Alimentarius Commission, the World Organization for Animal Health (OIE) and the International Plant Protection Convention (IPPC).

Implementation: All imported food products, including from other SACU countries, must meet South Africa's sanitary and phytosanitary, quality, and labelling requirements. Sanitary and phytosanitary measures in South Africa are based on international standards; however, SPS requirements on agricultural products appear stringent, since most agricultural goods are subject to quality standards or technical regulations. In March 2009, there were about 60 technical regulations on foodstuffs. The import of any animal and animal product (including meat), is prohibited where the risk of importing has been determined to be unacceptable.

Listed goods that are subject to import permits on SPS grounds have been determined based on a sanitary or phytosanitary risk-assessment procedures. The list of goods subject to import permits on SPS grounds is under continuous review by the Department of Agriculture to reflect changes in disease status. When new scientific information becomes available, risk assessments are carried out to determine whether import requirements need to be amended. Some of the controlled goods may be subject to additional documents like veterinary health certificate, import (export) certificate etc. Any product subject to SPS regulations may be subject to inspection (including grading and sampling) to verify compliance with regulations; the control may be done at any point. In case of non compliance, products may be seized and criminal proceedings may be instituted. However, appeals are possible under the various laws. The Minister may also prohibit the sale of any imported product if it was removed from the port of entry prior to verification of compliance.

Importation of controlled goods such as plants and plant products, pathogens, insects, exotic animals, and growth mediums is allowed by means of a permit or following publication in the Government Gazette. These import controls are aimed at preventing and combating the spread of agricultural pests. Imports of fertilizers, farm feeds, agricultural remedies and stock remedies are prohibited unless registered. The manufacture and sale of fertilizers and farm feeds containing substances derived from animal carcasses are prohibited, unless the bone or substance has been sterilized. Imports of controlled goods must be through a specified port of entry so that controls may be enforced. Controls may entail the destruction or cleansing of plants infected with pathogens or insects.

Any animal, animal product (including meat), parasite, contaminated or infectious thing may only be imported into South Africa after a permit and a veterinary certificate have been issued, and the conditions stipulated in both documents have been complied with. The conditions stipulated on the permit and veterinary health certificates vary according to the risk of importing the different commodities from individual exporting countries. A permit is required to import meat as per the Meat Safety Act (Act No. 40 of 2000) and the Animal Diseases Act (Act No. 35 of 1984). The permit may only be issued if meat is imported from a place approved by the national executive officer by notice in the Gazette. Once the Meat Safety Act of 2000 is amended, South Africa will accept certification from the abattoirs of the country of origin. South Africa also has technical regulations relating to the manufacture, production, processing, and treatment of canned meat products.

As per the Liquor Products Amendment Act of 1993, imports (exports) of alcoholic beverages with an alcoholic content of more than 1% with the exception of beer, sorghum beer, and medicine require an import (or export) certificate.

South Africa's National Drug Policy stipulates the introduction of a five-year re-licensing system for drugs, computerization of the evaluation system, prioritization of registration based on need, and fast-track procedures for essential drugs. Drugs and medicines must be registered in South Africa before import and sale. Import controls are also applied to medicines, mainly to ensure compliance.

GMO products intended for sale as food and/or feed are analysed for food safety on a case-by-case basis. Prior to undertaking any activity involving genetic modification, a suitable assessment of the environmental and human health risks must be made. Permits are required for import, export, contained use, trial release, and commercial release. Up to mid 2009, South Africa had approved herbicide-tolerant soybean, maize, and cotton, insect-resistant maize and cotton, as well as stacked insect-resistant and herbicide-tolerant maize and cotton for commercial release and/or for food and animal feed in accordance with the Genetically Modified Organism Act (Act No. 15 of 1997) Regulations.

Labelling: All products shipped to South Africa must conform to the metric international system of units. The country of origin must be identified on imported goods. "Special" labelling requirements apply to drugs, wine, foodstuffs, cosmetics, and toothpaste, and powders and mouthwashes containing fluoride. Certain products require labels in English and Afrikaans. False or misleading descriptions on alcoholic products are prohibited. The Agricultural Products Standards Act of 1990 regulates the packaging and marking of commodities (including imported goods) for local sale as well as export. Labelling (as well as quality standards) applies to a vast list of agricultural products including fruit, flowers, grains, processed animal and plant products, animal products, and liquor products derived from wine. The Minister in charge of agriculture may prescribe the use of a "distinctive mark" on exports to certify the class or grade or, in the case of organically produced products, the production method concerned; and/or a particular management control system. South Africa has regulations mandating the labelling of GM food products, including when allergens or human/animal proteins are present, and when a GM food product differs significantly from a non-GM equivalent. Under the Consumer Protection Act food that contains GM ingredients must be labelled accordingly. The SABS mark is granted to products that comply with relevant specifications. The Intellectual Property Laws Amendment Act of 1997 has provisions concerning the marking and packaging, and the use of certain words and emblems. The Explosives Act indicates that explosives must be clearly identified in the prescribed manner with legible and visible identification markings and must be packed in the required packaging material.

E) CUSTOMS MEASURES

Customs valuation: South Africa uses the 1964 Customs and Excise Act of South Africa, as amended, to regulate customs valuation. Under this Act, the customs value of imported goods is the transaction value based on the f.o.b. price of the import. Where the transaction value cannot be ascertained, the customs value is based on the methods provided for by the WTO Agreement on Customs Valuation.

Rules of Origin: South Africa, like all SACU countries, has both non-preferential and preferential rules of origin. The non preferential rules of origin is set out in Customs and Excise Act. Under the Customs and Excise Act, origin is conferred on a good if at least 25% of its production cost is represented by materials produced and labour performed in that territory, and if the last process in its production or manufacture has taken place in that territory.

Preferential rules of origin are applied under regional trade agreements such as the Southern African Development Community (SADC) Trade Protocol and under individual SACU member's bilateral trade agreements. The basic origin criteria for the SADC Trade Protocol are wholly produced, change in tariff heading and substantial transformation.

Pre-shipment Inspection and Other Custom Formalities: Article 23 of the 2002 SACU Agreement calls for all five SACU members, including South Africa, to take appropriate measures, including customs cooperation, to ensure that the provisions of the agreement are applied effectively and harmoniously. In order to promote harmonization and facilitate trade, SACU members with the help of the World Customs Organization (WCO), have adopted several customs initiatives. These include the introduction of the single administrative document (SAD) as a common customs declaration, a standard customs procedure code, and an electronic data interchange. However, customs procedures have not yet been harmonized in SACU, and some differences remain in the regulations and administrative procedures in the five countries; the documentation required also differs. At present all SACU members' custom procedures follow South Africa's Customs and Excise Act.

Goods entering the SACU area may be declared at the first port of entry into the customs union (usually a South African port), or may be removed in bond from the port of entry to another SACU country, where they are cleared for home consumption or for transit to another SACU country. Goods moved within SACU are free of customs duty but customs controls are maintained because of the difference in internal tax regimes (i.e. VAT and sales taxes) and in import control measures. Goods traded within the customs union must be declared at each border post and comply with the requirements (e.g. sanitary, phytosanitary, and technical requirements) of each SACU member state.

Trading activities in South Africa are open to nationals and foreigners. Importers (and exporters) in South Africa are required to register with the South African Revenue Service (SARS) when the value of traded goods exceeds R 20,000. The registration process takes on average one day. Upon registration, applicants are issued with a customs code number, which must be entered on all customs declarations.

All required documentation (e.g. bill of lading, commercial invoice) must be submitted with the customs declaration to the customs offices at the port of entry before goods can be cleared. The commercial invoice has to include all the necessary information for the South African Customs to determine the value of the imported item for duty purposes. A certificate and declaration of origin are required when preferential duties are applicable and for goods subject to anti-dumping or countervailing duties. Import permits (i.e. licenses) are required in certain instances. The executive officer might in the "public interest" suspend or withdraw a permit, or impose new or additional conditions to a permit.

Shipments may obtain customs clearance prior to arrival at a South African port (as soon as they are loaded onto the vessel to be transported). In the case of sea freight, once Customs is cleared, the importer pays dues to Harbour Revenue and receives a wharfage order. Import clearance generally takes a maximum of 24 hours for air freight, and two to three days for sea freight, depending on the port of entry.

F) TRADE REMEDIES AND CONTINGENCY MEASURES

Contingency measures continue to be harmonized in SACU. All SACU members must apply anti-dumping, countervailing or safeguard measure imposed by South Africa, through investigations conducted by the International Trade Administration (ITAC) of South Africa on behalf of all SACU countries.

The International Trade Administration Act of 2002, the Customs and Excise Act of 1964, as amended, the Anti-Dumping Regulations of 14 November 2003, and the Countervailing Regulations of 30 March 2005 provide the legal basis for anti-dumping and countervailing measures in South Africa.

South Africa continues to be one of the major users of anti dumping measures in the WTO. Anti-dumping investigations are usually initiated upon a written application by or on behalf of the SACU industry. It may also be self initiated by the ITAC. This is also the case for countervailing and safeguards investigations.

The margin of dumping is determined as the amount by which the normal value exceeds the export price. The ITAC may request the South African Revenue Services (SARS) Commissioner to impose a provisional duty in respect of the investigated goods, by notice in the Government Gazette. If no anti-dumping, countervailing or safeguard duty is imposed, then the provisional duty paid must be refunded. Anti-dumping duties will stay in place for five years, unless an interested party requests a review of these duties. Sunset reviews are available to determine whether any anti-dumping duty that has been in place for five years needs to be continued. Any of these duties may be reduced or withdrawn at the request of the Minister of Trade and Industry after an investigation by the ITAC. These amendments are also made through a notice in the Gazette. Anti-dumping proceedings may be suspended or terminated following the receipt of a satisfactory price undertaking from any exporter to revise its prices or to cease exports to the SACU at dumped prices. The ITAC's decisions may be challenged by the interested parties and taken to the High Court in South Africa.

The application of safeguards is regulated by the International Trade Administration Act of 2002, the Customs and Excise Act of 1964, as amended, and the Safeguard Regulations of 27 August 2004. A safeguard measure may only be imposed in response to a rapid and significant increase in imports of a product as a result of an unforeseen development, where such increased imports cause or threaten to cause serious injury to the SACU industry producing the like or directly competitive product. In determining serious injury or threat thereof to the SACU industry, the ITAC must consider the rate and volume of the increase in imports of the product concerned (in absolute terms or relative to the production and demand in SACU); and whether there have been significant changes in the performance of the SACU industry in respect of sales volume, profit and loss, output, market share, productivity, capacity utilization, and employment. Investigations are formally initiated through publication of an initiation notice in the Gazette. All interested parties have 20 days from the initiation of an investigation to comment on the application. The ITAC may request the SARS to impose a provisional payment as soon as the ITAC has made a preliminary determination that there are critical circumstances where a delay would cause damage that would be difficult to repair, and there is clear evidence that increased imports have caused or are threatening to cause serious injury. A definitive safeguard measure may be applied as a customs duty and/or a quantitative import restriction. Safeguards may be in place, in general, only for four years and can be extended for six years (for a maximum of ten years). A safeguard measure must be liberalized progressively at regular intervals throughout its period of validity. Where the ITAC deems that the lapse of the safeguard measure is likely to lead to the recurrence of serious injury and there is evidence that the SACU industry is adjusting; if extended, the measure must be reduced in effect. Safeguard measures imposed for a period exceeding three years must be reviewed at their halfway point. The ITAC's decisions regarding safeguards may be challenged in a court of law.

2.1.2 Export Policy

A) EXPORT DUTIES AND TAXES

Exporters of agricultural products are entitled to duty rebates and some agricultural exports are zero rated; however, some export levies are still in place for wine. South Africa still levies a tax on exports of unpolished diamonds in order to promote the development of the local economy, develop skills, and create employment. As of 2008, SARS has been responsible for collecting the diamond export levy of 5% based on the value of exported unpolished diamonds.

Inspection fees are levied on exports of certain perishable goods in accordance with the inspection requirements. Fees are published by the Department of Agriculture.

B) EXPORT RESTRICTIONS

A number of products are still subject to export control, including export permits (licences) and prohibition. The list is reviewed periodically. Controls are maintained on grounds of safety, security, and the environment, and to ensure compliance with international obligations under treaties and conventions to which South Africa is a signatory (e.g. the Montreal Protocol).

Prohibitions: Export prohibitions apply only to ozone-depleting substances in accordance with the Montreal Protocol. South Africa does not apply any trade embargoes except those imposed by the United Nations.

Licenses: Export permits are valid for exports to any country, including other SACU members. Applications are made to the International Trade and Administration Commission, or the government agency that controls the specific permit in question. The application procedure and time required for obtaining export permits takes on average three working days.

An export authorization is required, on SPS grounds, to export any animal, semen, ova or sterilized ostrich eggs. Exports of meat require a health certificate and the payment of fees, depending upon the province, prior to export. Exports of meat must be inspected, sampled, and tested.

Exports of any alcoholic product with an alcohol content of more than 1%, except beer, sorghum beer and medicines, require an export certificate under the Liquor Products Act.

Exports of unpolished diamonds continue to be regulated in South Africa. They are prohibited unless undertaken by a producer, a manufacturer (synthetic diamonds), a dealer, or a holder of an export permit. Unpolished diamonds must be sold at a diamond exchange and export centre.

A 2000 agreement allowed milling companies to export refined sugar and direct-consumption raw sugar (i.e. sugar not for use by the food industry). Therefore, South African Sugar Association is at present only responsible for exporting indirect-consumption raw sugar. There is no prohibition or restriction on the export of sugar; however, it is subject to automatic export licensing. All sugar exporters must apply for an export permit issued by the Department of Trade and Industry.

C) EXPORT SUBSIDIES

In 2003, South Africa notified the WTO that it does not maintain any specific subsidies or any subsidy that increases exports or aims to reduce imports.

Duty drawbacks are allowed on imports of certain goods incorporated or used in goods to be exported. The Department of Trade and Industry (DTI) has undertaken to implement a series of industrial development zones (IDZ) under its Spatial Development Initiative (SDI) programmes. Firms that locate in those zones will benefit from, inter alia, fiscal incentives, expedited customs procedures, and a single window that facilitates the issuing of all the required permits. The fiscal incentives include duty suspension on imports of raw materials, including machinery used in the production of goods intended for export, and VAT exemptions under specific conditions for inputs procured in South Africa.

Export promotion is also the responsibility of the DTI. The Export Promotion Directorate, under the DTI (specifically under Trade and Investment South Africa (TISA)), is responsible for promoting South Africa's exports of goods and services. The Directorate provides both financial and non-financial assistance to eligible exporters. It also provides information on export markets and opportunities; and issues country reports, market surveys, and booklets on the export process, on quality and other standards, and on e-commerce. Exporters are informed about the requirements for entering foreign markets and identifying export markets for their products and services. The Export Credit Insurance Corporation of South Africa (Pty) Ltd (ECIC) continues to provide export credit insurance for goods and services. South Africa also offers subsidized medium and long term loans to promote the export/import of capital goods and services.

2.1.3 Sectoral Policies

A) AGRICULTURE

South African agriculture is dualistic. A developed commercial sector, occupying 86% of the agricultural land, co-exists with large numbers of subsistence (communal) farms. In order to integrate small farmers, South Africa has embarked on a land reform programme and several other programmes to support the disadvantaged farming communities; some have been developed within the framework of the Agricultural Broad Based Black Economic Empowerment (AgriBEE).

Despite its modest contribution to GDP (2.6% in 2008), agriculture remains important because it absorbs a significant share of the unskilled workforce. South Africa's agricultural potential is limited. Conditions for agricultural production are not favorable in most regions due to poor land quality, scarcity of water, and highly variable climatic conditions. Nevertheless, agriculture is well diversified. South Africa has used its scarce arable land to produce high value crops such as grapes, fruit, and nuts, and non-arable agricultural land has been devoted to sheep and cattle farming in addition to wildlife tourism and conservation. The most important products are sugar cane, followed by field crops such as maize and wheat. Livestock remains the most important category of agricultural production; poultry meat, beef, milk, and dairy are the major component. South Africa has historically had a comparative advantage in agriculture products. South Africa's agriculture is increasingly export oriented; about 40% of total production is exported. Agricultural products accounted for 9.5% of total exports in 2008.

South Africa's main objective in agriculture is to create an efficient and internationally competitive sector that contributes to the objectives of the Growth, Employment and Redistribution (GEAR) Strategy, aimed at increasing economic growth by reducing income inequality and eliminating poverty. Other agricultural policy objectives include the emergence of small and medium-sized farms, food security, food safety, and environmental protection.

The principal legislation on agriculture is the Marketing of Agricultural Products Act aimed at, inter alia, improving market access and promoting agricultural exports. The Department of Agriculture and the Department of Land Affairs, with the assistance of the Departments of Water Affairs and Forestry, Environmental Affairs, and Trade and Industry are the main institutions in charge of formulating and implementing agricultural policy, and regulating the sector. Other institutions involved in the sector include the Agricultural Research Council (ARC), the National Agricultural Marketing Council (NAMC), and financial institutions such as the Land and Agricultural Bank (Land Bank) and the Development Bank of South Africa (DBSA).

Major areas of public support are R & D, education and training, inspection and control, infrastructure and food aid. Consistent with government policy, new programmes have been implemented to support the development of “market oriented family farms” emerging from the land reform process. The Comprehensive Agricultural Support Programme (CASP) is aimed at supporting the beneficiaries of the land reform willing to establish commercial farms. The overall goal is to provide the necessary services, in particular subsistence, to emerging and commercial farmers, and to ensure that the goal of food security for the country, and for the poor and vulnerable, is met. The CASP has several pillars - information management; technical and advisory assistance; training and capacity building; marketing and business development; supply of on-farm and off-farm infrastructure and inputs; and financial assistance. The CASP is a complement to the Micro-Agricultural Finance Schemes of South Africa (MAFISA), a state-owned scheme to provide micro and retail financial services to communal farmers and emerging entrepreneurs. MAFISA, launched as a pilot project in three provinces in 2005, is now operational in all provinces, and several financial institutions participate in the scheme. MAFISA provides loans at subsidized interest rates; the interest rate has been pegged at 8% since 2005. MAFISA funds are administered by the Land Bank (Land Bank operates as a development-finance institution within the agricultural and agri business sectors. It is regulated by the Land and Agricultural Development Bank Act), which performs fund and treasury management functions on behalf of the Department of Agriculture.

State involvement in agricultural markets has reduced significantly over the years especially with the partial liberalization of the sugar market. However certain restrictions continue. Raw sugar can be exported only through a single channel and quotas are allocated to individual producers for sugar sold on the domestic market. The domestic price is above world market prices because of the quota system and border protection. Guideline prices are also set for, inter alia, grapes intended for production of wine, grape juice, drinking wine, distilled wines and wine spirit, and export wines; milk and other dairy products; and cotton lint. However, according to the authorities, these prices are calculated for every product subject to a levy, are for administrative purposes only, and have no effect on the market price.

B) INDUSTRY/ MANUFACTURING

The contribution of manufacturing to GDP stood at 15.9% in 2008. The sector was affected by the global downturn. The share of manufacturing exports and imports in total merchandise trade declined from 61.2% to 51.5% and from 69.5% to 61.5%, respectively, between 2002 and 2008.

State intervention in the manufacturing sector remains substantial. Incentives are one of South Africa's key industrial policy instruments. A wide range of schemes continue to benefit manufacturing. These include general incentive schemes and structural adjustment programmes for specific industries (e.g. automotive, and textile and clothing), innovation, and research. The industries, actively supported by the Government since 1994, such as the automotive, carbon and stainless steel, and the textiles and clothing, have become South Africa's most important industries. The automotive sector is the leading manufacturing sector, predominantly because of the incentives provided through the Motor Industry Development Programme

(MIDP). A range of resource-processing industries, including carbon and stainless steel, chemicals and aluminium, have been supported by various tax instruments and other state support, while the textiles and clothing sector has benefited from the Duty Credit Certificate Scheme.

National Industrial Policy Framework (NIPF) was adopted in 2007. The NIPF sets out broad policies in the context of the Accelerated and Shared Growth Initiative for South Africa (ASGI-SA) with the aim of halving unemployment and poverty by 2014 through accelerated growth of at least 6% as of 2010. The main objectives of the NIPF are to diversify production so as to diminish the current reliance on traditional commodities; move towards a knowledge-based economy; facilitate progression up the value chain and promote labour-intensive industries with the increased participation of SMEs and historically disadvantaged people. Implementation of the NIPF is spelled out in the Industrial Policy Action Plan (IPAP) approved by Cabinet in July 2007. The focus of the work on industrial development will be on implementing sector strategies including those that have been finalised for business process outsourcing (BPO) and tourism, identifying action plans for priority sectors in which strategies have been developed such as metals, chemicals, automotives, and clothing and textiles. Furthermore, work will be undertaken to finalise strategies and action plans for additional sectors such as capital goods, agro-processing, film and creative industries and capital goods. The Regional Industrial Development Strategy (RIDS) has been developed in support of the NIPF. The RIDS proposes interventions to address regional disparities by financing regional development. Going forward, business cases for various proposals will be developed as part of an implementation plan for the RIDS.

C) MINING AND ENERGY

The State retains a significant role in the mining and energy sector with several state-owned enterprises (SOEs) operating in both subsectors. The National Energy Regulator of South Africa (NERSA) is in charge of the petroleum, gas, and electricity subsectors. It issues licences for building petroleum pipelines, and loading and storage facilities; constructing and operating gas transmission, distribution, and re-gasification facilities, “conversion of infrastructure”, and trade in gas; and electricity generation and distribution. NERSA sets and approves utility charges; utility companies (e.g Sasol or Eskom) may not increase their regulated rates or alter their conditions of service without NERSA’s approval. NERSA also ensures that access to petroleum pipelines and loading and storage facilities is provided on the “appropriate” land. It promotes competition amongst petroleum pipelines users and gas industries, as well as the optimal use of gas resources and settles customer disputes. NERSA is financed with public funds and levies charged to “regulated” industries, charges on dispute resolution, and licence fees.

Mining: Mining accounted for 5% of GDP and employed around 495,474 workers in 2007. It generated 8.9% of total fixed investment (12.1% of total private-sector investment), and contributed 30.2% of South Africa’s total merchandise exports, despite a decline in production (of 0.8% compared with 2006) led by a decline in gold and diamond production.

Average tariff protection for mining and quarrying is low (0.8%). Most activities, with the exception of salt mining (with a 10% tariff), are subject to tariffs of 0 to 2.9%. The Mineral and Petroleum Resources Development Act (MPRDA) stipulates that both foreigners and nationals have the right to apply for a prospecting right, mining permit, reconnaissance permit, beneficiation right, exploration right, and/or mining right as long as they comply with the requirements set out in the law.

Mining companies are liable for value-added tax on goods and services supplied to them, but exports of mining products are zero rated. Thus mining companies are entitled to refunds of VAT paid on inputs used in exported items.

The Department of Minerals and Energy has embarked on a 2008/09-2010/11 Strategic Plan aimed at increasing investment in mining, promoting the sustainable use of energy resources, and ensuring the development of an efficient, safe, and cost effective electricity industry. The Plan also envisages a royalty on the sale of mineral resources; the rate would be determined by a formula based on the degree of refinement and the value of the company's gross sales.

Energy: South Africa does not have significant deposits of oil and natural gas. In January 2008, reserves were estimated at 15 million barrels of oil and 318 million cubic feet of gas. The Central Energy Fund (CEF) (Pty) Ltd. was created to engage in the acquisition, exploration, generation, marketing, and distribution of oil and gas and to undertake research related to the energy sector. CEF is a private company, incorporated under the Companies Act, which is wholly owned by the State and comprises seven operating subsidiaries.

South Africa is a net importer of crude oil. Around two thirds of its consumption is imported, mainly from Iran, Saudi Arabia, Nigeria, and Angola. Imports of crude oil bear a 0% tariff rate. All the refined products produced in South Africa's companies are sold in the domestic market. Tariffs on imports of refined products average 3.8%. Imports of oils and other fossil fuels inorganic acids are also subject to import control measures. The Energy Master Plan on liquid fuels supports the development of additional crude refinery capacity to address the shortage of locally refined products.

South Africa's natural gas resources are scarce and are offshore. To compensate for the lack of natural resources, much of the gas used in South Africa is synthetic gas produced from coal by Sasol. Natural gas is imported from Mozambique and Namibia.

Wholly state-owned enterprise Eskom supplies most of the South African market and exports electricity. Additional electricity is generated by South African municipalities (2,400 MW) and private companies (800 MW). Eskom owns and operates the national transmission system. Its power generation capacity is of 42,000 MW; it produces electricity for the domestic market and exports to neighbouring countries. South Africa is a net exporter of electricity. It is a member of the Southern African Power Pool, which facilitates trade in electricity within the Southern African Development Community (SADC).

2.2 Trade in Services

Services (including construction) contributed some 65% to South Africa's GDP in 2007. Growth in 2008 reflected further expansion in telecommunications, financial services, construction, and wholesale, catering and accommodation ahead of the 2010 FIFA World Cup. The largest services subsectors in 2008 were finance, insurance, real estate, and business services (20.1% of GDP); community, social and personal services (18%); and wholesale, retail trade, catering and accommodation (13.8%). South Africa is a net services importer. Travel (tourism) has dominated services exports, illustrating the country's importance as a tourist attraction, while transportation was the main import, reflecting long distances from key markets. More efficient services delivery is a government priority; however, state intervention remains significant, rendering the supply of key services inefficient and costly.

South Africa's specific commitments in the Uruguay Round covered business services; communication services (courier services and telecommunication services); construction and related engineering; distribution services; environment services; financial services (insurance and insurance related services, and banking and other financial services); tourism and travel related services; and transport services. The horizontal commitments on market access contains a limitation on temporary presence for up to three years for those engaged in the supply of certain services, without requiring compliance with an economic

needs test; limitations on national treatment relate to local borrowing. South African registered companies with a non-resident shareholding of 25% or more have unspecified limits on local borrowing.

South Africa participated in the extended negotiations on basic telecommunications and financial services, and accepted the GATS Fourth Protocol (basic telecommunications) and the reference paper, and the Fifth Protocol (financial services). South Africa adopted the Reference Paper on Regulatory Principles as an additional GATS commitment. South Africa made commitments during the financial services negotiations to either maintain or expand the market access currently offered to foreign financial service suppliers.

South Africa grants MFN treatment in services to all WTO Members. The only two MFN exemptions listed relate to financial services and transport services. Members of the Common Monetary Area (i.e. Lesotho, Namibia, and Swaziland) enjoy preferential access to South Africa's capital and money markets and transfer of funds amongst CMA members is exempt of exchange controls. The right to carry goods and passenger to or from South Africa and between third countries (e.g. Botswana, Lesotho, Swaziland, Malawi, Zimbabwe, and other sub-Saharan African countries) by road, is reserved only to operators of contracting parties of a regional and plurilateral road transport agreements. Cabotage is restricted to South African registered vehicles and operators.

2.2.1 Financial services

Financial institutions in South Africa have had several years of robust economic growth, supported by prudent macroeconomic management and high commodity prices, and virtually no exposure in the sub-prime mortgage market. Up to end-2008, banks and insurance companies were profitable, and enjoyed good capitalization and reserve levels. The financial sector has also benefited from an effective regulatory framework. Commercial banks are the largest segment of the financial sector followed by life insurance companies.

The South African Reserve Bank (SARB) is responsible for commercial bank regulation and supervision. The SARB is governed by the Banks Act and the Mutual Banks Act, under which it must assign a Registrar of Banks to be in charge of banking supervision. Banking supervision has strengthened in recent years through the SARB's implementation of Basel II. In addition, the National Credit Regulator (NCR), established under the National Credit Act of 2005, regulates the "credit industry" in South Africa. It regulates all types of household credits extended by banks and non-banking institutions. The role of the NCR has become more relevant given the level of household indebtedness. It prohibits "reckless lending", which has required lenders to increase underwriting, and improve risk management, and has increased transparency. In addition to the commercial banks, several state-owned development banks/finance institutions have been created to finance projects in specific sectors, to support SMEs, and to provide banking services to the "unbanked" sector of the population.

The requirements (e.g. minimum capital requirements) for establishing a domestic or foreign bank are the same. Foreign-owned banks may operate in South Africa in three different corporate forms - as branches of their foreign subsidiary with domestic registration; as subsidiaries of their foreign parent (and legally constituted as domestic banks); or as foreign representative offices. Branches and subsidiaries are subject to the same supervisory requirements than domestic banks. Access to banking services has increased markedly. This has been as result of, inter alia, the Financial Sector Charter, which calls for the banking sector to expand its branch network; and the National Credit Act of 2005, which calls for the development of an accessible credit market to address the needs of the disadvantaged low-income population and remote communities.

In banking services, South Africa's GATS commitments on national treatment specify that natural persons holding deposit accounts in branches of banks not incorporated in South Africa must maintain a minimum balance of R 1 million in their accounts. Commitments were also made on market access, under which dealing in foreign exchange in South Africa may only take place through a dealer authorized by the South African Reserve Bank, and companies involved in, inter alia, asset management, collective investment schemes, and custodial services for securities and financial instruments, must be incorporated as public companies in South Africa and registered with the supervisory authority to carry on business in South Africa.

South Africa's insurance industry comprises long-term (mostly life) insurance, short-term insurance (corporate, general, personal motor vehicle), and reinsurance. Every insurer or reinsurer is required to be registered for a specific class or classes of business, i.e. assistance, disability, fund, health, life, and/or sinking fund. The requirements are the same for national and foreign companies. Foreign insurers/re-insurers still need to be incorporated as a public company in South Africa and be registered with the supervisory authority to carry on insurance business in South Africa. The minimum capital requirement for long-term insurers (for one or more kinds of long-term insurance policies) is R10 million or an amount equal to the operating expenses; whichever is higher while for short-term insurers (for one or more kinds of short-term insurance policies) the minimum capital requirement is R5 million. The actual capital will, however, be dictated by the type and volume of business to be conducted, as set out in the five-year projections submitted with the application. South African legislation requires reinsurers to register in South Africa in order to conduct business in the country. South African insurance companies however, often enter into reinsurance arrangements with foreign reinsurers. In order for this reinsurance to be acknowledged for purposes of capital adequacy requirements, the foreign reinsurer must provide security in the form of a monetary deposit with the South African primary insurer or an irrevocable guarantee or a letter of credit issued by a South African bank. The acquisition of 25% or more of the value of the shares in a registered insurer, by nationals or foreigners, requires the written approval of the Registrar of Insurance.

Insurance Laws Amendment Act addresses technical and regulatory issues in previous Acts, closes certain regulatory gaps, improves certain provisions and updates outdated references. The FSB, under the National Treasury (NT), is responsible for regulating insurance, pension funds and intermediaries, and the capital markets. The FSB operates under various pieces of legislation; it is accountable to government and parliament. The FSB is funded by levies and fees charged to the regulated entities. Every long-term and short-term insurer must pay a levy to the Financial Services Board. In addition, all license holders are required to submit quarterly and annual financial statements.

Market access limitations in South Africa's GATS commitments also apply to the insurance sector. Insurers/re-insurers need to be incorporated as a public company in South Africa and registered with the supervisory authority to carry on insurance business in South Africa; the executive chairman, public officer, and the majority of directors must be resident in South Africa. The acquisition of 25% or more of the value of the shares in a registered insurer requires the written approval of the Registrar of Insurance.

2.2.2 Telecommunications

The growth of this sector has been hampered by regulatory constraints restricting competition, especially the state semi-monopoly on fixed wire services, and the resulting high charges and inadequate services that penalize consumers, including businesses. The Department of Communications (DoC) is in charge of policies and legislation related to communications technology (ICT), ensuring reliable and affordable ICT infrastructure, strengthening the Independent Communications Authority of South Africa (ICASA),

the regulator, enhancing the capacity of and overseeing state-owned enterprises (SOEs), and fulfilling South Africa's international ICT responsibilities. ICASA regulates broadcasting, postal, and telecom services; issues licenses for related providers; enforces compliance with rules and regulations; monitors complaints and disputes brought against licensees; manages the frequency spectrum; and protects consumers. According to the provisions of the Act, the Competition Act applies to the telecom subsector. ICASA cooperates with the Competition Commission on any type of investigation.

The Electronic Communications Act of 2005 is aimed at facilitating the synergies between telecom, broadcasting, and information technologies services, while promoting competition in the sector through inter alia, facilitating access to networks. Under the Act, a new licensing framework ("technologically neutral") for electronic communications network services (ECNS), electronic communications services (ECS), and broadcasting services should have been effective as of early 2009. Up to 2009, South Africa had two types of telecommunications licenses - individual and class licenses. Individual licenses, for services with a significant impact on socio-economic development, are issued upon an invitation to apply by ICASA. Applications for class licenses require registration with ICASA upon payment of a fee. Individual licenses are valid for 20 years and class licenses for ten years; both are renewable.

Under its GATS specific commitments South Africa committed to license a second telecommunications supplier no later than 1 January 2004, to compete against Telkom in long-distance, data, telex, fax, and private-leased circuits services. As a result, a second operator was licensed, but Telkom continues to have a de facto monopoly over the network.

South Africa is a member of the International Telecommunications Union, the Telecommunication Regulatory Association of Southern Africa, the International Institute of Communication, the African Communication Regulation Authorities Network, and the Southern African Transport and Communications Commission.

2.2.3 Transport

The Department of Transport (DoT) develops, co-ordinates, and implements transport policies. It has established several public entities that are in charge of transport services. These include the South African National Roads Agency Ltd.; Cross-Border Road Transport Agency; Passenger Rail Agency of South Africa; South African Civil Aviation Authority; Airports Company South Africa Ltd.; Air Traffic and Navigation Services Company Ltd.; and South African Maritime Safety Authority. The National Ports Act of 2005 has been enacted which calls for the establishment of the National Ports Authority and a Port Regulator, and allows for certain ports to be administered by the National Ports Authority.

There is a longstanding need for major reforms in South Africa's transport sector. Transnet, a state-owned enterprise, continues to be the most important player in the sector, operating and controlling South Africa's freight infrastructure. Transnet is divided into five companies - Transnet Freight Rail (freight rail), Transnet Rail Engineering (rolling stock maintenance), Transnet National Ports Authority (formerly the National Port Authority (NPA) in charge of landlord function for ports), Transnet Port Terminals (port and cargo terminals management), and Transnet Pipeline (petroleum and gas products storage). Transnet's monopolistic position in different transport segments allows for cross-subsidization; the company uses the profits from export-related transport activities to subsidize loss-making activities such as general freight and passenger transport.

Under the GATS, South Africa made commitments on road transport services, including passenger transportation, freight transportation, and maintenance and repair of road transport equipment.

2.3 Trade in Intellectual Property

Intellectual property rights (IPRs) are protected under a variety of laws and regulations. The DTI administers these Acts through the Companies and Intellectual Property Registration Office (CIPRO), which publishes the monthly Patent Journal. The journal contains the filing status of patents, trademarks, designs, copyrights, cinematography and films applications, approvals, and disapprovals.

South Africa is a member of the WTO and as such has ratified the TRIPs Agreement. It is a member of the World Intellectual Property Organisation (WIPO) and is a contracting party to a number of treaties including the Paris Convention for the Protection of Industrial Property, Berne Convention for the Protection of Literary and Artistic Works, Trademark Law Treaty, WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT).

2.3.1 Patents

Under the Patents Act of 1978 (amended in 1998), patents of invention are granted for 20 years from the date of filing, subject to payment of the prescribed renewal fees by the patentee concerned or an agent after the third year; there is no extension. Patents are granted for any invention involving an inventive step capable of being used or applied in trade, industry or agriculture. Patent applications are examined for novelty. Patents of addition are granted for the remaining duration of the patent of invention. For the duration of the patent, the patentee has the right to exclude other persons from making, using, exercising, disposing or importing the patented invention. Parallel imports are not allowed in South Africa. If a patentee does not use the patent within three years of grant (or four years from application date, whichever is later), then a compulsory licence may be ordered. As a signatory of the Paris Convention, South Africa gives any person filing for a patent in another member nation a one-year priority (from the original registration date) for filing in South Africa. South Africa also accepts patents filed under the international provisions of the Patent Cooperation Treaty.

2.3.2 Trademarks

South Africa enacted its current trade mark law in 1993 (effective May 1995). Trademarks registered under this Act are granted for ten years and may be renewed indefinitely for ten-year periods. The law also protects internationally recognized trademarks. Trademarks are classified according to international standards. Trademarks must be accepted by the Trademarks Office in Pretoria in order for ownership claims to succeed. The mark must be distinctive or capable of becoming distinctive; it cannot be a generic term or graph depiction. The applicant also must use or intend to use the mark to be considered for registration. There is a trademark registration fee and a renewal fee. A mark can be removed from the register if it is not used for a period of five years, the individual owner dies or the company owning the mark is liquidated. The mark can also be removed if the entry was made “without sufficient cause” (e.g. the applicant registered the mark without intending to use it).

2.3.3 Copyright and related rights

Literary, musical and artistic works, cinematographic films, sound recordings, and software are protected under, inter alia, the Copyright Act of 1978 and its amendment which appears to be based on the provisions of the Berne Convention. Copyright ownership is granted automatically when the work is published. There are no legal or administrative processes to obtain copyrights. Films are the only works that require registration. The registration provides proof in case of copyright infringement, but provides no additional rights. Copyright protection for literary, musical, and artistic works extends for

the life of the author, plus 50 years. For computer software, films, photographs, and sound recordings, protection extends for 50 years from when the work is publicly released. Protection for performers is for 20 years, non-renewable.

2.3.4 Industrial Designs

Designs are protected in South Africa under the Designs Act of 1993. A registered design, either aesthetic or functional, relates to the shape or appearance of an article irrespective of whether it is patentable. Aesthetic designs are required to be new and original. Functional designs are subject to a novelty examination. The Act also allows for protection of designers of functional circuits. Protection is granted for 15 years for aesthetic designs and 10 years for functional designs, from the date of registration or issue, whichever is earlier.

2.3.4 Geographical Indications

There is no specific legislation to protect geographical indications (GIs). GIs continue to be protected under the Trade Marks Act, the Merchandise Act, and the Liquor Products Act. GIs may be registered in the form of collective trademarks or of certification trademarks and thus protected in South Africa.

2.3.5 Enforcement of IPRs

The Office of Company and Intellectual Property Enforcement (OCIPE), under the DTI, is in charge of IPR enforcement. OCIPE is responsible for education and capacity building, investigations, monitoring, and following complaints. OCIPE has inspectors to monitor enforcement. However, according to the authorities, since counterfeit products are mostly imported, the South African Revenue Services (SARS) Customs officials play a significant role in keeping the counterfeits from entering South Africa. IPR holders may also approach the DTI, South African Police Service (SAPS) or SARS Customs officials for assistance if their rights have been infringed.

The Counterfeit Goods Act introduced measures aimed at preventing trade and commercialization of counterfeit goods. It allows the Commissioner for Customs and Excise, upon application by the property right owner, to seize and detain counterfeit goods or suspected counterfeit goods imported into South Africa. The Copyright Act also provides for penalties in case of copyright infringement.

2.4 Economic Policies affecting Trade

2.4.1 Monetary and Fiscal Policy

Monetary Policy: The South African Reserve Bank (SARB), whose independence is guaranteed by the Constitution, has maintained an inflation targeting system since 2002. In 2007, inflation breached the upper end of the inflation target range. South Africa's Monetary Policy Committee (MPC) has increased interest rates several times with a view to containing inflation and moderating expectations for further price increases.

Fiscal Policy: In an effort to cushion the domestic economy, South Africa adopted an expansionary fiscal policy stance, with a projected budget shortfall of 3.9% of GDP for 2009. In line with national development priorities, the additional public-sector spending would be in infrastructure, promoting improved delivery of public services and reinforcing the social safety net. The generally stable fiscal position, up to 2007,

had been mirrored by a steady decline in the public debt. The ratio of national government debt to GDP was 23.8% in 2008.

2.4.2 Foreign Exchange and Balance of Payments

Foreign Exchange: Under the freely floating exchange rate system maintained by the South African Reserve Bank (SARB), the rand has been volatile over the last few years, partly attributed, by the authorities, to the relatively high proportion of off-shore trading. However, volatility can also be explained by South Africa's dependence on commodities whose prices have been highly variable. In line with its policy commitment, the SARB has continued to gradually build up foreign exchange reserves without seeking to influence the value of the exchange rate. SARB's gross reserves increased from US\$6.3 billion in 2002 to US\$38.4 billion at the end of 2008; nevertheless, reserves remained at around four months of imports. South Africa posted a deficit in the current account of the balance of payments throughout 2003-08, contrasting with the surpluses recorded in 2001 and 2002. The steadily widening gap reached 7.41% of GDP in 2008, a level not seen since the early 1980s. The current account deficit is the major source of vulnerability, since it exposes South Africa to the risk of a financial crisis due to the sudden halt of capital inflows.

Balance of Payments: South Africa posted a deficit in the current account of the balance of payments throughout 2003-08, contrasting with the surpluses recorded in 2001 and 2002. The steadily widening gap reached 7.41% of GDP in 2008, a level not seen since the early 1980s. Despite slowing private consumption growth, imports of goods and services continued to outpace exports as demand for capital goods is increasing. Export earnings also suffered from output constraints in the mining sector, experienced in the beginning of 2008. However, the recent decline of the international price of oil, which had exacerbated current account imbalances for a prolonged period, resulted in a significant narrowing of the deficit in the fourth quarter of 2008.

Portfolio investment was crucial in financing the current account deficit until 2006. However, the crisis compounded investors' concerns about the rising deficit and, accordingly, risk premium on South African debt increased markedly and portfolio inflows subsided, weakening the stock market index and the rand. Nevertheless, non-residents' confidence in the economy's growth potential resulted in rising levels of foreign direct investment. Hence, during 2007 and 2008, FDI and "other investment" emerged as the predominant source of foreign funds, more than offsetting the deficit in the current account.

2.4.3 Foreign Investment Regime

FDI inflows are predominantly channelled into mining and quarrying, manufacturing (notably the clothing industry), telecommunications, financial services and retail trade. Besides being one of the leading investors in the economies of its SACU partners, South Africa successfully attracts capital inflows from the rest of the African continent.

In 2008, FDI stood at US\$9 billion. The majority of overseas funds originate from the EU, particularly from the United Kingdom and Germany. The United States, Switzerland and Japan have also been important investors. Non-resident investors with encouragement from South Africa have taken ownership in local companies across a wide range of sectors, including glass manufacturing, retail trade, accommodation, financial services and platinum mining.

Trade and Investment South Africa (TISA) is mandated to promote investment, particularly FDI, and export development in South Africa. South Africa does not have a standalone investment law; investment

is governed by sector-specific legislation, which establishes the conditions for investment. A variety of schemes provide incentives to investors. According to the authorities, national treatment applies to all foreign investors, who can repatriate the proceeds and earnings of their investments after payment of taxes. TISA focuses on activities with the greatest growth potential, such as fine and speciality chemicals, polymers, and pharmaceuticals; minerals, and ferrous and non-ferrous metals; agri-processing, meat, fruit, and vegetables; textiles and clothing, and leather; auto industry; technology and research; and information and communication technology.

South Africa has made significant progress in liberalizing exchange controls including:

- Offshore direct investments by companies: the requirement that South African companies had to obtain a majority (i.e. over 50%) shareholding in foreign entities and/or projects outside of Africa was replaced by a minimum requirement of 25%.
- Customer foreign currency accounts: South African companies involved in international trade are now allowed to operate a single customer foreign currency (CFC) account for both trade in goods and services, and can use it for a wider variety of “permissible” transactions.
- Rand currency futures: the Johannesburg Securities Exchange has been granted permission to establish a rand currency futures market. This will enable South African investors to participate directly in the currency market through a transparent and regulated domestic channel.

Despite the ongoing liberalization, two restrictions to foreign investment remain in place in South Africa: (i) local minimum equity requirements for banks and insurance companies; and (ii) businesses with non-resident ownership or control equal to or greater than 75% are restricted as to the amount they may borrow from local financial markets. In addition, a foreign bank establishing a branch may be required to employ a minimum number of local residents to obtain a banking licence, and to have a minimum capital base. With the exception of financial institutions, any foreign company may establish a place of business in South Africa, and conduct its activities without having to incorporate as a local entity. The establishment of a branch requires registration as an “external company.” Additional approval is required for a business entity that will be involved in import and export activities. All foreign investors require a business permit to establish a company in South Africa. Nationals of the United States, European Union, and Canada do not require visas for business purposes. All other foreign nationals who apply for a business visa must apply through South Africa’s missions abroad.

South Africa has continued to promote outward investment, particularly in the SACU and SADC areas, in an effort to promote industrialization in the region. The Government is encouraging South African firms to invest regionally through the relaxation of foreign exchange controls on capital destined for the region.

2.4.4 Pricing Policy

Under the Marketing of Agricultural Products Act, guideline prices are determined for all products subject to levies. These guideline prices are for administrative purposes only and seek to ensure that the levy does not exceed 5% of the actual price. Guideline prices are set according to the national average price at the first point of sale (i.e. closest to the farm); they are revised every three years. Retail and wholesale fuel prices continue to be regulated by the Government. The pricing of services supplied by parastatals operating in various areas, such as telecommunications and transportation, remains subject to control.

The pricing mechanism on sugar appears to have been suspended. Guideline prices are, inter alia, set for grapes and grape juice concentrate intended for the production of wine, as well as for wine.

2.4.5 Competition Policy

The authorities continue to address anti-competitive practices across all sectors of the economy and are attempting to strengthen the existing competition regime. Competition authority is vested in three institutions with distinct functions - the Competition Commission of South Africa (CCSA); the Competition Tribunal of South Africa (CTSA); and the Competition Appeal Court (CAC). The CCSA is responsible for investigation, prosecution, and advocacy. CTSA deals with all large mergers and all restrictive practices and acts as an appeal body for CCSA's decisions in regard to small and intermediate mergers and exemptions. The CAC is a division of the High Court.

The Competition Act of 1998 prohibits anti-competitive conduct, restrictive practices (such as, price fixing and collusive tendering) and "abuses" by "dominant" firms (firms with a market share of 45% or more). The Act also requires a notification and prior approval procedure for mergers and acquisitions, and carries penalties for contraventions. In principle, the Act applies to all sectors of the economy; however, the Competition Commission has the right to exempt firms from the application of the Competition Act. Exemptions are granted by the Commission if the agreement or practice contributes to export promotion; assisting SMEs and historically disadvantaged persons to become competitive; stopping the decline of an industry; or protecting the stability of any industry designated by the Minister responsible for that industry. The Act also regulates anti-competitive behaviour of state-owned enterprises.

In 2008, the DTI introduced the Competition Amendment Bill into Parliament to strengthen certain provisions of the Competition Act, to enable the competition authorities to better deal with anti-competitive price-setting strategies, to address the levels of concentration in several sectors and the "complex monopolies" in operation because of the competition dispensation of the past; to fully incorporate the CCSA's Corporate Leniency Policy (CLP) into the law; and to strengthen the penal provisions of the Competition Act. The provision on "complex monopoly" conduct introduced in the Bill is intended to combat the anti competitive behaviour of firms in highly concentrated markets. The need for this provision arose because the Competition Act only targets specific violations and does not address outcomes from anti competitive behaviour not considered as an infringement in the Act. According to the DTI, "complex monopolies" exist in several industries including banking, bread, fertilizer, milling and telecommunications.

The Commission's CLP provides an incentive to cartel members to admit their anti competitive activities, since the first cartel member to do so will be given immunity from prosecution with no administrative fine. The CLP has been effective in helping the CCSA to uncover collusion and bid-rigging, hence DTI's proposal to introduce the policy in the future amended law. CCSA's Enforcement and Exemptions Division investigates anti-competitive practices and assesses of exemption applications. Complaints are either initiated by the Competition Commissioner or filed by members of the public or private enterprises. Where a prohibited practice has been established, the matter is referred to the CTSA for adjudication. In some cases, the CCSA reaches a settlement agreement with the parties.

2.4.6 State Ownership and Privatization Policy

In 2002, South Africa last notified to the WTO that it did not maintain any governmental and non-governmental state-trading enterprises as defined by Article XVII of the GATT 1994. However, State-

owned enterprises (SOEs) still play a critical role in South Africa's economy, operating in key sectors of the economy such as telecommunications, energy, defence, and transport. Until 2004, South Africa's intention was to privatize SOEs; however, the introduction of the Accelerated and Shared Growth Initiative (ASGISA) in 2003-04, which gives the SOEs a more significant role in the development of the economy, brought about a strategic shift. Moreover, according to the authorities, the commercialization and/or partial privatization of some SOEs was virtually put on hold for some years because the programme had been relatively unsuccessful. During 2001-08, only one SOE (Adventure Resorts) was sold, for some US\$10 million, while the sale of 25% of Telkom's shares in 2003 resulted in US\$500 million profit.

Since 2004, the aim has been to restructure the SOEs under the responsibility of the Department of Public Enterprises (DPE) so that they become more efficient, profitable businesses that could contribute to the economic growth and development of the country. The DPE portfolio comprises key network infrastructural providers (Eskom, Transnet, and Broadband Infraco); a full service network airline (South African Airways); an advanced military aerospace and defence manufacturer (Denel); a major technology development initiative (Pebble Bed Modular Reactor); a forestry company (SAFCOL); and a diamond mining company (Alexkor). Broadband Infraco and South African Express Airways (SAX) became SOEs in the 2007-08. Restructuring and further investment in SOEs have continued. The SOEs had to streamline their operations, dispose of non core assets, reduce costs, and improve access of the historically disadvantaged to utilities. However, some SOEs remain loss-making, with weak financial positions, and continue to be undercapitalized. Although transport, energy and defence have been somewhat opened to competition, three major public enterprises in principle still operate under monopoly or hold exclusive rights - Transnet (transport), Eskom (electricity) and Denel (Defence).

3. Multilateral, Regional and Bilateral Agreements

South Africa is a strong proponent of multilateralism and has historically played an active part in the GATT/WTO, including in the ongoing DDA negotiations where it is a key member of various configurations under the agriculture and NAMA areas of the negotiations. It has been active in several coalitions forged in the WTO, such as the Africa Group, the Cairns Group of agricultural exporters, G-20 and NAMA-11; which have been important for advancing South Africa's views.

South Africa is an important member of the Southern African Development Community (SADC), of which all SACU countries are members.

The launch of the NEPAD in 2001 and the adoption of the African Peer Review Mechanism (APRM) in 2003 are important landmarks in the effort to develop common values and standards of good governance in Africa. The mandate of the APRM is to "foster the adoption of policies, standards and practices that lead to political stability, high economic growth, sustainable development and accelerated sub-regional and continental economic integration through sharing of experiences and reinforcement of successful and best practice, including identifying deficiencies and assessing the needs for capacity building." The APRM is a voluntary mechanism available to all African Union (AU) member states. Accession to the APRM entails submitting to periodic peer reviews which include commitment to implementing the National Programme of Action (NPOA) arising from peer review, and operationalising the agreed parameters for good governance across the following four thematic areas - democracy and Political Governance, economic Governance and Management, Corporate Governance and Socio-economic Development. By 2007, there were 27 AU member countries that have voluntarily acceded to the APRM. Member states include Algeria, Angola, Benin, Burkina Faso, Cameroon, Egypt, Ethiopia, Gabon, Ghana, Kenya, Lesotho, Malawi, Mali, Mauritius, Mozambique, Nigeria, Republic of Congo, Rwanda, Sao Tomé and Príncipe,

Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Uganda and Zambia. Since its inception in 2003, the APRM Panel has launched reviews in 14 countries and fielded country review missions to five countries which include South Africa in 2006.

In addition to its regional agreements, South Africa has a series of bilateral trade arrangements. The most important is the Trade, Development, and Cooperation Agreement (TDCA) concluded in 1999 with the European Communities (EC). South Africa and the EC also concluded a Science and Technology Agreement, which provides for South Africa's qualified membership of the Cotonou Convention. The TDCA provides for asymmetrical trade liberalization between the two parties, with the aim of forming a free-trade area by 2012. South Africa will liberalize around 86% of its imports from the EC during a 12-year transitional period, while the EC will liberalize 95% in 10 years, starting from 1 January 2000. The EC agreed to complete most of its obligations on non-agricultural products in the initial 3-6 years. In the case of South Africa, sensitive products, comprising 16% of its imports from the EC, will be fully liberalized over the transitional period. Certain NAMA products, representing 3% of South Africa's imports from the EC, are only subject to partial liberalization. South Africa will remove duties on approximately 81% of its agricultural imports from the EC; while the EC will remove duties on approximately 61% from South Africa. If partial liberalization quotas are included in the latter figure, approximately 72% of South Africa's exports to the EC will be subject to some form of preference under the TDCA.

South Africa has bilateral trade agreements with Malawi and Zimbabwe, and grants non-reciprocal preferential treatment on a number of products from Mozambique. South Africa's trade agreement with Zimbabwe, a member of both COMESA and SADC, dates back to 1964, and is subject to various conditions. The duty-free regime or preferential tariff quotas apply to items including dairy products, potatoes, birds, eggs, some cereals, oil seeds, and oleaginous fruits. Live horses, asses, mules, cotton waste, and metal bedsteads are also duty-free; and specified types of woven fabrics of cotton, for example, are subject to concessionary tariff rates, when they meet specified levels of Zimbabwean content (75% in most cases). Concessional customs duties are granted by Zimbabwe on certain products exported by South Africa. The agreement with Malawi, which is also a member of COMESA and SADC, was concluded in 1990. Under the agreement, South Africa allows duty-free imports to its market of all goods grown, produced or manufactured in Malawi, subject to a minimum domestic value-added of 25%. However, preferential quotas apply to some products, such as tea (10,000 tonnes annually).

In addition to the specific agreements listed above, South African products are eligible for non-reciprocal preferences, including lower tariffs or preferential tariff quotas under, inter alia, the US African Growth and Opportunity Act (AGOA), the GSP schemes of the EC, as well as of Canada, Japan, Norway, Switzerland and the United States.

PART B

**India and the BRICS
Countries: Issues of Trade and
Technology**



India and the BRICS Countries: Issues of Trade and Technology

by Manoj Pant¹

1. Introduction

The shifts in the pattern of world trade since the establishment of the WTO in 1995 have been momentous. The most significant change has been the revival of South-South trade (SS trade). SS trade accounted for 32 percent of world trade in 2005. More importantly, about 50 percent of exports from developing countries have been to other developing countries. This trade has grown faster than world trade in both value and volume terms.

SS trade growth since the 1990s has been radically different from the expansion in the 1970s when SS trade went up to about 25 percent of world trade. At that time, SS trade expansion was driven by a rise in the price of oil which led to a transfer of purchasing power from developed countries to countries of the South. However, the expansion of the 1970s was short lived and, by the mid 1980s, SS trade dropped back to 20 percent of world trade. It was only in the 1990s that SS trade picked up again. Interestingly, the expansion of SS trade since the 1990s took place in a period when there were no major exogenous changes in the world trading environment, except the East Asian crisis. Since developed countries have enjoyed a period of relative boom during this period, the expansion of SS trade cannot be attributed to a demand crisis in the developed world. It is worthwhile to examine if this expansion in SS trade will mirror the 1970s. In other words, is the growth in SS trade in recent years sustainable?

Another feature of SS trade since the 1990s has been the emergence of Asia as a major growth centre among developing countries. In 2005, Asia accounted for about 85 percent of the total exports from developing countries. There also appears to have been some regional specialization with South America dominating in agricultural goods, Africa in natural-resource based goods, and Asia in manufactures. However, the share of exports of traditionally labour intensive goods like textiles, clothing and agricultural goods in SS trade declined by about 50 percent since 1995.

This period also coincided with an increase in foreign direct investment (FDI) to and from the South. In 2006, the countries of the South accounted for almost 30 percent of global inflows of FDI and about 16 percent of outflows. These statistics are important as we know that trade, technology and FDI are closely related. Trade and FDI are either complements or substitutes, in other words, FDI can either replace exports with domestic production or actually enhance them (see, Krugman, 1984).

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Finally, this was also the period when trade among the BRICS countries expanded sharply. Between 1995 and 2007, the share of intra-BRICS trade to global trade of BRICS countries increased from 6.5 percent to 13.9 percent. As can be seen from Table 1, during this period, each member country's share of intra-BRICS exports to its world exports increased by two to five times, with Brazil and South Africa experiencing the sharpest increase. Table 1 also highlights the double digit export growth for each country, particularly during the period 2001-2007. Nor is this growth limited to exports. Table 2 records similar increase in the import shares of the BRICS countries.

TABLE 1: INTRA AND EXTRA-BRICS EXPORTS (US \$ MILLION), 1995-2007

Economy	Flow	1995	2000	2007	Annual Growth rate in % (1995-2000)	Annual Growth rate in % (2001-2007)
Brazil	Export to World	46504.9	55118.9	160648.9	4.3	19.5
	Export to BRICS	2353.4	2027.9	17205.8	-3.7	42.8
	Share in BRICS	5.1	3.7	10.7		
China	Export to World	148779.5	249202.6	1220059.7	13.8	30.3
	Export to BRICS	3800.3	6031.3	71424.7	12.2	51.0
	Share in BRICS	2.6	2.4	5.9		
India	Export to World	31698.6	42358.1	145898.1	7.5	22.9
	Export to BRICS	1784.6	2090.6	14445.5	4.0	38.0
	Share in BRICS	5.6	4.9	9.9		
Russia	Export to World	78217.3	103092.7	352266.4	7.1	22.9
	Export to BRICS	4026.8*	6433.3	22934.5	12.4	23.6
	Share in BRICS	5.2	6.2	6.5		
South Africa	Export to World	24514.9	26298.0	64026.6	1.8	16.0
	Export to BRICS	805.1	939.2	6189.8	3.9	36.9
	Share in BRICS	3.3	3.6	9.7		

Source: UNCTADstat database

Note: * 1995 export figure from Russia to South Africa is not available.

TABLE 2: INTRA AND EXTRA-BRICS IMPORTS (US \$ MILLION), 1995-2007

Economy	Flow	1995	2000	2007	Annual Growth rate in % (1995-2000)	Annual Growth rate in % (2001-2007)
Brazil	Import from World	53734.3	55850.6	120621.0	1.0	13.7
	Intra- BRICS Imports	1035.5	2291.9	17014.4	22.0	39.7
	Share in BRICS	1.9	4.1	14.1		
China	Import from World	132084.0	225094.0	956115.0	1.0	13.7
	Intra- BRICS Imports	6108.7	9782.1	59265.9	22.0	39.7
	Share in BRICS	4.6	4.4	6.2		

India	Import from World	36592.1	52940.3	218645.0	9.7	26.7
	Intra- BRICS Imports	2351.6	4324.9	30746.9	16.5	38.7
	Share in BRICS	6.4	8.2	14.1		
Russia	Import from World	46301.0	33880.1	199726.0	-7.5	34.4
	Intra- BRICS Imports	1372.0*	2425.0	29541.3	15.3	51.7
	Share in BRICS	2.9	7.2	14.8		
South Africa	Import from World	27436.1	26770.7	79872.6	-0.6	20.0
	Intra- BRICS Imports	952.0	1620.1	12563.4	14.2	40.7
	Share in BRICS	3.5	6.1	15.7		

Source: UNCTADstat database.

Note: * exclude South Africa 1995 import figure.

Trends in intra-BRICS trade seem to have mirrored the trends in global trade of the countries in the South. India too seems to have followed the global trends with exports to developed countries down by about 7 percent between 1995 and 2005. These exports apparently shifted to developing countries whose share in India's exports went up by about 10 percent. However, at the commodity level, the shares of textiles and clothing declined in India's total export from 35 percent in 1995 to 16 percent in 2005. On the other hand, the share of engineering goods witnessed substantial increase.

In this paper we examine three issues. First, what has been the nature of the increase in BRICS trade and how sustainable is this? Related to this is the issue of whether growth in intra-BRICS trade (and Indian trade in particular) has now decoupled from growth in the developed economies. Second, what is the complementarity and substitutability in the commodity trade of the members of BRICS? Third, what are the possible methods of technical collaboration between BRICS countries in case of FDI? Here we will also comment on the institutional framework that such collaborations may adopt.

The paper is set up as follows. Section 2 outlines the methodology to be used to define sustainability of intra-BRICS trade and the issues of complementarity and substitutability along with the details of data sources. Section 3 presents commodity level investigation. Section 4 talks about issues related with FDI and technical collaboration. In section 5, some policy suggestions are given on possible commodity level supply linkages and methods of technical collaboration.

2. Methodology

2.1 Theory

Paul Krugman argues that while geography does determine trade, it is also true that trade determines geography over a period of time. The latter explains, for example, how over time some regions (countries) go into decline while new regions (countries) emerge as important trade centres. That trade is a function of geography was well established in the so called Heckscher-Ohlin-Samuelson (HOS) model of trade. What Krugman suggested is that in a dynamic setting, it is also possible that trade may determine geography (see Krugman, 1991).

Currently, we have three possible competing explanatory models of trade. The HOS model indicates that trade is determined by a country's resources. So a country's exports must extensively use its relatively

abundant resources. Second, the Ricardian model emphasizes the technology aspect - what a country exports is a function of what it can produce technologically at lowest cost compared to other countries. This was also the implication of Vernon's Product Cycle Hypothesis (Vernon, 1979). The similarity of the HOS and Ricardian models lies in their focus on the dissimilarities between countries as the factor propelling trade. This dissimilarity could be in resources, technology, consumer tastes, etc. Both models also imply trade in dissimilar goods which is often referred to as inter-industry trade. The third model of trade, however, focuses on the similarity of countries as being the basis of trade. This was first stated by Linder (1961) when he argued that countries which are similar in economic structure tend to trade precisely because they have similar demand patterns. Hence, in this trade, exporters do not have to invest heavily in sales promotion activities because consumers in these countries are already familiar with these products. This was formalized by Krugman (1979) in a model of trade with differentiated goods. The crucial difference from earlier models was that this trade between similar countries was in similar but differentiated goods and labeled as intra-industry trade, as distinct from the trade in dissimilar homogenous goods which occurs in the HOS and Ricardian models. In other words, trade between two countries exchanging computers for food would be labelled as inter-industry trade, while trade in different types of steel products would be categorised as intra-industry trade.

The type of trade taking place has enormous policy implications. Typically, when trade expansion takes the HOS or Ricardian route, countries must undergo structural change (because exporting sector expands and importing sector contracts) as trade expands. Thus, for example, typically trade between developed countries, North (hereafter referred to as N) and developing countries, South (hereafter referred to as S) is of the HOS or Ricardian type. Here, for example, as the S expands its exports of labour or land intensive commodities, it simultaneously imports commodities like computers, cars and other capital goods which use more capital or high technology. This leads to a disappearance of the import substituting sectors in both sets of countries with consequent dislocation of labour employed in these sectors. Political resistance to expansion of such trade follows and the structural adjustment needs a lot of time till labour is relocated and/or re-skilled. This has happened in, for example, the textiles sectors in N and some capital goods sectors in S. In other words, trade expansion of the HOS or Ricardian variety typically involves labour displacement in all countries.

On the other hand, trade of the Krugman variety (intra-industry trade in similar commodities) typically involves adjustment which only implies relocation of labour within the same industry and not any major labour dislocation across unrelated industries. Most N-N and S-S trade is usually of this type. Since no labour displacement takes place, expansion of such trade faces less political resistance.

The theory outlined above will be used to look at the sustainability of intra-BRICS trade. If intra-BRICS trade is mainly composed of labour intensive goods which are typically exported to the N countries, then it can be argued that this trade is not sustainable but is driven by temporary demand problems in the N countries. On the other hand, if this trade is in items where trade is typically of the intra-industry variety, then it is likely to be sustainable. The issue then is of the proper supply linkages, FDI and technology. Moreover, if trade is of the intra-industry variety, then it typically implies that the trade is symmetrical. Here some tests of this trade symmetry will be conducted.

On the issue of technology, it has been argued that the principal factor that drives trade today is FDI which also implies technological interchange between countries. It is in fact recognized that the existence of FDI determines technology and productivity to a greater extent than patent and technology purchase agreements (see, Pant and Mondal, 2010; Kathuria, 2000). In our study, we will see what have been the trends in intra- BRICS flows of FDI and the sectoral composition of such flows. The issue is whether FDI trends are establishing supply linkages which can make intra-BRICS trade sustainable.

2.2. Data and Data Sources

This study will concentrate on the implications of trade patterns and not go into the detailed history of domestic supply and demand issues in individual countries. The emergence of the BRICS is a new feature of world trade. Hence, the only possibility is to infer sustainability based on past performance. We have chosen the period of study as 1995-2007 as this was a period of fairly calm growth in world trade with no major exogenous changes. In particular, the period after 2007 was marked by the impact of the global recession, especially in developed countries. Hence, looking at trade in the post-2007 period would have biased our results in favour of intra-BRICS trade. Moreover, this was also the period, after the establishment of the WTO in 1995, which was characterized by a sharp decline in global tariffs and consequent trade expansion. Post-2007, the impact of the recession was felt in the form of non-tariff barriers particularly in developed countries. This would again bias our results. Hence, by concentrating on the period upto 2007, we are eliminating any exogenous factors that may bias our results in favour of intra-BRICS trade.

Trade data is often unreliable mainly because of differing country definitions, currency conversion and year of assessment. To eliminate these problems, we have relied entirely on the UN COMTRADE data base using the SITC, Rev.3 definitions of commodities. Data disaggregation is taken at the 5-digit level where necessary. Other information used is based on secondary published sources.

2.3 Analytical Framework

The issues to be analysed are those relating to sustainability of intra-BRICS trade, complementarity and substitutability of exports of BRICS countries, nature of intra- BRICS trade (in high or low technology commodities) and, finally, identifying commodities where the issues of technology transfer and collaboration are important.

The issue of sustainability is analysed in several ways.

First, we look at each of the member country's trade (at the 4-digit SITC classification) with other members and with the rest of the world. We then look at whether a country is a net exporter to BRICS and the rest of the world. For those items in which a country is a net exporter to both BRICS and the rest of the world, we argue that trade in these commodities is sustainable.

Second, it is presumed that sustainable trade between similar countries is generally of the intra-industry variety. Some authors have argued that intra-industry trade also implies trade symmetry (see, Theil, 1979). We will thus apply some measures of symmetry to look at the trends in trade symmetry (in aggregate) in BRICS over our reference period.

Third, sustainability also implies that countries of BRICS should have a comparative advantage in general in those commodities. In other words, countries should not be exporting to other BRICS countries the commodities in which they do not have the comparative advantage to export to the rest of the world as in that case the importing country would incur welfare loss in its imports. In this case, as per customs union theory, the BRICS bloc would lead to trade diversion (see, Lipsey, 1957; Meade, 1955). We argue that this trade is not sustainable as the importing country has an incentive to switch trade to countries outside the BRICS. To analyse this issue, we will use the commonly used measure of Revealed Comparative Advantage (RCA) (see, for example, Balassa, 1965).

Fourth, we will use the UNIDO (2009) definition to separate trade of BRICS countries into natural resource based, low technology, medium technology and high technology trade. We will then characterize intra-BRICS trade by this parameter. Then we will address the issue of substitutability and complementarity in exports from BRICS. This will be in relation to exports to non-BRICS countries of manufactured goods. Once again the measure of RCA will be used to differentiate between commodities with the premise that where member countries have an RCA greater than 1 in the same commodity, they are competitors in third countries. The attempt will be to try and identify such commodities. However, where countries are exporting outside the BRICS in non-competing commodities, there is some complementarity if the commodities belong to the same industry group.

Fifth, as we have already noted, we will look at trends in FDI among BRICS countries to identify in which areas technology transfer seems to be occurring and possible supply side arrangements to facilitate this.

Finally, at the highest possible level of disaggregation, we will try to identify commodities where intra-BRICS trade seems the most promising and where concentrated efforts of trade and technological cooperation might yield best results.

3. Empirical Analysis

The issue of sustainability of SS trade can be addressed at the macro and micro levels. In the next section we look at some macro issues.

3.1. Macro Issues in Sustainability

The issue of sustainability is crucial. We have noted in the introduction that a similar jump in SS trade took place in the 1970s but that was not sustainable, as it was mainly due to temporary demand slump in the developed countries. How true is this here in our reference period 1995-2007? Table 3 below gives some statistics on GDP growth rates, per capita incomes and demography for the BRICS countries in the periods 1995-2000 and 2000-2007.

TABLE 3: ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF BRICS COUNTRIES

Indicators	Year	India	Brazil	China	Russia	South Africa
Compound Growth Rate of GDP in Current Prices (in %)	1995 -00	5.5	-3.5	10.5	-3.7	-2.5
	2000-07	13.2	11.3	15.9	25.8	11.6
Per Capita in Current Prices (in US \$)	1995	371.0	4844.0	601.0	2116.0	3684.0
	2007	945.0	7281.0	2559.0	9100.0	5975.0
Population (in Millions)	1995	953.2	161.7	1189.7	148.5	41.4
	2000	1042.6	174.2	1244.8	146.7	44.9
	2007	1164.7	190.1	1306.2	141.9	49.2
% of Population above 15 years	2001	62.5	69.1	N.A.	82.5*	63.9**
% share of 60+ pop to total pop	2003	7.4***	9.3	N.A.	17.8	2.9

Source: (1) International Monetary Fund, *World Economic Outlook Database*, April 2010; (2) *Labour Statistics*, ILO.

Note: * Russia 2002; ** South Africa 2003; *** India 2001.

Table 3 clearly indicates that the second period (2000-2007) was characterized by double digit growth rates for all the countries along with a two to four times increase in the per capita incomes. Clearly, income growth in these countries sustained growth in BRICS trade (relative to world trade) already shown in Tables 1 and 2. This sustainability is also clear from the favourable demographics of these countries in 2001. As shown in the last two rows of Table 3, these countries have a fairly young population with only Russia having more than 10 percent of its population above the age of 60.

What about the developed countries? The comparable numbers are shown in Table 4.

TABLE 4: ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF SELECT DEVELOPED COUNTRIES

Indicators	Year	France	Germany	Japan	UK	USA
Compound Growth Rate of GDP in Current Prices (in %)	1995 -00	-3.3	-5.5	-2.4	5.1	6.1
	2000-07	10.0	8.3	-0.9	9.6	5.1
Per Capita in Current Prices (in US \$)	1995	27183.0	30861.0	41969.0	19947.0	27827.0
	2007	41940.0	40480.0	34286.0	45922.0	46673.0
Population (in Millions)	1995	57.8	81.8	125.4	58.0	266.5
	2000	59.1	82.3	126.8	58.9	282.3
	2007	61.9	82.2	127.8	61.0	301.9
Percent age of Population above 15 years	2003	81.4	85.3	85.9	79.9	73.5
% share of 60+ pop to total pop	2003	20.7	25.8	25.4	33.3*	15.4

Source: (1) International Monetary Fund, *World Economic Outlook Database*, April 2010; (2) *Labour Statistics*, ILO.

Note: * indicates UK's 50+ share in total

As can be seen from Table 4, the main developed countries of the OECD (with the exception of Japan) had fairly high growth rates of GDP in the period 2000-2007. So it cannot be argued that there was a demand contraction which shifted exports to the BRICS. In fact, in the largest demand source, the US, growth rates of GDP have been high since 1995. The future growth of demand in these countries is likely to be constrained by the fact that per capita incomes have grown by less than half over the period 1995-2007. Japan is again the clear outlier. In addition, future demand expansion in these countries is also likely to be affected by unfavourable demographics. In Table 4, barring the US, it is seen that populations are ageing rapidly with over 20 percent of population in the age group 60 and above.

It may thus be reasonable to conclude that the expansion of BRICS trade has not been at the expense of decline in demand in the developed world. It is also clear, at the macro level, that demographics do not favour future growth in the developed countries even after recovery from the current recession.

Another macro issue in sustainability relates to bilateral trade balance. It is often argued that sustainable trade requires symmetry, in other words exports and imports must roughly remain in balance. Prolonged trade imbalances are politically difficult to sustain. One measure of bilateral asymmetry has been suggested by Theil (1979). The entropy measure H of bilateral symmetry increases as trade becomes more symmetric (for a detailed mathematical exposition of H see Appendix 1). We calculated the H indices for all pairs of bilateral trade among BRICS countries over the period 2000-2007. The results are shown below in Table 5.

TABLE 5: TRADE SYMMETRY IN BILATERAL AND INTRA-BRICS TRADE

Entropy (Hij)		
Bilateral Country Group	1995	2007
Brazil-Russia	0.596	0.863
Brazil-India	0.745	0.92
Brazil-China	0.963	0.999
Brazil-South Africa	0.998	0.775
Russia-India	0.875	0.776
Russia-China	0.907	0.963
Russia-South Africa	0.964	0.899
India-China	0.884	0.86
India-South Africa	0.949	0.963
China-South Africa	0.894	0.942
Criterion Function for BRICS		
Bilateral Country Group	1995	2007
I ₀	0.074	0.051
I ₁		0.181
I ₂		0.119
I ₃	0.056	0.039

Source: Author's Calculation

Table 5 clearly shows that the trade has been getting increasingly asymmetric for almost half of the set of bilateral pairs of countries, that is, Brazil-South Africa, Russia-India, Russia-South Africa and India-China. However, bilateral trade asymmetry may not imply asymmetry for the BRICS as a whole. To what extent has asymmetry increased or decreased for the BRICS countries taken together?

To look at trade symmetry for the matrix of BRICS trade, we have used Theil's criterion function measure of asymmetry which is based on the principles of information theory. The criterion function measure, I, is defined as

$$I = \sum_i \sum_j P_{ij} \log \frac{P_{ij}}{(P_{ij} + P_{ji})/2}, \text{ for } i \neq j$$

P_{ij} refers to the share of country i's exports to country j as a ratio of total intra-BRICS exports. It is easy to see that if the trade of any two countries is symmetric, then $P_{ij} = P_{ji}$ and $I=0$. It is clear that an increase in the value of I implies increasing asymmetry of trade. The values of I for 1995 and 2007 is given by I_0 . What we want to measure, however, is to what extent symmetry has changed during our reference years 1995-2007? We use three measures for trade symmetry for 2007 compared to our reference period 1995. First, I_1 is an application of I to the actual trade matrix for 2007, given the information from 1995 trade matrix. Second, assuming that the exports of 1995 are a true guess of the probability of exporting in 2007, we get the measure I_2 . Finally, the trade matrix for 2007 is re-estimated so that I_2 is calculated from a matrix whose total exports and imports equal the actual exports-imports of each country in 2007 but where the probability of exporting is taken from the 1995 trade matrix. This gives us I_3 (for details see Appendix 1).

It is also obvious that I is necessarily positive if there is trade imbalance for any country. However, it is possible to adjust the trade matrix for these trade imbalances (see Appendix 1 for details). This allows us to define the function I_3 . The values of I_3 are calculated for 2000 and 2007. The results are shown in the bottom half of Table 5.

Table 5 suggests that asymmetry has apparently declined in 2007 relative to 1995 as I_0 in 2007 (0.051) is smaller than I_0 in 1995 (0.074). Comparing the unadjusted measure of I (i.e. I_1) with the adjusted I (i.e. I_2), we see that the I_2 is smaller than the unadjusted measure of I i.e. I_1 . This means that the 2007 intra-BRICS trade is more symmetric as compared to 1995 intra-BRICS trade when we take adjusted I rather than unadjusted I . However, if we take the 1995 trade pattern as one that would prevail in 2007, then we see that asymmetry has actually increased - $I_2 > I_0$. The same asymmetry is implied in comparing I_3 to I_0 in 2007 and 1995. Last, if we impose trade balance on the member countries, then asymmetry would have decreased between 1995 and 2007 and the value of I_3 fallen between 1995 and 2007. Hence, it can be concluded that asymmetry in trade has been driven by trade imbalances and removal of these imbalances is merited as this would make trade more symmetric. The issue of trade imbalances does deserve attention within the BRICS.

3.2 Trade and Sustainability of BRICS trade

Before looking at disaggregated trade statistics, it is worthwhile to look at the inter-country pattern of BRICS trade in the period 1995-2007. Tables 6 and 7 below give the pattern of BRICS trade for each of the countries for both exports and imports.

TABLE 6: PERCENTAGE SHARE OF INTRA-BRICS EXPORTS TO TOTAL COUNTRY EXPORTS, 1995-2007

Exporting Country	Year	Partner Country				
		Brazil	China	India	Russia	South Africa
Brazil	1995	0	51.1	13.6	24.2	11.1
	2000	0	53.5	10.7	20.9	14.9
	2007	0	62.5	5.6	21.7	10.2
China	1995	20	0	20.1	43.8	16.1
	2000	20.3	0	25.9	37	16.8
	2007	16	0	33.7	39.9	10.4
India	1995	4.8	18.6	0	58.4	18.2
	2000	9.2	35.2	0	40.9	14.7
	2007	13.2	65.7	0	6.4	14.7
Russia	1995	2.4	86.8	10.8	0	NA
	2000	6.3	80.9	11.9	0	0.9
	2007	6.5	78.5	13.6	0	1.4
South Africa	1995	35.8	34.2	23.5	6.5	0
	2000	21.5	35.7	39.6	3.2	0
	2007	8.4	67.4	21.8	2.4	0

Source: UN COMTRADE.

Tables 6 and 7 reveal some interesting trends. First, China's dominance is clear. According to Table 6, Brazil, India and South Africa have switched to China as their main trade partner. For India and Brazil, this has been at the expense of Russia and for South Africa at the expense of Brazil. Only Russia has reduced the share of its exports going to China in favour of India. Moreover, India has remained an important market for Brazil and South Africa while becoming more important for Russia. So, while China has emerged as the main market for the other countries, India is the second most important market in the trade matrix.

A look at the pattern of imports in Table 7 indicates that China has become the main source of imports for all the countries at the expense of traditional trading partners. It is worth noting that India and China account for 80 percent or more of the imports from and exports to the all other BRICS countries.

TABLE 7: PERCENTAGE SHARE OF INTRA-BRICS IMPORTS, 1995-2007

Importing Country	Year	Partner Country				
		Brazil	China	India	Russia	South Africa
Brazil	1995	0	40.4	13.3	17.8	28.5
	2000	0	53.3	11.8	24.9	9.9
	2007	0	74.2	12.7	10	3.1
China	1995	20.2	0	6.5	62.2	11.1
	2000	16.6	0	13.8	59	10.6
	2007	30.9	0	24.7	33.2	11.2
India	1995	12.9	36.4	0	40.7	10
	2000	6.5	44.5	0	23.9	25.1
	2007	3.1	79.5	0	9.9	7.5
Russia	1995	11.4	55.8	32.8	0	N.A.
	2000	14.7	57.5	26	0	1.8
	2007	12.4	83.4	3.5	0	0.7
South Africa	1995	25.1	51.7	19.8	3.5	0
	2000	18.2	61.5	15.6	4.7	0
	2007	13.2	68.2	14.1	4.5	0

Source: UN COMTRADE.

In summary, intra-BRICS trade is dominated by China on both the export and import fronts, followed by India as a distant second. It must thus be noted that the increase in intra-BRICS trade share has also been accompanied by some decline in multilateralism in intra-BRICS trade. Here, the main sufferer seems to have been Russia which is trading more with non-BRICS countries.

It is worthwhile to see commodity level changes in intra-BRICS trade. We have looked at the period 2000-2007 and the data in Table 8 below present commodity level data at the one digit SITC, Rev. 3 level of aggregation.

TABLE 8: SHARE OF INTRA BRICS EXPORTS TO WORLD EXPORTS, 2000 TO 2007 (IN %)

Commodity Group	Commodity Description	2000	2007
0	Food and live animals	3.7	7.7
1	Beverages and tobacco	6	9.1
2	Crude materials, inedible, except fuels	10.2	30.3
3	Mineral fuels, lubricants and related materials	1.4	4.4
4	Animal and vegetable oils, fats and waxes	14.2	21.6
5	Chemicals and related products, n.e.s.	9.1	13
6	Manufactured goods classified chiefly by material	3.3	5.6
7	Machinery and transport equipment	2.4	5
8	Miscellaneous manufactured articles	3.4	5.9
9	Commodities and transactions not classified elsewhere in the SITC	0.1	2.2

Source: UN COMTRADE.

In Table 8, we present data on changes in the share of intra-BRICS exports to the world exports of that commodity group. The data indicates the degree to which BRICS countries have been switching their trade from the world to other members of the group. Table 8 also indicates that while in all cases the share of intra-BRICS trade has increased, the dominating items in intra-BRICS trade are Crude materials (Section 2), Animal and Vegetable Oils (Section 4) and Chemical Products (Section 5). In 2007, these items constituted about 51 percent of the world trade of the BRICS countries in these commodities. We will comment on disaggregated statistics at a later point. However, it is worth noting that all these commodities are largely resource based commodities.

One crude method of judging the issue of sustainability of intra-BRICS trade is to look at the main exports of the bloc, at a disaggregated commodity level, and see in which commodities they are net exporters to the world and to other BRICS countries. To obtain a better idea of the physical commodities involved, we have disaggregated data to the 4-digit SITC level. We have then looked at all commodities in which the exports of the country accounted for at least 1 percent of its intra-BRICS trade in 2007. This allowed us to account for a substantial part of a country's intra-BRICS trade. We then looked at changes in the ratio of a country's net trade within BRICS to its net trade in that commodity for the world as a whole. The results are shown in Table 9 below for the years 2000 and 2007 (for detailed results see Appendix 2).

TABLE 9 - RATIO OF NET INTRA BRICS TRADE TO TRADE WITH REST OF THE WORLD, 2000 AND 2007* (IN %)

	Product Code	2000	2007
Brazil	1212	9.1	19.7
	2222	16.4	42.9
	2515	4.2	14.1
	2815	9.5	43.9
	2816	10.2	18.6
	4211	26.9	34.9
	6114	6.1	25.8
	6715	-1.1	13.4
	7832	1.3	25.5

China	3250	24.4	24.3
	5413	19.5	40.6
	6732	0.0	12.4
	7641	6.7	14.1
	7821	-0.5	44.6
	8432	3.8	18.1
	8442	3.4	17.2
	8453	1.7	12.2
	8454	1.7	10.2
India	8514	6.1	18.0
	2631	15.7	109.3
	2731	21.6	48.8
	2815	28.7	801.7
	2816	124.6	5207.7
	2852	48.5	176.7
	2875	0.0	154.6
	2879	63.8	548.6
	5112	2.4	14.7
	5429	17.3	15.1
Russia	5751	25.3	45.9
	6821	35.2	30.8
	2321	23.1	19.5
	2474	26.6	62.9
	2475	16.4	47.3
	2515	44.1	60.5
	5121	24.5	29.2
	5156	62.6	49.9
	5621	21.6	25.2
	5623	71.1	69.6
	5629	21.4	26.8
South Africa	6751	36.0	37.1
	7144	39.3	69.9
	7648	67.2	110.0
	2513	12.7	20.7
	2681	13.6	47.5
	2816	32.4	34.2
	2831	0.0	71.1
	2877	1.2	52.7
	2879	2.2	67.7
	2882	15.2	23.9
	3212	8.3	14.5
	5223	89.9	84.7
	6715	4.1	20.7
	6753	2.7	20.9
	6755	10.6	21.0

Source: WITS.

Note: * selection of commodities has been done on the basis of 1 percent or above share of respective commodities in total intra BRICS trade of particular country.

Table 9 tells us in which commodities a country's net trade to BRICS has increased relative to its exports to the world. From the table, it can be seen that in almost all cases, the ratios have increased substantially (details of commodities not included in Table 9, see Appendix 2). This perhaps indicates that the members of the BRICS are redirecting more and more of their reasonably competitive exports (still exporting to the world) towards the each other. As Appendix 2 also shows, there are some commodities where the ratio in 2007 was negative which indicates that for that commodity a country is a net exporter to BRICS but net importer from the rest of the world. Hence, the county may not have a competitive advantage in exports of these commodities. However, there are very few commodities in this category and they are restricted to Brazil (four commodity groups) and South Africa (one group). For Brazil, these commodities are crude petroleum, copper ores and concentrates, other ferroalloys (silicon, manganese and chromium) and motor vehicle parts (other than chassis and bodies). However, the net exports of these items are of marginal value.

We can further classify the commodities into three classes - those where the ratio is more than 100 percent (shown in bold) in 2007, those where ratio is above 20 percent (shown in italics) and the rest. A ratio of more than 100 percent indicates that intra-BRICS trade is more important than the world trade, while the ratio over 20 percent indicates the areas where the intra-BRICS trade is substantial. It can be seen that ratios above 100 percent are mainly for commodities exported by India. These commodities are cotton (SITC 2631) and Ores of Iron, pellets of iron, alumina, zinc ores and other ores (SITC 2815, 2816, 2852, 2875 and 2879), mainly natural resource based products. In Table 10 below we indicate the changes in these exports from India to the BRICS over the period 2000 to 2007. The data in the table indicates percentage share of intra-BRICS trade in these 4-digit exports in India's total world exports of these items.

TABLE 10: PERCENTAGE SHARE OF INDIA'S INTRA BRICS TO TOTAL EXPORTS DURING 2000 AND 2007

Commodity Code	Commodity Description	2000	2007
2631	Cotton (other than linters), not carded or combed	0.1	52.3
2815	Iron ores and concentrates, not agglomerated	28.7	88.9
2816	Iron ore agglomerates (sinters, pellets, briquettes, etc.)	64.5	98.1
2852	Alumina (aluminium oxide), other than artificial corundum	46.2	66.3
2875	Zinc ores and concentrates	0.0	60.7
2879	Other non-ferr.ore,concntr	60.5	85.1
Total of Above Commodities		34.8	78.1

Source: UN COMTRADE.

Table 10 clearly indicates how dependent India had become on exports of these items to the BRICS countries. However, the exports of raw minerals are mainly driven by Chinese imports (exports of cotton and alumina to South Africa and Russia are negligible) and there is some doubt that this is sustainable over longer period. However, in other commodities there is some indication of sustainable growth in intra-BRICS trade. We will look at this in some detail later.

The issue of sustainability involves some further consideration of the nature of intra-BRICS trade. This is also important in linking the issue of trade to considerations of technology transfer, which we take up at the end of this study. To look at this, we break up the trade pattern shown in Table 9 in terms of the technology content of exports. We use the UNIDO definition (see, UNIDO, 2009) to classify exports into resource based, low technology, medium technology and high technology items. For a description

of the UNIDO classification, see Appendix 3. The changes between 2000 and 2007 in the composition of exports by this classification are given below in Table 11. (For the detailed commodity data see Appendices 4 and 5).

TABLE 11: SHARE IN INTRA BRICS EXPORTS, 2000 TO 2007: TECHNOLOGICAL CLASSIFICATION

Technology Classification	Brazil		China		India		Russia		South Africa	
	2000	2007	2000	2007	2000	2007	2000	2007	2000	2007
Resource Based	64.8	72.7	4.0	-	29.5	42.7	21.0	48.9	44.8	58.8
Low Tech Exports	1.9	3.3	21.4	11.4	17.3	-	-	-	2.4	5.4
Medium Tech Exports	5.4	5.2	5.0	5.6	-	5.2	26.6	19.5	13.7	10.4
High Tech Exports	1.8	-	5.4	10.5	5.5	2.2	6.8	1.1	-	-

Source: WITS.

From Table 11 it is clear that all the countries, barring China, have been excessively dependent on exports of natural resources. Obviously, the main destination is China. There seems to be some technological imbalance in the intra-BRICS trade as China clearly dominates in high technology (HT) items. Here, the share of HT items in exports to BRICS countries has been in fact falling for India and Russia. On the other hand, there is comparable presence of each of the BRICS countries in medium technology (MT) products. From the point of view of sustainability of intra-BRICS trade, it appears necessary to look at the details for the prospects of increasing exports of technologically advanced products, preferably in MT and HT. We will come back to this aspect in a later section.

It is worthwhile to further identify the commodities listed in Appendix 5 by their importance in trade. Our basic commodity definition in Appendices 4 and 5 is taken at the 4-digit level of classification. We looked at two classes of commodities - those where the share of the 4-digit commodity in the 2-digit commodity group has increased between 2000 and 2007 (increasingly important commodities) and those where this share has fallen over this period but which accounted for at least 10 percent of 2-digit intra BRICS trade (for each country) in 2007 (important commodities). In Table 12 below we list those 4-digit commodities which belong to the above two commodity groups and which account for at least one percent of a country's intra BRICS trade in 2007. The commodities are also classified by their technological content.

TABLE 12: IMPORTANT AND INCREASINGLY IMPORTANT COMMODITIES FOR BRICS, 2000 TO 2007

Technology Classification	Product Code	4 digits Increasingly Important	4 digits important commodities
Brazil			
Resource Based Exports	2222		2222
	2815	2815	
	2816		2816
	4211	4211	
India			
Resource Based Exports	2631	2631	
	5112	5112	
Medium Tech. Exports	5751	5751	

High Tech Exports	5429		5429
Russia			
Resource Based Exports	2474		2474
	2475	2475	
	5121		
	5621		5621
	5629		5629
South Africa			
Resource Based Exports	2816	2816	
	2877	2877	
	2879	2879	
	5223		5223
Medium Tech. Export	5121	5121	

Source: UN COMTRADE.

Note: Division is based on UNIDO, 2009.

Table 12 indicates that there are very few quantitatively important commodities in intra-BRICS exports. In fact, there are no such commodities for China's intra-BRICS trade while for the others the trade is dominated by resource based commodities. To put it in another way, among the commodities which comprise one percent or more of a country's intra-BRICS trade in 2007, there are very few which belong to the set of commodity groups where intra-BRICS trade is important or has become increasingly important between 2000 and 2007. In fact, these few commodities largely belong to the set of resource based commodities like iron ores and pellets (Brazil, India and South Africa), manganese ores (South Africa), cotton (India), non-coniferous wood (Russia), and soya and soya oil (Brazil).

In medium technology exports, the only quantitatively important products are propylene polymers (India) and nitrogenous fertilizers (Russia). Even here, only India's medium technology exports increased after 2000.

Thus, in quantitative terms, the importance of growing intra-BRICS trade in LT, MT or HT products is insignificant. At present, the dominance in trade is of resource based products. This is unlikely to be sustainable both from the point of view of demand from China and long-run supply constraints from other BRICS members. Sustainability, therefore, will lie in exports in other technology areas.

3.3 Complementarity and Substitutability

The issues of complementarity and substitutability are important in that it is likely that countries could have technical collaboration in areas where there is some complementarity in production. However, for products which are close substitutes in production (or consumption), it is possible that such technical collaboration may not be welcomed. The issue of technology and cooperation will be dealt with in the next section. Here we will look at the measures to identify complementarity and substitutability.

We have already noted that measures of Revealed Comparative Advantage (RCA) will be used to address the issues of complementarity and substitutability among products exported by the BRICS countries (for a definition of RCA see Balassa, 1965). The essential principle of RCA is that if a product exported by two

or more countries to third markets (the rest of the world) have RCAs greater than 1, then these products are competing (substitutes) in world markets (see, for example, Pant et.al., 2010)². However, this is only true for similar commodities. This is difficult to define empirically, and would normally require calculating cross price elasticities of substitution in consumption or production among these products and for which extensive data is needed. We have used a simpler procedure. Products of different countries are defined as similar if they fall in the same 5-digit level of disaggregation which is the highest level of disaggregation available. These products are substitutable in consumption but horizontally differentiated.

However, if products at the 5 digit level of disaggregation with RCA greater than 1 fall in the same commodity group at the 3-digit (or 2-digit) level but are different in their 5-digit definition, then we argue that these products belong to the same industry but are vertically differentiated and could be considered as complementary products. Countries could coordinate production of these products for the world market as they are not direct substitutes for each other.

We calculated RCA for each country for the year 2007. However, since the concept of product differentiation is usually applied only to products which are not heavily resource dependent, we did our calculation only for commodities falling in Sections 4-8 of the SITC classification system. The detailed results are shown in Appendix 7.

For ease of exposition, we list commodities where countries face some substitutability in third markets in Table 13.

TABLE 13 - PRODUCT SUBSTITUTABILITY AMONG BRICS COUNTRIES

Product Codes	Product Name	Countries	Major Markets	Total sale in major Markets (in %)
Resource Based Exports				
51124	Xylenes, pure	Brazil	Mexico; USA	89.0
		India	China; Indonesia; Pakistan	83.2
Medium Tech Exports				
51213	Butanols	Russia	China	89.7
		South Africa	China; Netherlands; United Arab Emirates	71.8
56216	Urea, whether or not in aqueous solution	China	US Virgin Isds; India; USA	59.4
		Russia	Brazil; Mexico; Peru	63.6
56293	Diammonium hydrogenorthophosphate (diammonium phosphate)	China	India; Pakistan; Thiland; Viet Nam	72.5
		Russia	Argentina; Iran; Pakistan	59.7
56294	Ammonium dihydrogenorthophosphate (monoammonium phosphate) and mixtures t	China	Brazil; India	45.0
		Russia	Argentina; Brazil; Estonia; Ukraine	62.9

2 Due to the base affect Balassa's index is often an overstatement. To correct this, we have also used a related measure given in UNCTAD (2010). For definition, see Appendix 6. It may be noticed that this has no effect on our results which follow irrespective of which index is used.

57511	Polypropylene	Brazil	Argentina; Nigeria	35.4
		India	China; Pakistan; Turkey	50.5
67153	Ferrochromium	India	China; Japan; Netherland	63.6
		South Africa	China; Germany; Japan; Other Asia nes	60.1
68212	Refined copper	Brazil	China; Netherland	84.3
		India	China; Malaysia; Other Asia nes; Saudi Arabia	70.0
High Tech Exports				
54131	Penicillins and their derivatives with a penicillanic acid structure; sal	China	India	55.6
		India	Egypt; Spain; Thailand; UAE	26.9
54139	Other antibiotics	China	Germany; India; Italy; Rep. of Korea	41.8
		India	Brazil; China; Germany; Iran; USA; Viet Nam	37.1

Source: UN COMTRADE.

Table 13 indicates that there are only 10 products at the 5-digit classification where there is some possibility of substitutability (competition) in third country markets. These are resource based product, Xylenes (Brazil/India). In the MT industries, there are five products - Butanols in the chemicals industry (Russia/South Africa), Fertiliser products (China/Russia), and one in plastics industry, Polypropylene (China/India). There are also two products in the HT sectors, both belonging to the Pharmaceutical industries - Penicillins and other Antibiotics (China/India).

Substitutability also implies competition in the same markets. Closer analysis of Table 13 (see, column 4) shows that the BRICS countries are by and large exporting to different markets. The only competition seems to be for Butanols (China) where India and Brazil are competing, Ammonia products (Brazil) where China and Russia are competing, Ferrochromium (China, Japan) where India and South Africa are competing and Refined Copper (China) where India and Brazil are competing, and other antibiotics (Germany) where India and China are competing. It is interesting to note that the main markets where these countries compete in these products lie within the BRICS itself with the exception of pharmaceutical exports. In general, the products, where there appears some substitutability, belong to the Chemicals, Metals and Pharmaceutical industries and the substitutability (competition) is quite limited. It should also be noted that most of the products above fall in the MT or HT areas where technological cooperation is usually positive and desirable.

A broad idea on areas where there is some complementarity among the BRICS countries is given in Table 14 below. Table 14 indicates that there are a large number of products belonging to various industries where there exists some degree of product complementarity between countries. While the details are available in Appendix 7, we have summarized the main industry heads and countries in Table 14. From Table 14, it can be seen that our data cover 30-50 percent of the BRICS countries exports with the exception of iron and steel (I&S) products where our data covers about 20 percent of exports.

TABLE 14: PRODUCT COMPLEMENTARITY AMONG BRICS COUNTRIES, 2007

Industry Code	Industry Description	Product Description	Countries	Major Markets	Total sale in major Markets (in %)
Resource Based					
421	Fixed veg. fat, oils, soft (Edible Oil)	Soya bean oil; Sesame; Groundnut oil; Sunflower seed	Brazil	China; Iran; Netherlands; India	57.3
			China	China, HongKong SAR; Dem. People's Rep. of Korea; Japan	52
			Russia	Egypt; Italy	28.3
51	Various Chemical Products	Acyclic Hydrocarbons; Benzene; Amino-alcohol-phenols; Acrylonitrile	Brazil	USA; Netherlands; Argentina	47.9
			India	USA; China	21.8
			Russia	Finland; China	51.7
			South Africa	USA; Japan; Netherlands	52.5
Low Tech Export					
67	Iron and steel	Iron and Steel; Flat-rld products; hotrld; coldrld	China	Rep. of Korea	16.3
			South Africa	China; USA	21.6
Medium Tech Export					
51	Various Chemical Products	Methanol; Fatty alcohols; Cyclanic; Phenol	Brazil	USA; Netherlands; Argentina	47.9
			India	USA; China	21.8
			Russia	Finland; China	51.7
			South Africa	USA; Japan; Netherlands	52.5
57	Plastics in primary form	Polyethylene; Polyvinyl chloride; Polycarbonates;	Brazil	Argentina	30.1
			China	China; Zambia; Zimbabwe	33.9
67	Iron and steel	Iron and Steel; Ferro-alloys; Ferrosilico-manganese; Flat-rld products	Brazil	USA	26.9
			India	USA	14.7
			Russia	Iran; Italy; Turkey	31.3

Source: UN COMTRADE

Table 14 shows that the main industries where there exists some complementarity between the BRICS countries are Vegetable Oils (Brazil, China and Russia), Chemical Products (Brazil, India, Russia and South Africa), Plastics (Brazil and China) and Iron and Steel (all BRICS countries). In addition, the complementarity extends from resource based to HT products.

Our notion of complementarity (as already noted above) implies each country specializing at some stage of production in any given industry. Some more details can be obtained from Appendix 7. Hence, in vegetable oils, there is a clear product differentiation with Brazil specializing in Soya products, China in Groundnut and Russia in Sunflower. Since these are resource based products, they are not substitutable in production. However, as they all fall in the category of edible oils, there is some degree of substitutability in consumption. Hence, while there is some possibility of technical collaboration in production, there is a

problem of substitutability in consumption. To explore this further, we need to look at another parameter of substitutability - markets. But, from the second last column of Table 14, it can be seen that there is very little conflict in terms of market because each country has a distinct market segment.

The other possible area of complementarity is the Chemicals industry. Appendix 7 shows this in the MT areas where Brazil, India, Russia and South Africa seem to specialize in different types of Industrial Alcohols. Technical collaboration in these areas is certainly feasible. Again, from Table 14 we can see that the four countries, barring China, share common markets of the US, China and Netherlands, both for basic and MT exports.

The third industry where complementarity seems to exist is Iron and Steel (I&S). From Table 14, this complementarity is indicated in both LT exports (Hot and Cold Rolled Steel) and MT exports (Alloys). Appendix 7 shows the areas of specialization. In LT areas, China concentrates on Iron products and South Africa on stainless steel products. In MT areas, the specialization is clear. India specializes in Manganese and Chromium alloys and Russia in semi finished I&S products, including electrical grade. We have already seen that India and South Africa compete in Chromium alloys in the Chinese and Japanese markets. Yet, in other products, there is considerable complementarity in this industry and thus scope of technical collaboration. It can also be seen that Brazil, India and South Africa export to a common market, the US.

The last industry where we see some possibility of complementarity is the Plastics industry. Again, from Appendix 7 we see that China and Brazil specialize in different varieties of Polyethylene products. We have already seen that in one product (Polypropylene), China and India are direct competitors. However, there appears high degree of complementarity between India, Brazil and China in the Plastics industry because there is no commonality of markets.

In general, the substitutability and complementarity seem to exist in four areas - edible oils, chemicals, metal products and plastics. While in a few products there may be direct competition in third markets, in most cases the markets are different and there may be no conflict of interest in collaborative arrangements. However, it is only in pharmaceutical products where India and China seem to compete in a common third market outside the BRICS. For products in which production complementarity is indicated, the only common markets outside the BRICS are possibly Netherlands (Chemicals) and US (Iron and Steel).

4. Technology, FDI and Cooperation

In the previous section we mentioned areas where cooperation between the BRICS countries is feasible. Empirical literature shows that it is technology which is the most important long term determinant of trade as compared to resources, whether natural or human (see, for example, Trefler, 1995). It is acknowledged that trade and technology are linked through Foreign Direct Investment (FDI). Specifically, FDI may serve as a substitute or complement to trade. Thus, if FDI is linked to domestic market access then it may reduce trade and if it is linked to exports then it may enhance trade. Typically, FDI and trade are substitutes when trade is in final goods but complements when the trade is in intermediates. We also know that declining tariffs and transport costs have led to the fragmentation of international production, so much so that much of the trade today is in intermediate inputs (see, for example, Krugman, 2008; UNCTAD, 2010). Thus trade and FDI are becoming complementary and technology is assuming a crucial role in promoting trade.

Traditionally, developing countries have tried to obtain technology through purchase of drawings and designs, patents etc. However, empirical literature indicates that this method of obtaining technology is not very effective. In fact, recent literature on FDI, technology and productivity, has concluded that it is the presence of foreign firms via FDI that has positive productivity impact on domestic firms via learning by doing, external economies etc. (see, Pant et.al., 2011). It has also been argued that the impact of FDI on productivity of local firms is a function of the technology gap between the donor country and host country firms. However, if this gap is very high then absorption of technology by the host country firms becomes difficult. To the extent that this gap is likely to be lower between firms in developing countries, it can be argued that intra-BRICS FDI will have greater impact on productivities than FDI from developed countries (see, Gammeltoft, 2008). In other words, to see the possibility of technological upgradation, one needs to see the trends in FDI in the BRICS countries.

FDI needs an enabling environment. This can be created by host countries via institutional mechanisms for cooperation between the BRICS countries. This institutional mechanism has three components - Direct Tax treaties (DTTs), Bilateral Investment Treaties (BITs) and TRIMS under the WTO, and government policy towards FDI.

This section will look at the issues of technology and cooperation using the above theoretical frame based on some data taken from the World Investment Reports of the UNCTAD and other studies on these issues. We will also try to relate this to our discussion in the previous sections on trade between BRICS countries.

4.1. Intra BRICS Foreign Direct Investment

Today, the BRICS are a growing and substantial source of world demand and, together as emerging markets, are almost equal in size to the markets of major developed countries. In 2010, the BRICS accounted for about 16.3 percent of world exports as compared to 27.8 percent for the OECD top five countries (Economic Times, October 3, 2011). They also constitute the home and host region for a significant proportion of the world's FDI flows. As can be seen from Table 15, in 2010, BRICS's FDI was around twenty percent of world's inflows and ten percent of outflows. Net FDI inflow from the BRICS increased from \$41 billion in 1995 to \$108 billion in 2007 and was \$75 billion in 2010. Moreover, according to Table 15, Brazil, China, India and South Africa were net importers of FDI throughout the period 1995-2010, whereas Russia was a net exporter in 2010 but a net importer in 1995 and 2007. In general, we can see that the BRICS economies are important players as the host countries.

TABLE 15: BRICS FDI INFLOWS, OUTFLOWS (IN % TO WORLD) AND NET TO WORLD (BILLION US\$)

Economy	1995			2000			2007			2010		
	In-ward	Out-ward	Net FDI	In-ward	Out-ward	Net FDI	In-ward	Out-ward	Net FDI	Inward	Out-ward	Net FDI
Brazil	1.3	0.3	3.3	2.3	0.2	30.5	1.8	0.3	27.5	3.9	0.9	36.9
China	11	0.6	35.5	2.9	0.1	39.8	4.2	1.0	61.1	8.5	5.1	37.7
India	0.6	0.0	2.0	0.3	0.0	3.1	1.3	0.8	8.1	2.0	1.1	10.0
Russia	0.6	0.2	1.5	0.2	0.3	-0.5	2.8	2.1	9.2	3.3	3.9	-10.5
South Africa	0.4	0.7	-1.3	0.1	0.0	0.6	0.3	0.1	2.7	0.1	0.0	1.1
BRICS compared to World	13.8	1.7	41.1	5.8	0.6	73.5	10.4	4.4	108.6	17.8	11.1	75.3

Source: UNCTAD, 2010.

More importantly, BRICS have played a major role in FDI flows from developing countries. From Table 16 we see that the share of developing countries in FDI outflows has jumped dramatically between 1988-90 and 2003-05. A major part of this came from the BRICS countries.

TABLE 16: DISTRIBUTION OF FDI BY REGION, 1980-2005

Region	Inflow				Outflow			
	1978-80	1988-90	1998-00	2003-05	1978-80	1988-90	1998-00	2003-05
Developed economies	79.7	82.5	77.3	59.4	97.0	93.1	90.4	85.8
European Union	39.1	40.3	46.0	40.7	44.8	50.6	64.4	54.6
Japan	0.4	0.0	0.8	0.8	4.9	19.7	2.6	4.9
United States	23.8	31.5	24.0	12.6	39.7	13.6	15.9	15.7
Developing economies	20.3	17.5	21.7	35.9	3.0	6.9	9.4	12.3
Africa	2.0	1.9	1.0	3.0	1.0	0.4	0.2	0.2
Latin America and Caribbean	13.0	5.0	9.7	11.5	1.1	1.0	4.1	3.5
Asia and Oceania	5.3	10.5	11.0	21.4	0.9	5.6	5.1	8.6
West Asia	-1.6	0.3	0.3	3.0	0.3	0.5	0.1	1.0
South, East and South-East Asia	6.7	10.0	10.7	18.4	0.6	5.1	5.0	7.7
South-East Europe and CIS	0.0	0.0	0.9	4.7		0.0	0.2	1.8
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: *World Investment Report 2006. FDI from Developing and Transition Economies: Implications for Development*. UNCTAD.

We now turn to a more detailed analysis of FDI from the BRICS countries in terms of its geographical and sectoral composition. While aggregate data are available from UN publications, it is difficult to get data on intra BRICS flows and the country and the sectoral composition of the FDI flows from the BRICS. Hence, in the remaining sections we have relied on published secondary data for our exposition.

4.2 Geographical and Sectoral Composition of FDI flows from BRICS

From the literature, it appears that FDI inflows to BRICS come mainly from outside the bloc. This is also true for outflows of FDI from BRICS (Gammeltoft, 2008). The major destinations of Brazil's FDI outflows are Chile, Mexico and Venezuela in Latin America, Western Europe and the US. In addition, there are outflows to the usual tax havens of Bahamas, Bermuda and British Virgin Islands. For Russia, the FDI outflows are to the CIS countries, Western Europe and Central and Eastern Europe. The destination for India's outward FDI has changed over time. From 1975 to 1980s, the outflow was initially directed towards Singapore, Thailand, Sri Lanka, Malaysia etc. But in recent years, the major recipients are developed countries like the US and UK, mainly due to outward FDI by India's software industry. Within BRICS, the Russian Federation was a major recipient with 18 percent of cumulative FDI in the period 1996-2003 (see Gammeltoft, 2008). In addition, India's FDI flows go to tax havens like Bermuda, British Virgin Islands and Mauritius. In contrast, Chinese FDI has mainly flowed to developing countries of Asia, Latin America and Africa for asset acquisition in areas like mining, oil and gas. South African outward FDI has concentrated in the African region. Thus, there is a sharp divergence in the destination of FDI from the BRICS countries. While FDI from Brazil, South Africa and Russia is concentrated in their traditional regional neighbours, Indian FDI has been moving towards the developed countries while Chinese FDI is globally diversified in the natural resource sectors in developing countries.

Till 2004, the largest stock of FDI abroad was owned by Russia and Brazil and invested largely in their neighbourhood. However, Chinese FDI has grown nine times over the period 2003-2009 and is essentially global in nature. China now is the dominant source of FDI with India coming a close second. However, the destination of Chinese and Indian FDI is markedly different. Detailed differences in the sectoral pattern of FDI from the BRICS are also obtained by looking at the major outward investing companies in these countries.

Table 17 below reflects differences in the sectoral pattern of FDI outflows from each of the BRICS countries. Although, at the aggregate level, the FDI outflows from the developing countries are mainly going towards infrastructure and resource based sectors, there exist some high technology and service sectors which are also attracting FDI from the developing countries in general, and from the BRICS in particular (Gammeltoft, 2008).

Box 1. Most inflows went into services, but the sharpest rise in FDI was in natural resources.

Services gained the most from the surge of FDI, particularly finance, telecommunications and real estate. (Since data on the sectoral distribution of FDI are limited, these observations are extrapolated from data relating to cross-border M&As which accounted for a significant share of inflows.) The predominance of services in cross-border investments is not new. What is new is the further and sharp decline in the share of manufacturing and the steep rise of FDI into the primary sector, primarily the petroleum industry.

Source: World Investment Report 2006. FDI from Developing and Transition Economies: Implications for Development, UNCTAD.

Brazil's FDI outflow is concentrated in offshore financial infrastructure and services and trade related transport services. Although its role in the primary and manufacturing sectors is limited, important recipients, albeit at limited scale, are food, beverage, tobacco, petroleum, fuel production and metal industries. Russia's FDI has been concentrated in resource based sectors like oil and gas and metals. But now Russia's FDI is also moving towards manufacturing and telecommunication sectors. The sectoral composition of India's FDI is quite different with flows mainly to fertilizer, pesticides & seeds, drugs & pharmaceuticals industries in the manufacturing sector, and Information Technology (IT) and Business Process Outsourcing (BPO) in the service sector. China's FDI outflow has concentrated on resource extraction in oil, gas and minerals, although recently there is also some outflow to IT manufacturing in Asian countries and R & D activities in the developed countries. South Africa's FDI is concentrated mainly in the resource-based and financial sectors.

TABLE 17: MAIN OUTWARD INVESTING AND INWARD RECEIVING INDUSTRIES BY COUNTRY

Country	Outward Investing Industries from BRICS	Major OFDI Firms from BRICS
Brazil	Energy, mining, services	Vale; Petrobras; Gerdau; Embraer; Votorantim; Camargo Correa; Odebrecht; Aracruz; Usiminas
China	Trade and services, manufacturing, resource extraction (oil, gas, minerals), IT	Shanghai Electric Industrial Company; Nanjing Automobile Group; Shanghai Baolong Industries; Danyang Dare Technology Group; Zhejiang Hongsheng Group; Suntech Power Holdings; Dalian Machine Tool Group; Sichuan Century Shuaghong Display Device Co. Ltd.; Harbin Measuring And Cutting Tools; Changsha Zhonglian Heavy Industry Tech. Development Co. Ltd.; Beijing Jingxi Heavy Industries

India	Pharmaceuticals, agricultural inputs, software, IT and broadcasting	Tata Steel; Hindalco (Aditya Birla); Ispat Industry; Ranbaxy Laboratories; Matrix Laboratories; Tata Chemicals; Reliance; Tata Motors; Bharat Forge; Mahindra and Mahindra; Tata Tea; United Spirit; Suzlon Energy; Videocon International; Wipro Ltd; Sasken Communication Technologies Ltd; Videsh Sanchar Nigam Ltd.; Reliance Infocomm; Bharti Airtel; Oil and Natural Gas Corporation (ONGC); ONGC Videsh
Russia	Oil, gas, metal, manufacturing and telecommunication	Evraz; VTV Aerospace; NLMK Steel; Vimpelcom; Norilsk Metals; Interrus Energy; Rusal Construction; AirBridge
South Africa	Resource extraction and finance	Sappi Limited; Sasol Limited; MTN group; Anglo Gold; Naspers Limited; Barlows Id; Nampak Limited;

Source: Gammeltoft (2008); Athukorala (2009); KPMG (2008); DGEFIN (2008); UNECA (2004).

FDI from Brazil, India and South Africa has generally been in the same areas in which they have major exports, but Chinese and Russian FDI has been largely asset seeking. The trends in FDI flows of BRICS countries appear similar to that from developing countries summarized in Box 1.

4.3. FDI Strategies

It is useful to see what strategies are followed by the BRICS countries in planning their FDI outflows, especially the role of the state in financing/aiding outflows. There are three possible vehicles for FDI - public sector companies (PSUs), the transnational companies (TNCs) and the small manufacturing enterprises (SMEs). For Brazil, the foreign investors are large TNCs and SMEs. Russia's FDI outflow is going through PSUs and TNCs. But SMEs play an important role in Russia's outward FDI in the CIS and the Central and Eastern Europe countries. India's FDI outflow is via TNCs in information technology enabled services (ITES), SMEs in pharmaceutical and entertainment industries and the PSUs in oil and natural gas exploration. China's FDI investors comprise mainly PSUs in resource and mineral exploration, TNCs in IT, manufacturing and R&D, and SMEs in textiles and small scale IT and manufacturing. In South Africa, TNCs play a dominant role in outward FDI. Here, the TNCs as well SMEs are concentrated in gold & precious metals, sugar, paper, furniture, cellular phone services and plastic industries (Gammeltoft, 2008).

The general picture seems to be a mix of strategies involving PSUs, TNCs and SMEs in outward FDI.

Box 2. There has been a significant increase in developing-country firms in the universe of transnational corporations.

Transnational corporations (TNCs), most of them privately owned, undertake FDI. However, in some home countries (notably in the developing world) and in some industries (especially those related to natural resources) a number of major State-owned enterprises are also increasingly expanding abroad. According to estimates by UNCTAD, the universe of TNCs now spans some 77,000 parent companies with over 770,000 foreign affiliates. In 2005, these foreign affiliates generated an estimated \$4.5 trillion in value added, employed some 62 million workers and exported goods and services valued at more than \$4 trillion.

Total sales of TNCs from developing countries reached \$1.9 trillion in 2005, providing employment to some 6 million workers. In 2004, there were five companies from developing economies in the list of the top 100 TNCs, all with headquarters in Asia, three of them State-owned. These five companies – Hutchison Whampoa (Hong Kong, China), Petronas (Malaysia), Singtel (Singapore) Samsung Electronics (the Republic of Korea) and CITIC Group (China) – topped the list of the largest 100 TNCs from developing countries.

Source: World Investment Report 2006. *FDI from Developing and Transition Economies: Implications for Development*, UNCTAD.

In Box 2, we see that the role of TNCs from developing countries has been expanding on the global stage. However, not all these TNCs are large corporations and many are actually SMEs. The main point is that with internationalisation of production, both large TNCs and SMEs are now integrated in the value chain (see, for example, UNCTAD World Investment Report, 2005). In this context, the Chinese strategies are worth noting. Chinese outward FDI tends to be underestimated as it does not include state initiatives and SMEs which are induced by FDI from large corporations. This is particularly true for Chinese FDI in Africa (see, for example, Gammeltoft, 2008). Typically, infrastructure FDI is driven by the Chinese government on the basis of soft loans to Chinese companies. However, the Chinese government tends to link the availability of these loans to concessions by host countries in areas like oil and gas exploration which is done by other Chinese companies. The SMEs run by Chinese vendors tend to follow in small manufacturing, retailing etc. The official figures on FDI do not capture the loan and induced FDI components.

We have already noted that one of the principal methods of international transmission of technology is FDI. However, FDI outflows from BRICS countries have been related more to domestic input requirements (as in China) or export promotion (as in the other countries). In particular, to the extent that trade and FDI are complements, the broad trends in FDI outflows from the BRICS indicate that these flows have contributed little to trade within the group. In the earlier section we have looked at the commodities where there exists some complementarity/substitutability between countries of the BRICS. Broadly, these commodities belong to industries like vegetable oils, chemicals, metals, plastics and pharmaceuticals. From our earlier discussion it is clear that these are not the areas where FDI outflows from BRICS have concentrated. Yet, if technical collaboration is to promote trade within BRICS or between BRICS and the outside world, then these are the areas where FDI should be clearly visible.

However, while the emergence of BRICS is a recent phenomenon, FDI flows noted above are part of a long term pattern. Our conclusion is largely based on observation of the historical pattern of FDI. It is possible that FDI flows may change in response to current trade patterns. Yet, it may be noted that trade has usually followed FDI rather than the other way around.

4.4 Institutional Arrangements for Technology Collaboration

The data based analysis of FDI is largely concentrated on flows from large state/private companies, much of which are the consequences of existing trade flows. However, apart from technology arrangements that flow from intra-firm transfers in TNCs, there is also the issue of the institutional mechanism which either aids FDI or is a precondition of technology collaboration. Here, the state has an important role to play in enabling technology collaboration, particularly in the context of SMEs. In this section, we will provide a brief overview of these arrangements within the BRICS.

Typically, countries sign up as contracting parties to International Investment Agreements, Bilateral Investment Treaties (BITs) or Direct Tax Treaties (DTTs) with investing partners. BITs are largely concerned with creating the institutional arrangements governing FDI flows between the contracting parties. In particular, they are concerned with creating a level playing field for investors in partner countries, defining conditions for technology transfer and creating a dispute settlement mechanism. On the other hand, DTTs by and large create a preferential tax regime for FDI flows. The objective of both is to eliminate any uncertainty among investors. Here it may be noted that following the TRIMS Agreement in the WTO, BITs have become largely irrelevant and the treatment of foreign investment is largely governed by the stipulations of TRIMS. By and large, TRIMS requires that foreign investors get non-discriminatory treatment, in other words, they should be treated at par with domestic investors. More specifically, investment agreements cannot be tied to trade promotion.

However, the proliferation of BITs and DTTs indicates that developing countries have been moving towards a more favourable treatment to foreign investment. UNCTAD's World Investment Report (2005) indicates that at the end of 2004, South-South BITs comprised 25 percent of the total number of BITs signed in the world. It suggests that cooperation in the field of foreign investment is gaining momentum amongst developing economies and economies in transition. More recently, many countries are building investment agreements into their regional trading arrangements (RTAs) what are now being called WTO plus agreements.

In Table 18 below, we list the DTT agreements in the BRICS. As can be seen from the table, most of the BRICS countries have some kind of DTT with each other but these agreements are not standardized nor are all countries included in the set of DTT for any country. Thus, for example, China has an Income and Capital Agreement with India and Brazil but only an Income Agreement with Russia. Similarly, South Africa has an agreement only with China. Thus, it is necessary to develop some model DTT which could be applicable to all BRICS countries so as to prevent a clash of interests among them.

TABLE 18: TOTAL BILATERAL INVESTMENT TREATIES AND DOUBLE TAXATION AGREEMENTS CONCLUDED, JUNE, 2011

	BRICS		Number of BITs and DTTs in Non-BRICS (excluding BRICS)	
Country	BITs	DTA	BITs (excluding BRICS)	DTA (excluding BRICS)
Brazil	-	China (I&C); India (I&C); Russia (I)	14	35
China	India; Russia; South Africa	Brazil (I&C); India (I&C); Russia (I); South Africa (T & I)	125	109
India	China; Russia	Brazil (I&C); India (I&C); Russia (I&C)	78	77
Russia	India; China; South Africa	Brazil (I); China (I); India (I&C)	66	65
South Africa	China; Russia	China (T&I)	44	65

Source: UNCTAD, *Country Specific BITs and DTAs, 2011*.

Note: Notations in parentheses refer to the type of agreement

Here, T&I: Transport and Income; I&C: Income and Capital; I: Income.

In recent years, most developing countries have signed RTAs with other developing countries. Typically, some of these RTAs have agreements on investment and services added to the usual agreement on trade in commodities. These are often called 'WTO plus' agreements. In Table 19 below we list the RTAs among two or more of the BRICS countries.

TABLE 19: REGIONAL TRADE AGREEMENTS AMONG BRICS COUNTRIES

BRICS Members	Regional Trade Agreements	RTA Members from BRICS	Date of Signature	Date of Enforcement	Type of Agreement
Brazil	Global System of Trade Preferences among Developing Countries (GSTP)	India	13-Apr-88	19 April, 1989	Partial Scope Agreement
	MERCOSUR	India	25-Jan-04	1-Jun-09	Partial Scope Agreement
China	Asia Pacific Trade Agreement (APTA)	India	31-Jul-75	17-Jun-76	Partial Scope Agreement

India	Asia Pacific Trade Agreement (APTA)	China	31-Jul-75	17-Jun-76	Partial Scope Agreement
	Global System of Trade Preferences among Developing Countries (GSTP)	Brazil	13-Apr-88	19 April, 1989	Partial Scope Agreement
	MERCOSUR	Brazil	25-Jan-04	1-Jun-09	Partial Scope Agreement
	Southern African Customs Union (SACU)	South Africa	Under Negotiation		Partial Scope Agreement
Russia					
South Africa	Southern African Customs Union (SACU)	India	Under Negotiation		Partial Scope Agreement

Source: WTO, RTA Database.

Table 19 indicates that India and Brazil are linked via RTA with the MERCOSUR group of countries. India is currently negotiating an RTA with SACU (where South Africa is the dominant member). However, the countries of BRICS are probably much more strongly linked by RTAs to other regional members. For example, China and India are only linked via the APTA which is not an effective RTA and involves a large number of countries. RTAs may have some impact on trade promotion. However, this would require detailed analysis beyond the scope of this study.

4.5 Role of the Government in Technical Collaboration

It is now well recognized that for R&D in developing economies, the state has an important role to play. This is also important in the area of trade where we have noted that SMEs play a pivotal role as part of the global value chain. This is clearly brought out in Table 20 below.

TABLE 20: CONTRIBUTION BY SMALL AND MEDIUM-SIZED ENTERPRISES IN SELECTED ECONOMIES

Countries/ areas	SMEs' share in exports	SME share in total enterprises	SME share of total workforce
China	69.2	99.0	74.5
India	40.0	n.a.	n.a.
Russia	54.0*	97.6	60.9

Source: Asia Pacific Trade and Investment Report (APTIR) 2011, UNESCAP.

* Share of total sales revenue.

Table 20 indicates the crucial role that SMEs play in exports from developing countries and the BRICS countries in particular. Actually, this is also true for some developed countries in Europe. SMEs also form a large part of the total number of enterprises engaged in trade. However, since these SMEs normally lack the financial muscle to undertake R&D, it is important for the state to step in to create the enabling environment for such R&D.

A recent study by UNESCAP has listed the benefits that SMEs can obtain in being part of the global value chain (see, APTIR, 2011). Broadly, these benefits fall in the category of backward linkages with suppliers, technology and forward linkages with consumers via brand name benefits in areas like automobiles. Some of these benefits are clearly seen in the case of linkages between component manufacturers and the automobile suppliers. Automobile components are major items exported from both India and South

Africa. Here the role of the state is to create an enabling environment via training programmes and, in general, to promote these global value chains.

Apart from promotion of SMEs, developing country governments can play an important role in promoting R&D. Generally, the share of GDP devoted to R&D in developing countries is low compared to the developed countries. For example, while Brazil invests around 1% of GDP in R&D activities, the US invests more than twice this figure. Many analysts believe that this higher investment has significantly contributed to the current position of the US as a leader in technology development. In the US, research universities receive income from different sources, from funding and grants to royalties and donations. Europe, on the other hand, presents a greater degree of heterogeneity in R&D expenditures. Although their average expenditure is close to 2% of the GDP, three countries (Germany, France and UK) account for around three quarters of the total R&D investment in Europe. In India, the share of R&D in GDP is a little over one percent but almost all of the R&D expenditure is made by the government, except in the case of the pharmaceutical sector where the private sector is involved in R&D activities.

It is not often realized that ninety five percent of the world's inventions are the outcome of research in universities. It is then the private sector that converts these inventions to innovations via market applications. What is necessary is a National Innovation System (NIS) where such partnerships can be internalized. The current strengthening of university-industry partnerships appears to be similar within BRIC (Brazil, Russia, India, China) countries (Uriona-Maldonado et. al., 2010). However, according to many authors, the Brazilian and Chinese governments are far ahead of other countries in developing this partnership. What is still missing is an intra-BRICS institutional mechanism for promoting university-industry exchange between countries of the bloc. Lack of this mechanism may be a reason why BRICS have lagged behind in technological innovation, particularly in the context of their growing SME sector.

5. Conclusion

The defining feature of trade in the last two decades or so has been the growth of South-South trade which has exceeded the growth of world trade and the trade between developed and developing countries. The emergence of the BRICS grouping in recent years and the growth of intra-BRICS trade is certainly a new development which merits some study. The recent BRICS Summit held in Sanya (China) on 14th April 2011 concluded with the release of a joint document called the 'Sanya Declaration.' The Sanya Declaration was in a sense an expression of intent for the formation of a new developing country bloc. It was also recognition of the growing trade ties between the BRICS countries. The Declaration also noted the need for technological cooperation among the BRICS countries.

However, while BRICS may be an important political group in various fora of the UN, it is not clear if it is a sustainable economic bloc. It is also not clear what form of technological cooperation will take place between these countries. In this study, we have looked at economic aspects of the BRICS on three issues. Firstly, to what extent is the growth of intra-BRICS trade sustainable? Secondly, what is the substitutability and complementarity in product trade? Finally, what are the main issues in technological collaboration between BRICS countries.

On the issue of sustainability, we have looked at the growth of intra-BRICS trade in the period 1995-2007. The choice of this period was dictated by the fact that it was the decade after the formation of the WTO and that there were also no major exogenous factors during the period that could have biased our results in favour of intra-BRICS trade. Our study shows that the expanded intra-BRICS trade took place even while demand growth was still quite high in the developed world indicating that trade was

not driven by adverse demand conditions in the developed world as it was in the 1970s. However, our study also shows that this growing intra-BRICS trade was accompanied by its increasing asymmetry due to the overpowering presence of China. This asymmetry is not sustainable in the long run.

Another test of sustainability is done at the micro level. Here, at 4-digit level of disaggregation, we calculated the ratio of net intra-BRICS trade to net BRICS trade with the rest of the world for each country of BRICS in those commodities which accounted for at least one percent of a country's intra-BRICS exports in 2007. We looked at the changes over the period 2000-2007. We see that in almost all cases, the ratios have increased substantially, indicating that the members of the BRICS are redirecting more of their reasonably competitive exports towards each other. For India, some ratios are over 100 per cent which indicates the increasing importance of BRICS trade relative to trade with the rest of the world. This is seen in commodities like cotton, ores and pellets of iron, alumina, zinc and other ores.

However, one question that remains is whether the trade in these commodities has been increasing over our reference period (2000-2007). We looked at commodities where the share of the 4-digit commodity in the 2-digit commodity group has increased between 2000 and 2007 (increasingly important commodities) and those where this share has fallen over this period but where the commodity accounted for at least 10 percent of 2-digit intra-BRICS trade for each country in 2007 (important commodities). We define these as quantitatively important commodities. Here we see that there are very few quantitatively important commodities in intra-BRICS exports. Much of intra BRICS trade seems to be in resource based commodities. However, as noted previously, it is in non-resource based commodities that future growth is most promising. Thus, the current structure of intra-BRICS is likely to alter radically from the pattern of resource based commodity exports which drove intra-BRICS trade in the period 1995-2007. In other words, intra-BRICS trade is sustainable but not on the basis of trade in resource based commodities.

This issue of sustainability involves some further consideration of the nature of intra-BRICS trade, particularly in terms of the technology content of trade. To see this, we classified intra-BRICS trade by its technology content using the UNIDO definition. This gives further clarity to our previous conclusion. Quantitatively, the importance of growing intra-BRICS trade in LT, MT or HT products is insignificant, except in some MT products like propylene polymers and nitrogenous fertilizers.

The second issue analysed is the degree of complementarity and substitutability of BRICS trade in third countries, especially in areas where technological cooperation is feasible. Generally, where countries compete in similar products in the same third country, market technological cooperation may be difficult. By using revealed comparative advantage (RCA) as a measure of complementarity/substitutability, we find that there is little substitutability and hence competition between these countries as they are by and large exporting to different markets. Such competition may be for Butanols (in China) where India and Brazil are competing, Ammonia products (in Brazil) where China and Russia are competing, Ferrochromium (in China, Japan) where India and South Africa are competing, Refined Copper (in China) where India and Brazil are competing and other antibiotics (in Germany) where India and China are competing. Most of the above products fall in the MT or HT areas where technological cooperation is generally useful and desirable but it may not happen due to an element of competition in the same market. Apart from these, there are a large number of products belonging to various industries where product complementarity exists between BRICS countries. These are Vegetable Oils (for Brazil, China and Russia), Chemical Products (for Brazil, India, Russia and South Africa), Plastics (for Brazil and China) and Iron and Steel (for all BRICS countries). Our notion of complementarity suggests the possibility of each country specializing at some stage of production in any given industry. There is also little scope of conflict in technological collaboration because each country has a distinct market segment.

The third issue relates to technological cooperation between the BRICS countries. We looked at this from two points of view. One, the major source of technological transfer is foreign direct investment (FDI). FDI generally facilitates technology transfer and collaboration between countries. In addition, FDI may also promote trade given that much of trade today is in intermediate goods. Two, for developing countries, the role of institutions is important, especially the role of the government in promoting FDI and technological transfer via creation of enabling institutions.

Our analysis indicates that with the exception of China and Brazil, the pattern of FDI from BRICS countries has not been conducive to promoting intra-BRICS trade. Barring China and Brazil, FDI outflows have largely been promoting regional trade. For India, FDI is still oriented towards the developed countries. Here the Chinese strategy is worth noting. China tends to facilitate infrastructure development in distant countries via loans which are then linked to preferential treatment to Chinese companies in specific sectors. Subsequently, small scale Chinese traders are encouraged to step in to perform services like retail, small trade etc.

On the issue of institutional factors promoting FDI and trade, there appears little progress in intra-BRICS coordination in areas like double taxation agreements. However, the issue of bilateral investment agreements is probably not so relevant given the operation of the TRIMS agreement under the WTO. Similarly, there appears little cooperation among the BRICS countries through RTAs because 'WTO plus' agreements are increasingly used to establish investment agreements.

One of the factors often ignored while looking at BRICS trade is the dominance of small scale establishments (SSIs) in exports of these countries. Here, the role of the government in promoting global value chains is crucial, given the low resource base of these firms. Finally, the role of the government in promoting technological development via university-industry partnership is also important, particularly in making new technologies available to the SSIs. Here, only Brazil and China have developed systems. The other countries need to develop such channels of interaction among different actors to strengthen the National Innovation Systems. There is also no institutional mechanism for intra-BRICS coordination in technological partnerships. Some such mechanism must be developed.

To conclude, the observed growth in intra-BRICS trade is largely due to resource based trade which is not sustainable for all the countries. It is not surprising that FDI flows from these countries have done little to promote intra-BRICS trade. However, there seems to be growing trade in other areas where technological cooperation is feasible. Here, the need is to establish institutional mechanisms like National Innovation Systems to promote intra-BRICS FDI in these areas.

APPENDIX 1

A) ENTROPY OF BILATERAL TRADE SYMMETRY

The following entropy is a simple way of measuring trade symmetry of bilateral trade flows between two countries:

$$H_{ij} = -x_{ij} \log_2 x_{ij} - x_{ji} \log_2 x_{ji}$$

Let x_{ij} be the amount of exports from country i to country j, measured as fraction of the total trade between the two countries, so that $x_{ij} + x_{ji} = 1$

H_{ij} takes a maximum of 1 when $x_{ij} = x_{ji} = 1/2$ and a minimum of zero when $x_{ij} = 1$ and $x_{ji} = 0$ or $x_{ij} = 0$ and $x_{ji} = 1$. Bilateral entropies H_{ij} can be computed for each 5_{c2}=10 pairs of countries in our study.

B) THE CRITERION OF SYMMETRY IN INTRA-BRICS TRADE

Let P_{ij} be the exports from country i to country j in 1995, measured as a fraction of intra-BRICS trade in 1995; q_{ij} is the exports from country i to country j in 2007, measured as a fraction of intra-BRICS trade in 2007.

We have measured four types of criterion functions in our study:

$$1) \quad I_0 = \sum_i \sum_j P_{ij} \log \frac{P_{ij}}{(P_{ij} + P_{ji})/2}$$

Intra-BRICS trade becomes symmetry when I_0 takes value 0, i.e. $P_{ij} = P_{ji}$ for all i and j and i not equal to j. As the value of I_0 increases then the intra-BRICS trade asymmetry increases.

$$2) \quad I_1 = \sum_i \sum_j q_{ij} \log \frac{q_{ij}}{P_{ij}}$$

Here the criterion of symmetry means all countries should maintain the intra-BRICS exports share in 2007 with respect to its intra-BRICS exports share 1995. In other words, the 2007 intra-BRICS trade shares (q_{ij}) are predicted by the 1995 intra-BRICS trade shares (P_{ij}) without any modification or no-change extrapolation.

$$3) \quad I_2 = \sum_i \sum_j \widehat{q_{ij}} \log \frac{\widehat{q_{ij}}}{P_{ij}}$$

Here the criterion of symmetry is the all countries should maintain the intra-BRICS expected exports share ($\widehat{q_{ij}}$) in 2007 with respect to its actual intra-BRICS exports share (P_{ij}) in 1995. In the language of information theory, the expected information of the message that transforms the P_{ij} 's as "prior probabilities" into the $\widehat{q_{ij}}$'s as "posterior probabilities".

$$4) \quad I_3 = \sum_i \sum_j \mu_{ij} \log \frac{\mu_{ij}}{(\mu_{ij} + \mu_{ji})/2} \quad \text{Where, } \mu_i = \frac{1}{2} (P_i + P_i)$$

Here the criterion of symmetry means all countries should maintain the intra-BRICS trade balances. This criterion function shows how the symmetry changes when we apply a biproportional adjustment to the trade matrix so as to eliminate the discrepancy between each country's total export and total imports.

APPENDIX 2

TRENDS IN INTRA BRICS AND WORLD NET EXPORT BETWEEN 2000 AND 2007

Economy	Product Code(1% or greater)	2000			2007		
		Net Intra BRICS Ex- port (X-M)	Net World Export (X-M)	Percentage of Intra to World Net Export	Net Intra BRICS Ex- port (X-M)	Net World Export (X-M)	Percentage of Intra to World Net Export
Net intra BRICS and World from Brazil	1212	65.3	716.7	9.1	403.6	2047.5	19.7
	2222	337.4	2055.2	16.4	2867.8	6679.8	42.9
	2515	55.7	1334.9	4.2	386.9	2746.2	14.1
	2815	176.0	1852.2	9.5	3124.1	7114.1	43.9
	2816	121.7	1194.6	10.2	641.1	3443.8	18.6
	2831	0.0	-257.7	0.0	311.4	-45.4	-685.9
	3330	36.1	-3031.3	-1.2	839.9	-3070.7	-27.4
	4211	87.3	324.3	26.9	585.6	1676.6	34.9
	6114	35.8	588.5	6.1	530.3	2052.4	25.8
	6715	-4.4	404.1	-1.1	161.3	1200.3	13.4
	6821	-0.1	-287.8	0.0	199.4	-957.7	-20.8
	7832	0.9	67.4	1.3	241.2	944.8	25.5
	7843	30.3	-369.7	-8.2	133.7	-509.8	-26.2
Net intra BRICS and World from China	3250	224.0	916.5	24.4	742.4	3057.4	24.3
	5413	74.2	380.6	19.5	722.9	1780.5	40.6
	6732	0.0	0.0	0.0	797.8	6436.9	12.4
	7522	1.0	257.1	0.4	962.9	65915.6	1.5
	7611	37.3	1059.1	3.5	866.3	17664.5	4.9
	7638	24.6	2775.5	0.9	780.0	18325.4	4.3
	7641	30.7	461.6	6.7	820.6	5808.2	14.1
	7643	6.7	1137.7	0.6	3110.7	34349.2	9.1
	7649	86.8	-1496.2	-5.8	1815.0	21879.1	8.3
	7758	42.5	2283.6	1.9	726.4	9914.6	7.3
	7821	0.2	-44.0	-0.5	856.1	1920.1	44.6
	8432	43.7	1161.8	3.8	1379.5	7612.8	18.1
	8442	58.0	1681.9	3.4	1906.2	11102.9	17.2
	8453	74.5	4359.5	1.7	1912.4	15706.7	12.2
	8454	38.5	2244.5	1.7	857.9	8389.6	10.2
	8514	188.2	3065.1	6.1	1253.1	6944.7	18.0

Net intra BRICS and World from India	2631	-50.0	-318.7	15.7	856.6	784.0	109.3
	2731	46.8	216.5	21.6	235.3	481.7	48.8
	2815	94.1	327.8	28.7	3912.1	488.0	801.7
	2816	15.2	12.2	124.6	203.1	3.9	5207.7
	2852	20.0	41.2	48.5	165.6	93.7	176.7
	2875	0.0	-11.5	0.0	279.5	180.8	154.6
	2879	22.7	35.6	63.8	240.3	43.8	548.6
	5112	-5.2	-217.4	2.4	166.5	1132.9	14.7
	5429	90.6	522.3	17.3	311.5	2062.1	15.1
	5751	16.1	63.7	25.3	168.4	366.6	45.9
	6715	-24.9	50.8	-49.0	16.6	554.8	3.0
	6821	11.1	31.5	35.2	386.6	1253.9	30.8
Net intra BRICS and World from Russia	2321	62.0	268.0	23.1	236.9	1215.1	19.5
	2474	287.4	1082.2	26.6	1978.8	3144.5	62.9
	2475	40.7	248.9	16.4	466.8	987.9	47.3
	2482	11.0	704.6	1.6	210.1	3163.0	6.6
	2515	160.6	363.9	44.1	362.7	599.2	60.5
	3330	262.9	23031.0	1.1	5649.3	113614.0	5.0
	5121	40.9	167.2	24.5	210.3	721.2	29.2
	5156	117.6	187.8	62.6	215.7	432.2	49.9
	5621	114.6	531.5	21.6	494.6	1965.8	25.2
	5623	288.4	405.9	71.1	1168.7	1679.7	69.6
	5629	137.0	639.0	21.4	544.1	2030.7	26.8
	6726	255.0	1472.3	17.3	300.6	5011.3	6.0
	6751	60.9	169.4	36.0	459.6	1237.8	37.1
	7144	59.3	151.0	39.3	599.4	858.0	69.9
	7648	20.9	31.1	67.2	199.4	181.3	110.0
Net intra BRICS and World from South Africa	2513	45.9	360.8	12.7	83.4	402.3	20.7
	2681	4.4	32.3	13.6	69.2	145.6	47.5
	2816	105.3	324.6	32.4	518.8	1515.6	34.2
	2831	0.0	0.7	0.0	121.1	170.4	71.1
	2877	1.7	144.4	1.2	215.8	409.5	52.7
	2879	2.2	98.8	2.2	444.3	656.6	67.7
	2882	10.5	69.3	15.2	120.7	504.9	23.9
	3212	103.2	1247.2	8.3	452.4	3125.6	14.5
	3330	0.0	-3453.7	0.0	786.1	-9077.8	-8.7
	5223	106.5	118.4	89.9	192.2	226.9	84.7
	6715	40.4	986.7	4.1	554.4	2684.4	20.7
	6753	10.6	390.6	2.7	188.1	898.8	20.9
	6755	2.3	21.8	10.6	124.2	592.3	21.0
	6841	0.7	709.7	0.1	148.4	1588.9	9.3
	6842	11.6	76.7	15.1	26.7	451.2	5.9

Source: WITS.

APPENDIX 3

MEASURING PRODUCT SOPHISTICATION IN INDUSTRY

In the past, the OECD used to use technology classification based on ISIC Rev. 2 industry classifications. The methodology uses three indicators of technology intensity reflecting, to different degrees, “technology-producer” and “technology-user” aspects: i) R&D expenditures divided by value added; ii) R&D expenditures divided by production; and iii) R&D expenditures plus technology embodied in intermediate and investment goods divided by production. From 2003 onwards the OECD made the new technological classification of manufacturing industries based on ISIC Rev. 3 into high-technology, medium-high-technology, medium-low-technology and low-technology groups was made after ranking the industries according to their average over 1991-99 against aggregate OECD R&D intensities. Industries classified to higher categories have a higher average intensity for both indicators than industries in lower categories.

As our analysis in this report is based on the industry classification based on the SITC Rev 3 we have used the UNIDO definition of industries which is classified on the basis of SITC Rev.3. UNIDO (2009) introduced a new measure of the degree of sophistication of a manufacturing activity or product, P-soph is as follows:

If a product's P-soph index is high, it indicates that it is produced primarily by high-income countries. A lower value indicates that low-income countries are more intensively engaged in production in the sector. More precisely, P-soph is the weighted average of GDP per capita of all countries producing the good, where the weights are the “production intensities” of the sector in each country (normalized to 1). Production intensity is measured by the ratio of the value-added share of the sector in a country's total manufacturing relative to the sector's value-added share in world manufacturing. This approach is analogous to the use of revealed comparative advantage by Hausmann, Hwang and Rodrik (2007).

Correspondingly, the final technological categorisation of industries on the basis of SITC Rev 3 at the 3-digit level is given below:

1) RESOURCE-BASED

016, 017, 023, 024, 035, 037, 046, 047, 048, 056, 058, 059, 061, 062, 073, 098, 111, 112, 122, 232, 247, 248, 251, 264, 265, 281, 282, 283, 284, 285, 286, 287, 288, 289, 322, 334, 335, 342, 344, 345, 411, 421, 422, 431, 511, 514, 515, 516, 522, 523, 524, 531, 532, 551, 592, 621, 625, 629,

633, 634, 635, 641, 661, 662, 663, 664, 667, 689

2) LOW-TECHNOLOGY

611, 612, 613, 642, 651, 652, 654, 655, 656, 657, 658, 659, 665, 666, 673, 674, 675, 676, 677, 679, 691, 692, 693, 694, 695, 696, 697, 699, 821, 831, 841, 842, 843, 844, 845, 846, 848, 851, 893, 894, 895, 897, 898, 899

3) MEDIUM-TECHNOLOGY

266, 267, 512, 513, 533, 553, 554, 562, 571, 572, 573, 574, 575, 579, 581, 582, 583, 591, 593, 597, 598, 653, 671, 672, 678, 711, 712, 713, 714, 721, 722, 723, 724, 725, 726, 727, 728, 731, 733, 735, 737, 741, 742, 743, 744, 745, 746, 747, 748, 749, 761, 762, 763, 772, 773, 775, 778, 781, 782, 783, 784, 785, 786, 791, 793, 811, 812, 813, 872, 873, 882, 884, 885

4) HIGH-TECHNOLOGY

525, 541, 542, 716, 718, 751, 752, 759, 764, 771, 774, 776, 792, 871, 874, 881, 891

APPENDIX 4

EXPORTS BASED ON UNIDO TECHNOLOGY DEFINITION OF COMMODITIES FOR 2000

BRAZIL 2000		
	Product Codes	% Share in Brazil's Total Intra-BRICS Exports
Resource Based Exports	0122	1.5
	0123	1.6
	0611	14.3
	0612	1.2
	0713	1.7
	1212	3.2
	2222	16.6
	2484	1.2
	2515	2.7
	2815	8.7
	2816	6
	3330	1.8
	4211	4.3
	<i>Share of Resource Based Exports</i>	64.8
Low Tech Exports	6114	1.9
	<i>Share of LT exports</i>	1.9
Medium Tech Exports	5711	1
	7812	2.8
	7843	1.6
	<i>Share of MT</i>	5.4
High Tech Exports	7923	1.8
	<i>Share of HT exports</i>	1.8
CHINA 2000		
	Product Codes	% Share in China's Total Intra-BRICS Exports
Resource Based Exports	423	1.0
	2613	2.0
	5157	1.0
	<i>Share of Resource Based Exports</i>	4.0
Low Tech Exports	8411	1.3
	8414	1.0
	8415	1.0
	8442	1.0
	8453	1.3
	8458	1.0
	8481	7.2
	8512	1.6
	8513	2.0
	8514	3.1
	8942	1.0

	<i>Share of LT exports</i>	21.4
Medium Tech Exports	3250	3.7
	7782	1.3
	<i>Share of MT</i>	5.0
High Tech Exports	5413	1.4
	7526	2.5
	7649	1.5
	<i>Share of HT exports</i>	5.4
INDIA 2000		
	Product Codes	% Share in India's Total Intra-BRICS Exports
Resource Based Exports	0342	3.6
	0361	1.4
	0423	1.2
	0713	2.6
	0741	5.4
	0813	1.1
	1211	1.3
	2731	2.3
	2815	4.5
	2852	1.1
	2879	1.2
	4225	1.6
	5169	2.3
	<i>Share of Resource Based Exports</i>	29.5
Low Tech Exports	6513	5.6
	6522	1.1
	8415	1.8
	8424	1.9
	8427	1.9
	8442	1.1
	8453	1.3
	8454	3.0
	<i>Share of LT exports</i>	17.3
High Tech Exports	5421	1.2
	5429	4.4
	<i>Share of HT exports</i>	5.5
RUSSIA 2000		
	Product Codes	% Share in Russia's Total Intra-BRICS Exports ^a
Resource Based Exports	2474	4.3
	2515	2.4
	3330	4.0
	5156	1.8
	6841	7.3
	6411	1.2

	<i>Share of Resource Based Exports</i>	21.0
Medium Tech Exports	5621	1.7
	5623	4.4
	5629	2.1
	5711	1.3
	5731	2.1
	6726	3.9
	6727	3.2
	7932	7.9
	<i>Share of MT</i>	26.6
High Tech Exports	7921	1.1
	7929	1.0
	8911	2.0
	8912	2.7
	<i>Share of HT exports</i>	6.8
SOUTH AFRICA 2000		
	Product Codes	% Share in SA's Total Intra-BRICS Exports
Resource Based Exports	2513	4.9
	2687	1.0
	2816	11.2
	2878	1.1
	2882	1.1
	3212	11.2
	5162	1.5
	5223	11.5
	5236	1.3
	<i>Share of Resource Based Exports</i>	44.8
Low Tech Exports	6516	1.3
	6753	1.1
	<i>Share of LT exports</i>	2.4
Medium Tech Exports	5913	2.2
	6715	5.1
	6832	1.6
	6842	1.4
	7436	2.3
	5121	1.1
	<i>Share of MT exports</i>	13.7

Source: WITS.

APPENDIX 5

EXPORTS BASED ON UNIDO TECHNOLOGY DEFINITION OF COMMODITIES FOR 2007

BRAZIL 2007				
	Product Codes	% Share in Brazil's Total Intra-BRICS Exports	4 digits Increasingly Important	4 digits important commodities
Resource Based Exports	0112	5.6		
	0122	3.9		
	0123	2.8		
	0611	6.1		
	0612	1.1		
	1212	2.4		
	2222	16.7		2222
	2515	2.3		
	2815	18.2	2815	
	2816	3.7		2816
	2831	1.8		
	3332	4.9		
	4211	3.4	4211	
	5112			5112
	5113		5113	
	5146		5146	
	5156		5156	
	<i>Share of Resource Based Exports</i>	72.7		
Low Tech Exports	6114	3.1		
	<i>Share of LT exports</i>	3.1		
Medium Tech Exports	5121		5121	
	5711			5711
	5751		5751	
	6715	1.5		
	6821	1.2		
	7832	1.4		
	7843	1.2		
	<i>Share of MT exports</i>	5.2		

CHINA 2007				
	Product Codes	% Share in China's Total Intra-BRICS Exports	4 digits Increasingly Important	4 digits important commodities
Resource Based Exports	2772		2772	
	2782		2782	
	2929		2929	
	2613			2613
	2723			2723
	2919			2919
	4113			4113
	4213		4213	
	4218		4218	
	4229			4229
	4311		4311	
	4313			4313
	5157		5157	
	<i>Share of Resource Based Exports</i>			
Low Tech Based Exports	6732	1.1		
	8432	1.9		
	8442	2.7		
	8453	2.7		
	8454	1.2		
	8514	1.8		
	<i>Share of Low Tech</i>		11.4	
	3250	1.1		
Medium Based Exports	5621			5621
	5629		5629	
	5731		5731	
	5743		5743	
	7611	1.2		
	7638	1.1		
	7758	1.0		
	7821	1.2		
	<i>Share of Medium Based Exports</i>		5.6	
High Tech Exports	5413	1.1		
	7522	1.4		
	7641	1.2		
	7643	4.4		
	7649	2.4		
	<i>Share of High Tech Exports</i>		10.5	

INDIA 2007				
	Product Codes	% Share in India's Total Intra-BRICS Exports	4 digits Increasingly Important	4 digits important commodities
Resource Based exports	2631	5.9	2631	
	2731	1.6		
	2814		2814	
	2815	27.1		
	2816	1.4		
	2852	1.3		
	2875	1.9		
	2879	1.7		
	4225			4225
	5112	1.7	5112	
	5169			5169
	Share of Resource Based Exports	42.7		
Medium Tech Exports	5123		5123	
	5711		5711	
	5751	1.2	5751	
	6715	1.2		
	6821	2.8		
	Share of Medium Based Exports	5.2		
High Tech Exports	5413			5413
	5421		5421	
	5429	2.2		5429
	Share of High Tech Exports	2.2		
RUSSIA 2007				
	Product Codes	% Share in Russia's Total Intra-BRICS Exports	4 digits Increasingly Important	4 digits important commodities
Resource Based Exports	412	1.7		
	2321	1.3		
	2482	1.1		
	2474	10.2		2474
	2475	2.4	2475	
	2513		2513	
	2514			2514
	2515	1.9		
	2815		2815	
	2874			2874
	3330	29.2		
	4215			4215
	5148		5148	
	5156	1.2		
	5157			5157

	<i>Share of Resource Based</i>	48.9		
	5121	1.1		
Medium Tech Exports	5123			5123
	5124			5124
	5621	2.6		5621
	5623	6.0		
	5629	2.8		5629
	6726	1.6		
	6751	2.4		
	7144	3.1		
	<i>Share of Medium High Export</i>	19.5		
High Tech Exports	7648	1.1		
	<i>Share of High Tech Exports</i>	1.1		
South Africa 2007				
	Product Codes	% Share in SA's Total Intra-BRICS Exports	4 digits Increasingly Important	4 digits impor- tant commodities
Resource Based exports	2513	1.4		
	2681	1.1		
	2816	8.9	2816	
	2831	1.9		
	2877	3.5	2877	
	2879	7.2	2879	
	2882	1.9		
	3212	7.3		
	3330	19.7		
	4111			4111
	5111		5111	
	5157		5157	
	5162			5162
	6841	2.5		
	5223	3.2		5223
	<i>Share of Resource Based</i>	58.8		
Low Technology Exports	6753	3.2		
	6755	2.2		
	<i>Low Tech Export</i>	5.4		
Medium Technol- ogy Export	5121		5121	
	6715	9.4		
	6842	1.1		
	<i>Medium Tech Exports</i>	10.4		

Source: WITS.

APPENDIX 6

The rationale for using a variant of RCA index of Balassa (1965) is to eliminate the large values of RCA appearing merely because of country size. Thus a large country's exports of any commodity may be a small part of its own exports but may constitute a large part of world exports of that commodity because that commodity is not important in world trade. At an extreme a country's RCA should show numbers infinitely high if that country is the only exporter of that product. This is allowed for the variant of the Balassa index shown below. Since this country is the only exporter of that commodity the issue of substitutability and competition in world markets is irrelevant. To identify this bias we have also used a variant of Balassa's index given below.

Balassa's RCA Indices:

$$RCA_j^i = \frac{x_j^i / x^i}{x_j^w / x^w}$$

Variant of RCA index of Balassa can be defined as:

$$RCA_j^i = \frac{x_j^i / x^i}{x_j^{ROW} / x^{ROW}}$$

Where i is a country in BRICS, j is the commodity, x is exports, W and ROW stand for world and the rest of world respectively. Here ROW implies the world excluding BRICS. Hence, use of the second index (as we have done) indicates that exceptionally high RCAs may be due to the fact that the country is the only exporter of that commodity. Essentially, we are simply eliminating double counting of a country in both the numerator and the denominator of the index. We have calculated both variants of the RCA shown above.

APPENDIX 7

PRODUCT-WISE REVEALED COMPARATIVE ADVANTAGE ACROSS BRICS, 2007

Product Codes	Product Name	Brazil	China	India	Russia	South Africa
RESOURCE BASED						
4218	Sesame (Sesamum) oil and its fractions		yes*			
4225	Castor oil and its fractions			yes***		
4311	Fats and oils and their fractions, animal or vegetable, boiled, oxidized,					
41112	Fats and oils and their fractions, of fish, other than liver oils					
41135	Wool grease (other than crude) and fatty substances derived from wool gre		yes*			
42111	Soya bean oil, crude, whether or not degummed	yes*				

42119	Soya bean oil, refined, and its fractions	yes**				
42139	Groundnut oil, refined, and its fractions		yes*			
42151	Sunflower seed or safflower oil, crude				yes*	
42159	Sunflower seed or safflower oil, refined, and fractions thereof				yes*	
42299	Fixed vegetable fats and oils, crude, refined or fractionated, n.e.s.					
43131	Fatty acids; acid oils from refining					
51119	Acyclic hydrocarbons, n.e.s.					yes**
51122	Benzene, pure	yes*				
51124	Xylenes, pure	yes*		yes*		
51133	Tetrachloroethylene (perchloroethylene)	yes*				
51135	1,2-Dichloroethane (ethylene dichloride)	yes*				
51464	Lysine and its esters; salts thereof; glutamic acid and its salts	yes*				
51467	Amino-alcohol-phenols, amino-acid-phenols and other amino-compounds with	yes*				
51483	Acrylonitrile				yes*	
51561	Lactams				yes*	
51576	Heterocyclic compounds containing a pyrimidine ring					
51577	Other heterocyclic compounds with nitrogen hetero-atom(s) only					
51579	Heterocyclic compounds, n.e.s.					
51623	Acetone					yes*
51624	Butanone (ethyl methyl ketone)					yes**
51625	Other acyclic ketones without other oxygen function					yes*
51699	Other organic compounds			Yes***		
52234	Diphosphorus pentaoxide; phosphoric acid and polyphosphoric acids					yes*
68411	Aluminium, not alloyed					yes*
LOW TECH EXPORTS						
8453	Jerseys, pullovers, cardigans, waistcoats and similar articles, knitted o		yes*			
8454	T-shirts, singlets and other vests, knitted or crocheted		yes*			
61141	Other bovine and equine leather, without hair on, tanned	yes*				
61142	Other bovine and equine leather, without hair on, parchment-dressed	yes*				
67321	Flat-rld prod. of iron or n/a steel, not 673.11, w>600mm,th>4.75mm		yes*			
67324	Flat-rld prod. of iron or n/a steel, not coated, hotrld,w>600mm,th>4.75mm		yes*			

67531	Flat-rlld prod. of stnls steel, hotrlld, of a width of 600 mm or more and					yes*
67532	Flat-rlld prod. of stnls steel, hotrlld, of a width of 600 mm or more and					yes**
67534	Flat-rlld prod. of stnls steel, hotrlld, of a width of 600 mm or more and					yes*
67552	Flat-rlld prod. of stnls steel, coldrlld,w>600mm,3<th<4.75mm					yes*
67553	Flat-rlld prod. of stnls steel, coldrlld,w>600mm,1<th<3mm					yes*
67554	Flat-rlld prod. of stnls steel, coldrlld,w>600mm,0.5<th<1mm					yes*
84324	Trousers, bib and brace overalls, breeches and shorts, men's or boys', of		yes*			
84426	Trousers, bib and brace overalls, breeches and shorts, women's or girls',		yes*			
85148	Footwear, n.e.s., with uppers of leather or composition leather and outer		yes*			
MEDIUM TECH EXPORT						
7611	Television receivers, colour (including video monitors and video projecto		yes*			
7832	Road tractors for semi-trailers	yes*				
51211	Methanol (methyl alcohol)				yes*	
51213	Butanols				yes*	yes*
51215	Undenatured ethyl alcohol of an alcoholic strength by volume of 80% or hi	yes**				
51217	Fatty alcohols, industrial					yes**
51231	Cyclanic, cyclenic or cycloterpenic alcohols and their halogenated, sulph			yes*		
51235	Aromatic cyclic alcohols and their halogenated, sulphonated, nitrated or					
51241	Phenol (hydroxybenzene), pure, and its salts					
51243	Other phenols and phenol-alcohols				yes*	
56211	Ammonium nitrate, whether or not in aqueous solution				yes*	
56216	Urea, whether or not in aqueous solution		yes*		yes*	
56231	Potassium chloride				yes*	
56291	Fertilizers, n.e.s., containing the three fertilizing elements nitrogen,				yes*	
56293	Diammonium hydrogenorthophosphate (diammonium phosphate)		yes*		yes*	
56294	Ammonium dihydrogenorthophosphate (monoammonium phosphate) and mixtures t		yes*		yes*	
57111	Polyethylene having a specific gravity of less than 0.94	yes*				
57112	Polyethylene having a specific gravity of 0.94 or more	yes*				
57311	Polyvinyl chloride, not mixed with any other substances					
57431	Polycarbonates		yes*			

57433	Polyethylene terephthalate		yes*			
57511	Polypropylene	yes*		yes*		
57513	Propylene copolymers					
67152	Ferrosilico-manganese			yes*		
67153	Ferrochromium			yes*		Yes***
67159	Ferro-alloys, n.e.s.	yes*				
67261	Semi-fin. prod. of iron or n/a steel< 0.25% of carbon, spec. rectangular				yes*	
67262	Semi-fin. prod. of iron or n/a steel< 0.25% of carbon, other rectangular				yes*	
67511	Flat-rld prod. of silicon-electrical steel, width > 600 mm				yes*	
68212	Refined copper	yes*		yes*		
68423	Aluminium plates, sheets and strip, of a thickness exceeding 0.2 mm					yes*
71441	Turbojets				yes*	
76381	Video-recording or reproducing apparatus, whether or not incorporating a		yes*			
77586	Microwave ovens; other ovens; cookers, cooking plates, boiling rings, gri		yes*			
77587	Electrothermic domestic appliances, n.e.s.		yes*			
78219	Motor vehicles for the transport of goods, n.e.s.					
78439	Other parts and accessories of the motor vehicles of groups 722, 781, 782					
HIGH TECH EXPORT						
7522	Digital automatic data processing machines, containing in the same housin		yes*			
54131	Penicillins and their derivatives with a penicillanic acid structure; sal		yes*	yes*		
54139	Other antibiotics		yes*	yes*		
54213	Medicaments containing penicillins or derivatives thereof, with a penicil					
54219	Medicaments containing other antibiotics, put up in measured doses or in		yes*			
54293	Medicaments, n.e.s., put up in measured doses or in forms or packings for					
76411	Telephone sets		yes*			
76417	Other apparatus, for carrier-current line systems		yes*			
76432	Transmission apparatus incorporating reception apparatus		yes*			
76483	Radar apparatus, radio navigational aid apparatus and radio remote contro					
76491	Parts and accessories suitable for use solely or principally with apparat					
76493	Parts and accessories suitable for use solely or principally with the app		yes***			

Note: * RCA value lies between 1 and 20; ** RCA value falls between 20 and 40 and ***RCA value lies above 40.

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PART C

Deepening Cooperation in Services among BRICS members



Deepening Cooperation in Services among BRICS members

by Prof. Rupa Chanda¹

1. Introduction

The last two decades have witnessed considerable changes in the world's geopolitical and economic landscape. Several large developing economies have become important as producers, consumers, trading partners, recipients of capital flows, and suppliers of manpower. Although these economies are at different stages of integration with the world economy and have followed different trajectories for development, they have all become increasingly important in shaping the location, organization, and distribution of global production. In particular, the economies of Brazil, Russia, India and China or the BRICs, a term first coined by Goldman Sachs in 2001, have received the most attention given their significance in terms of critical dimensions such as territorial size, population, potential as consumer markets, and strategic role and influence within their respective home regions. More recently, with the entry of South Africa into this club, the group has been re-named BRICS, further expanding its geopolitical influence and giving it a four continent reach.

Over the past decade, the term BRICs, and since 2010 the term BRICS, have come to represent the gradual shift in global economic power towards emerging economies and away from the developed G7 economies. In 2010, these economies accounted for a combined GDP of around \$11.4 trillion (and over US \$18 trillion on PPP basis), representing 18 percent of global output, compared to less than 10 percent a decade earlier.² According to Goldman Sachs, by 2050, their combined output would surpass that of the G-7 countries. The BRICS have also become increasingly important in global trade and capital inflows, due in large part to the liberalization of their trade and FDI policies. Their share in inward FDI flows has trebled between 2000 and 2010, from a little below 6 percent to nearly 18 percent³ and their share in global exports of goods and services has grown from less than 7 percent to over 15 percent during this same period.⁴

Perhaps what distinguishes the BRICS from many other developing countries is that their significance has extended beyond the presence of local market opportunities. These economies have emerged as

1 The author is a Professor of Economics at the Indian Institute of Management Bangalore. She is grateful to Kirithiga Balasubramaniam, Sasidaran Gopalan and Shahana Mukherjee for their excellent research assistance.

2 Author's calculations based on World Bank database (accessed on November 29, 2011). See Table 1 in this paper.

3 Author's calculations based on UNCTAD statistics, <http://unctadstat.unctad.org/> (accessed on October 29, 2011). See Table 3 in this paper.

4 Author's calculations based on UNCTAD Statistics, <http://unctadstat.unctad.org/> (accessed on November 15, 2011). See Table 2 in this paper.

important drivers of markets and of trade and investment opportunities outside their markets. The total value of FDI outflows from the BRICS economies has risen from a mere \$7 billion in 2000 or 0.6 percent of global outward FDI flows to over \$140 billion in 2010, or 11 percent⁵. Likewise, their imports of goods and services from the rest of the world have increased from around \$475 billion or 6 percent of global imports of goods and services to over \$2 trillion or over 14 percent⁶. The BRICS are also key players in the international division of labour, with over 40 percent of the world's labour force⁷. They have also made their presence felt in other important areas such as global energy demand, climate change negotiations, macroeconomic policy coordination, and exchange rate management. Thus, the significance of the BRICS lies in their ability to both influence and to be influenced by the global economy, stemming from a wide range of inherent as well as policy-induced factors.

These five leading emerging economies are, however, very different from each other. As one report put it, "China is the workshop of the world, Russia is regarded as a petrol station, India is the Office, Brazil and South Africa provide raw materials."⁸ Although they face many common development challenges and share a common desire for a new world order, they are also potential rivals and have many differences. At the recent BRICS Summit in Sanya, the Indian Prime Minister aptly noted, "The challenge before us is to harness the vast potential that exists among us. We are rich in resources, material and human. We are strengthened by the complementarities of our resource endowments. We share the vision of inclusive growth and prosperity in the world. We stand for a rule-based, stable and predictable global order. We respect each other's political systems and stages of development. We value diversity and plurality. Our priority is the rapid socio-economic transformation of our people and those of the developing world. Our cooperation is neither directed against nor at the expense of anyone."⁹

An important element in pooling this potential is the identification of possibilities for cooperation and greater economic engagement among the BRICS. Thus far, however, the BRICS have largely taken the form of a political organization with periodic summits and declarations on issues concerning the global economy and foreign policy. The group cannot be termed an economic or trade bloc. However, the possibilities for greater economic engagement are many. There is considerable scope for complementarity in trade and investment flows as well as for collaboration and cross-learning among these countries given their resource endowments and areas of competitiveness. Brazil and South Africa are well endowed in natural resources which are of import interest to others such as India and China. India is competitive in generic pharmaceuticals and labour-intensive services such as software and business process outsourcing, areas which some of the others in this grouping are interested in developing. China is competitive in manufacturing which is of import interest as well as a competitive challenge for the others. Russia has the potential to provide much needed energy resources to countries such as India and China for whom energy security is one of the main concerns today.

The service sector is one such area where the BRICS could potentially engage with each other through investments, trade, and collaborative ventures, and also learn from each other's experiences. With the growing importance of services in the economies of all the BRICS members, this sector is likely to play

5 Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on October 29, 2011). See Table 3 in this paper.

6 Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 15, 2011). See Table 2 in this paper.

7 Author's calculations using UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 3, 2011). See Table 4 in this paper.

8 New York Times (2010)

9 <http://www.mea.gov.in/mystart.php?id=100517541>

an increasingly important role for fostering cooperation and commercial relations among the BRICS countries. Services today account for over 50 percent of GDP in Brazil, India, Russia, and South Africa.¹⁰ Services trade has also grown in importance for Brazil, India, and China. There are also specific service subsectors where the BRICS are competitive. For instance, India is competitive in IT-ITeS services, China in transportation and logistics services, South Africa in tourism and financial services, Russia in energy services, and Brazil in retail services, also suggesting possible complementarities among them in the service sector. In light of the considerable liberalization undertaken by these economies in their service sectors over the past decade and the growing internationalization of their firms, there is scope for increased cross border investment among the BRICS in the service sector, not only to supply each other's markets but also to leverage each other as bases for exports to third countries. Further, given the demographic complementarity among the BRICS with some members likely to face demographic challenges and some with the potential to reap demographic dividends, there are also opportunities for these countries to benefit from each other's human resources, with ramifications for cooperation in labour-intensive and knowledge-based services. Thus there are many possible sources for synergies among these countries in the service sector.

To date, however, there has been little or no analysis of the prospects for deepening cooperation among the BRICS, particularly in the service sector. Most of the focus on BRICS has thus far been on their role as an international negotiating group and their overall significance as markets of strategic interest to other countries. Analysis of their prospects in specific sectors such as services and their prospects in each other's markets has been limited. This paper attempts to fill this gap. It aims to understand the possible synergies in services trade among the BRICS members and to identify the ways in which these synergies could be realized. It is structured as follows.

Section 2 provides a brief background on the BRICS economies and their contribution to the world economy. This is followed by a detailed overview of their service sectors in Section 3. The discussion highlights the contribution of services to total output and employment in these economies and also outlines the sub-sectoral trends and characteristics of their services sectors. Projections regarding the future size of the service sector in these countries are also provided. Section 4 outlines the trends in services exports and imports for the BRICS countries and the contribution of different subsectors to their services trade. It also presents indicators of competitiveness for these countries across various service subsectors in order to identify areas of potential competition and complementarity among them in services trade. Section 5 provides a similar overview for investment inflows and outflows, highlighting the trends, the sectoral and partner country characteristics in order to identify the significance of services in investment flows for the BRICS and the areas for competition and complementarities among them with respect to services investment. Section 6 discusses the trends in regulatory reforms and unilateral liberalization by the BRICS in their service sectors. It identifies the key barriers affecting services exports to BRICS markets and the prospects for entering each other's markets. Section 7 discusses the extent to which the BRICS have engaged in multilateral, bilateral and regional liberalization of services and provides a comparative assessment of their GATS and RTA commitments in selected services vis a vis their existing policies in these same subsectors. Section 8 highlights the policies and measures which these governments have introduced to support the growth of their service sectors and in particular services exports. This section also highlights the case of one or two successful services in each BRICS member and the lessons these provide to the others in this group. Section 9 concludes by summarizing the possibilities for cooperation, commercial engagement, and learning among the BRICS in the service sector and by providing a roadmap to deepen services trade among the members as well as increase their presence in the global services market.

¹⁰ Based on UN statistics. <http://unstats.un.org/> (accessed on November 28, 2011). See Table 5 in this paper.

2. An Overview of BRICS in the World Economy

Any discussion of the BRICS requires one to first place them in the global context so as to understand where they stand as a group, how their contribution to the world economy has evolved, how individual member countries within this grouping compare with each other, and the commonalities and differences across them with regard to their performance and potential. The following discussion provides a brief overview of the trends in economic performance of the BRICS economies, individually and as a group in key areas such as output, trade and investment flows. It also highlights their significance in shaping global demographic and labour market trends. The objective is to help situate the subsequent discussion on services trends and prospects in these economies, within this broader context.

2.1. Economic contribution of BRICS

In economic terms, the contribution of the BRICS has been rising. From a cumulative share of around 7 percent of global output in 1995, their share rose to a little over 18 percent of global GDP in 2010 in nominal terms¹¹ (and over 20 percent of global GDP in PPP terms)¹². Inward FDI flows to these economies have risen from around \$80 billion in 2000 to around \$220 billion in 2010, indicating their growing importance as destinations for global capital and as production bases¹³. Growth in outward FDI from these countries has been even more striking, rising from a little over \$7 billion in 2000 to over \$30 billion in 2005 and to \$146 billion in 2010, growing more rapidly than global FDI flows over this period¹⁴. Likewise, reflecting their growing competitiveness and integration with world markets, exports and imports of goods and services by the BRICS have more than trebled between 2000 and 2010, more rapidly than global trade flows over this period. Between 2000 and 2010, their exports of goods and services have grown from \$555 billion to \$2.8 trillion while their imports of goods and services have increased from \$475 billion to \$2.3 trillion¹⁵.

Although all the BRICS countries have increased their economic contribution to the global economy, these trends have been dominated by China, often exactly mirroring trends in China's economic performance. China alone accounted for half of the combined GDP of all the BRICS countries in 2009. Its share in world GDP more than doubled from 3.6 percent to 7.2 percent between 2000 and 2009. In contrast, India experienced lower though still a significant increase in its contributions to global output, from 1.5 percent to 2.3 percent over the 2000 to 2009 period. In contrast, South Africa's and Brazil's share in global output remained virtually the same while Russia's share in global output rose marginally from 1.4 percent to 1.7 percent during this period.¹⁶ Similarly, China's share in global exports and imports of goods and services as well as inward FDI flows increased several-fold between 2000 and 2010, while the increase in the contribution of the other BRICS to global trade flows was much less striking. China alone accounted for over half of all trade and FDI flows for the BRICS economies.¹⁷

11 Author's calculations based on UN Statistics, <http://unstats.un.org/> (accessed on November 29, 2011). See Figure 1 in this paper.

12 Based on World Bank database (accessed on November 29, 2011) See Table 1 in this paper.

13 Author's calculations using UNCTAD database, <http://unctadstat.unctad.org/> (accessed on October 29, 2011). See Figure 3.

14 Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on October 29, 2011). See Table 3 in this paper.

15 Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 15, 2011). See Figure 2.

16 Author's calculations using World Bank database (accessed on November 29, 2011).

17 Author's calculations using UNCTAD database, <http://unctadstat.unctad.org/> (accessed on October 29, 2011).

Table 1 provides the main economic indicators for the BRICS economies. It captures the scale of their output, trade, FDI, and population of all these economies and also makes evident China's dominance within this group in all respects. It also highlights the much smaller size of South Africa in all respects and its particularly high unemployment rate in South Africa, which makes it an anomaly within this group.

TABLE 1: ECONOMIC AND OTHER INDICATORS FOR THE BRICS, 2010

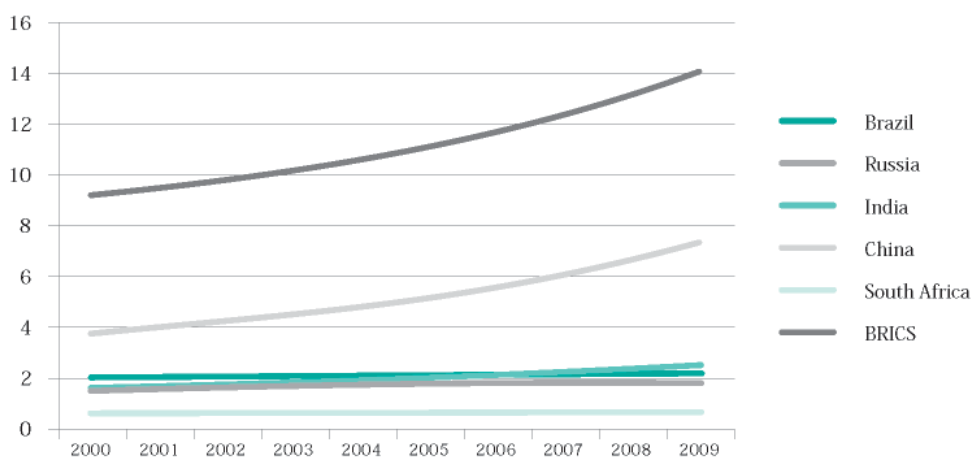
	GDP Current (US \$bn)	GDP growth (%)	Population (mn)	PPP Per Capita GDP (US\$)	PPP GDP (US \$bn)	Total merchandise exports (US \$bn)	Total service exports (US \$bn)	Total export in merchandise and services (US \$bn)	Trade/GDP (%)	FDI inflows (US \$bn)	FDI inflows/GDP (%)	Unemployment (%)
Brazil	2087.8	7.5	194.9	11127	2169.2	201.9	32.8	234.7	21.4	48.4	2.3	6.7
China	5878.6	10.3	1338.3	7535.5	10084.7	1578.3	158.2	1736.4	54.2	105.7	1.8	6.1
India	1729	9.7	1170.9	3585.6	4198.6	221.4	116.3	333.2	43.3	24.6	1.5	10.0
Russia	1479.8	4	141.7	19840.4	2812.3	400.4	44.5	444.5	49.1	41.2	2.8	7.5
South Africa	363.7	2.8	49.9	10485.8	524.1	85.7	14	99.8	52.6	1.6	0.4	24.9
WORLD	63044	4.2	6840.5	11150.8	76277.6	15174.4	3745.4	18975	30.1	343.6	2.1	8.7

Source: World Bank, UNCTAD, <https://www.cia.gov/> (accessed on November 29, 2011)

Note: Unemployment numbers are estimates for 2010 for Brazil, Russia, India, South Africa and the world and September 2009 estimates for China

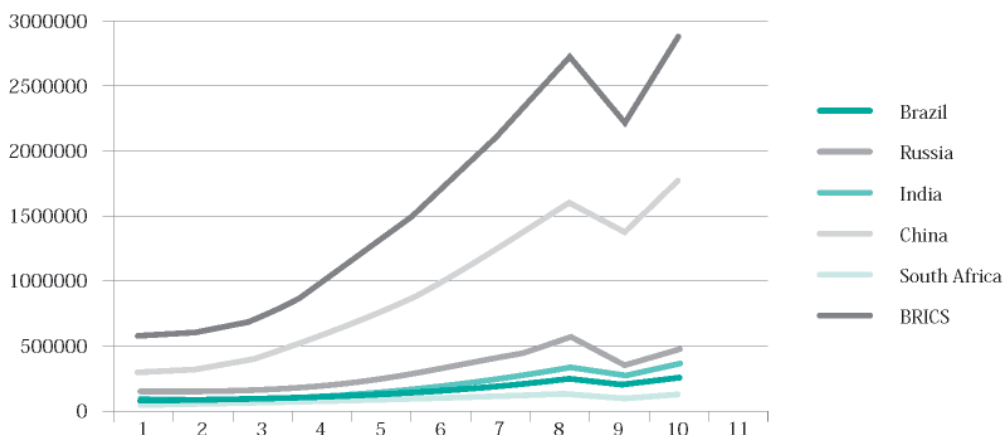
The following tables and figures illustrate the significance of the BRICS in the world economy and China's role in driving overall trends in this group. The data also highlight their relative sizes and the asymmetries in their economic performance.

FIGURE 1: SHARE OF BRICS ECONOMIES IN WORLD GDP, 2000-10 (%)



Source: Author's calculations based on UN Statistics, <http://unstats.un.org/> (accessed on November 29, 2011)

FIGURE 2: EXPORTS OF GOODS AND SERVICES BY THE BRICS ECONOMIES, 2000-10 (US\$ MN)



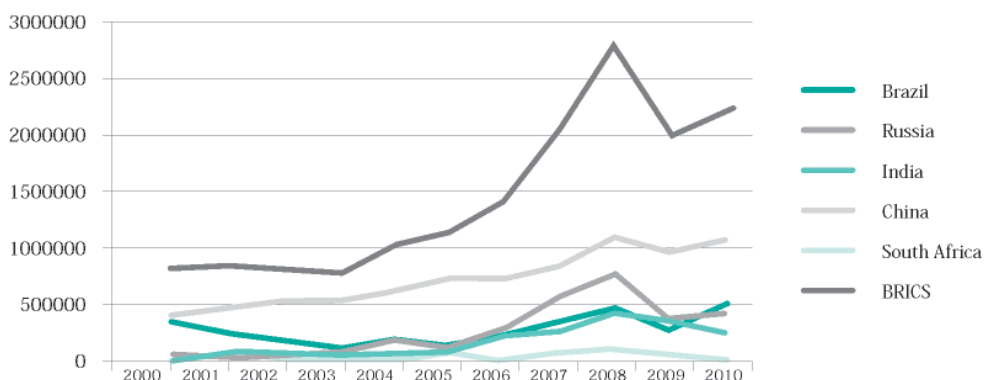
Source: Based on UNCTAD Statistics, <http://unctadstat.unctad.org/> (accessed on November 15, 2011)

TABLE 2: SHARE OF WORLD EXPORTS AND IMPORTS OF GOODS AND SERVICES FOR THE BRICS, SELECTED YEARS (%)

	EXPORTS			IMPORTS		
	2000	2005	2010	2000	2005	2010
ECONOMY						
Brazil	0.8	1.0	1.2	0.92	0.77	1.36
China	3.5	6.4	9.2	2.17	1.58	8.33
India	0.7	1.2	1.8	0.87	1.44	2.31
Russia	1.4	2.1	2.3	0.80	1.34	1.84
South Africa	0.5	0.5	0.5	0.44	0.58	0.51
Total BRICS	7.0	11.2	15.0	6.20	9.70	14.34

Source: Authors' calculations based on UNCTAD Statistics, <http://unctadstat.unctad.org/> (accessed on November 15, 2011)

FIGURE 3: FDI INFLOWS IN THE BRICS ECONOMIES, 2000-10 (US\$ MN)



Source: Based on UNCTAD Statistics, <http://unctadstat.unctad.org/> (accessed on October 29, 2011)

TABLE 3: SHARE OF BRICS ECONOMIES IN GLOBAL FDI FLOWS, SELECTED YEARS (%)

ECONOMY	Inward FDI			Outward FDI		
	2000	2005	2010	2000	2005	2010
Brazil	2.34	1.53	3.89	0.19	0.29	0.87
China	2.90	7.37	8.50	0.07	1.39	5.14
India	0.26	0.78	1.98	0.04	0.34	1.11
Russia	0.19	1.31	3.31	0.26	1.45	3.91
South Africa	0.06	0.68	0.12	0.02	0.11	0.03
Total BRICS	5.75	11.67	17.82	0.58	3.57	11.05

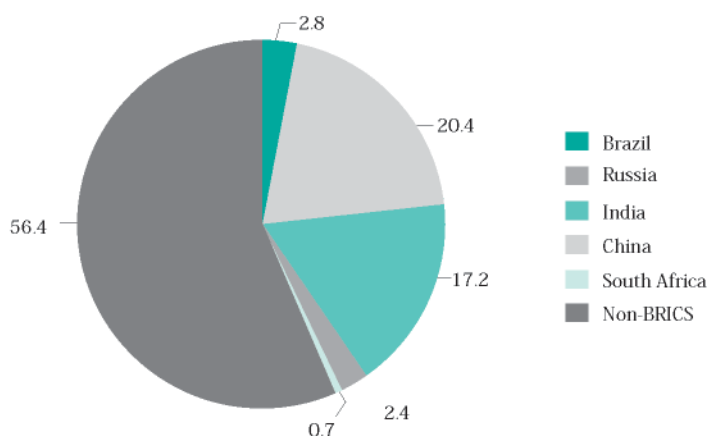
Source: Based on UNCTAD Statistics, <http://unctadstat.unctad.org/> (accessed on October 29, 2011)

The preceding overview clearly indicates that the BRICS are not a homogenous group. The aggregate statistics mask considerable differences among them in terms of economic size and the degree of integration with and influence on world markets. China's performance is noteworthy, surpasses that of all the others consistently; India's is more moderate but shows a consistent upward trend, Brazil and Russia are less consistent; and South Africa lags considerably behind the others with stagnant or even declining trends. These differences suggest that it may not be appropriate to draw generalizations based on the BRICS as a whole. Individual economies within this group reflect different potentialities.

2.2. BRICS and the Global Labour Market

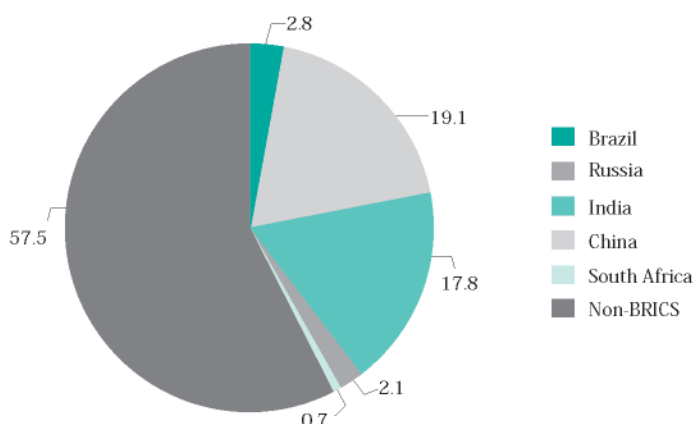
Demographics are a major factor shaping the role of the BRICS in the world economy. With a combined population of 3.2 billion and a labour force of 1.6 billion, the BRICS together accounted for around 43 percent world's population as well as labour force in 2010.¹⁸ Hence, the BRICS assume significance in the international labour market which is confronted with severe shortages of skilled and less skilled workers.

FIGURE 4A: SHARE OF WORLD POPULATION IN 2000 (%)



¹⁸ Author's calculations using UNCTAD statistics. <http://unctadstat.unctad.org/> (accessed on November 3, 2011)

FIGURE 4B: SHARE OF WORLD POPULATION IN 2010 (%)



Source: Author's calculations using UNCTAD statistics. <http://unctadstat.unctad.org/> (accessed on November 3, 2011)

TABLE 4: SHARE IN GLOBAL LABOUR FORCE (%)

	Brazil	China	India	Russia	South Africa	BRICS	Non-BRICS
2000	3.0	26.1	14.2	2.6	0.6	46.3	53.7
2005	3.1	25.2	14.4	2.5	0.6	45.8	54.2
2010	3.1	24.3	14.8	2.3	0.6	45.2	54.8
2015	3.2	23.4	15.1	2.1	0.6	44.4	55.6
2020	3.2	22.2	15.5	1.9	0.6	43.4	56.6

Source: Author's calculations using UNCTAD statistics. <http://unctadstat.unctad.org/> (accessed on November 3, 2011)

However, these aggregate statistics once again hide huge differences in demographic outlook among the BRICS countries. China and India together account for around 86 percent of the group's population and labour force. There are also considerable differences among them with regard to the projected changes in working age population, in both absolute and relative terms, with consequent implications for their growth, savings, and investment prospects. According to UN population projections, only India and Brazil have a favourable demographic outlook. By 2020, the working-age population in India is expected to rise by 240 million and by 20 million in the case of Brazil. In contrast, it is projected to decline sharply by 20 million in Russia. China's working age population is expected to peak in 2015 and decline thereafter, overall growing by 10 million between 2010 and 2020. These shifting demographic trends are reflected in the BRICS' gradually declining share in world population and workforce.

3. Services Output and Employment in the BRICS

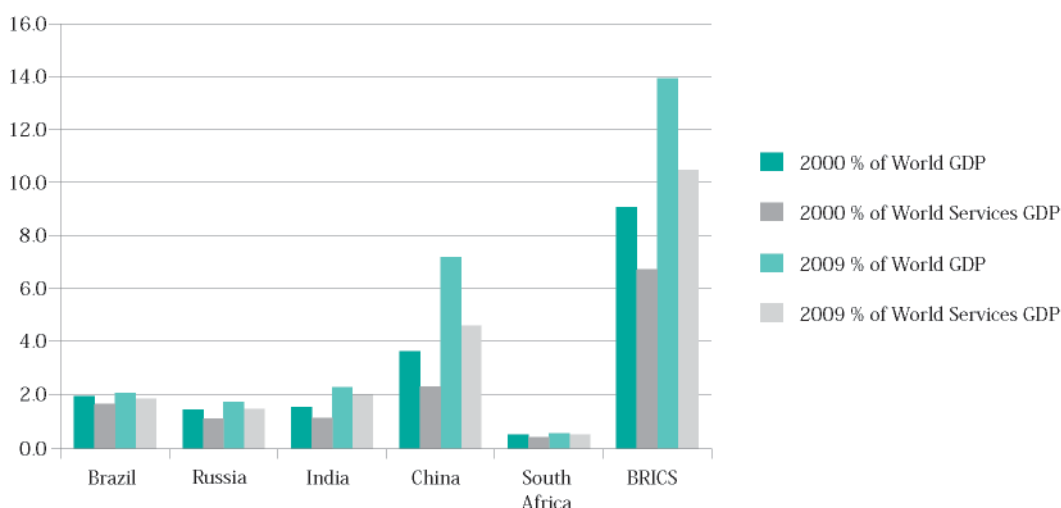
It is evident that overall, the BRICS are clearly an important economic grouping whose economic influence is growing. The following discussion starts by examining the contribution of the BRICS as a whole to global services output and the extent to which the latter is in line with their overall contribution to world output. The objective is to understand how vibrant their services sectors have been and the role played by services in their emergence on the world market. This is followed by a detailed discussion of

the performance of the service sector in the BRICS, including the trends in growth and composition of services output as well as trends in services employment in these countries. The discussion also outlines the sector's performance relative to other parts of the economy.

3.1. BRICS and the world services economy

The BRICS have seen a significant increase in their share of world services GDP from around 6.7 percent in 2000 to around 10.5 percent in 2009.¹⁹ This trend is similar to that seen for the BRICS' contribution to total world GDP which has similarly increased from around 8 percent to 14 percent over the 1990-2009 period (see Figure 1). However, the relative significance of the individual countries in global services output varies. The increased contribution is mainly on account of India and China, whose shares in world services GDP have about doubled. In contrast, the contributions of South Africa, Russia and Brazil to world services output show only marginal increases between 2000 and 2009.

FIGURE 5: BRICS IN WORLD GDP AND WORLD SERVICES GDP (%)



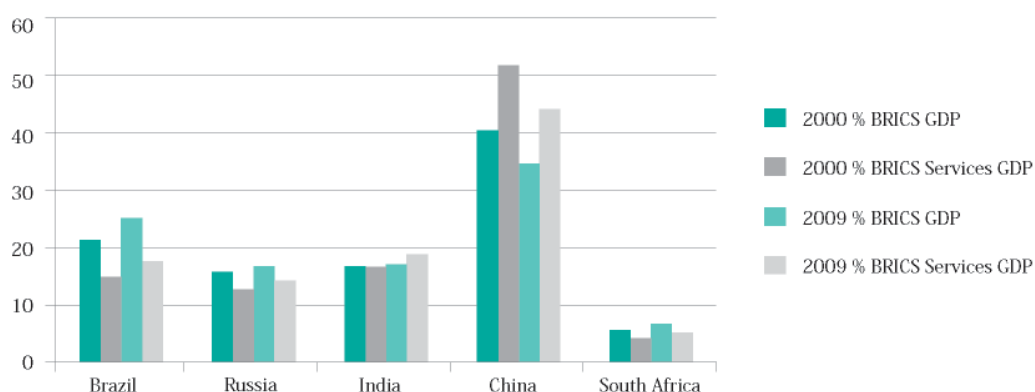
Source: Based on UN Statistics, <http://unstats.un.org/> (accessed on November 29, 2011)

The relative strength of China is evident from its increased share in both overall BRICS GDP and in BRICS services GDP between 2000 and 2009. While the shares of Brazil, Russia and South Africa have fallen, particularly of Russia; China's share in both BRICS GDP and in BRICS services GDP has more than doubled over the 1990-2009 period.²⁰ India's share has decreased marginally in overall BRICS GDP but has increased by one and a half times in the case of BRICS services GDP. Hence, India's service sector is clearly growing faster than its overall economy (indicating other lagging sectors) while China's service sector has moved in parallel with the overall economy, suggesting an overall dynamism in its economic performance. These statistics also indicate the much higher growth experienced by China in overall as well as service sector growth compared to all the other BRICS, with India a distant second. Figure 6 illustrates the relative sizes of the individual BRICS economies in overall as well as services GDP.

¹⁹ Author's calculations based on UN Statistics, <http://unstats.un.org/>, (accessed on November 29, 2011). See Figure 5.

²⁰ Based on UN statistics <http://unstats.un.org/> (accessed on November 29, 2011). See Table 5 in this paper.

FIGURE 6: SHARE OF INDIVIDUAL COUNTRIES IN TOTAL BRICS GDP AND IN TOTAL BRICS SERVICES OUTPUT (%)



Source: Based on UN Statistics, <http://unstats.un.org/> (accessed on November 29, 2011)

3.2. Services Output in the BRICS

The evidence presented above indicates that the significance of the service sector varies considerably across the BRICS and that the services have played a varying role with regard to shaping the importance of individual BRICS countries in the global economy. The latter is also evident from the differences in absolute size, growth rates, and pattern of services growth seen across the BRICS economies.

The size of the service sector varies considerably across these countries, from \$182.9 billion for South Africa to \$1.6 trillion for China in 2009. Brazil, Russia and India have roughly similar size service sectors, estimated at \$626.7 billion, \$509.8 billion and \$678.5 billion, respectively in 2009. However, a common feature of all these economies, save China, is that in absolute terms services output has increased by more than the output in the primary and secondary sectors over the 1990-2009 period. In the case of China, although services output has grown significantly over this period, this has been surpassed by the growth in secondary sector output, reflecting China's prowess in the manufacturing sector. Among the BRICS, China and India have witnessed the most rapid increase in their services output. China's services output has increased seven-fold and India's has increased six-fold over these two decades, while services output has less than doubled in the case of the other three countries. Thus, the general pattern of superior economic performance noted earlier for India and China, is also evident in the case of their service sectors compared to those in the other BRICS economies.

Table 5 shows the value of output across the primary, secondary and tertiary (inclusive of construction services) sectors for all five economies. It shows the vast range in their services value added as well as in the overall size of these economies. It also highlights the more rapid growth in services compared to the growth in other sectors for most of these countries.

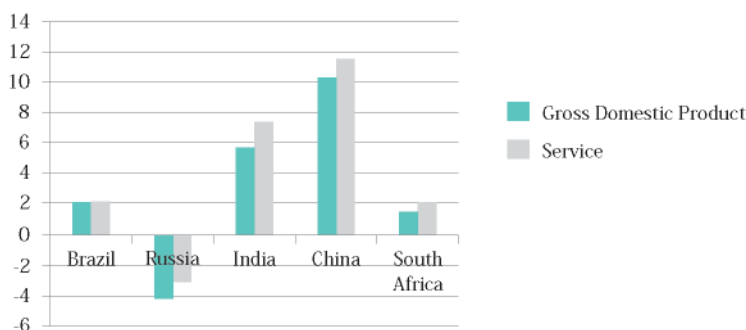
TABLE 5: VALUE OF GDP BY SECTORS (US\$ BN)

		1990	2000	2005	2009
Brazil	Gross Domestic Product	518.21	656.49	756.76	867.66
	Primary	24.44	35.20	43.20	47.56
	Secondary	127.25	157.74	184.46	193.46
	Tertiary (with construction)	366.51	463.55	529.10	626.65
Russia	Gross Domestic Product	639.28	469.85	670.90	768.01
	Primary	42.35	29.02	36.34	41.85
	Secondary	215.77	132.65	220.56	216.33
	Tertiary (with construction)	381.16	308.18	414.00	509.84
India	Gross Domestic Product	325.10	559.11	784.56	1057.97
	Primary	101.31	128.33	146.67	160.36
	Secondary	67.58	117.19	159.94	219.15
	Tertiary (with construction)	156.21	313.60	477.96	678.45
China	Gross Domestic Product	544.80	1437.94	2256.90	3422.47
	Primary	155.33	225.65	273.60	363.81
	Secondary	172.17	575.20	942.49	1480.58
	Tertiary (with construction)	217.31	637.09	1040.80	1578.07
South Africa	Gross Domestic Product	151.69	182.39	220.32	250.92
	Primary	5.10	5.47	5.88	6.18
	Secondary	50.34	55.10	62.60	61.89
	Tertiary (with construction)	96.25	121.83	151.83	182.85

Source: Based on UN Statistics, <http://unstats.un.org/> (accessed on November 29, 2011)

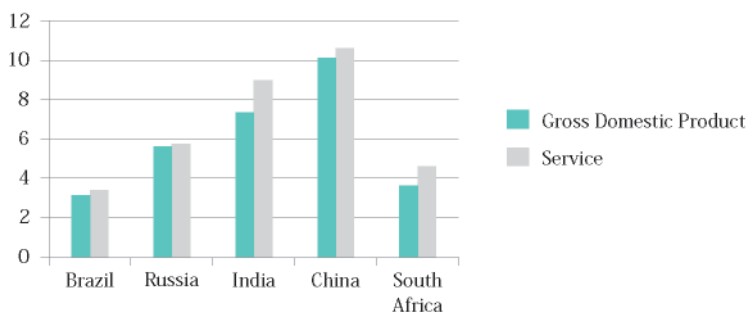
It is interesting to note that in almost all these economies (except China), services growth has picked up in the 2000-09 period compared to the 1990s. Most of the BRICS have witnessed higher average annual growth rates for services (and also for overall economy) in the post 2000 period compared to that in the preceding decade (when several of these economies experienced very low or even negative growth rates). Figures 7a and 7b illustrate the CAGR for services as well as overall GDP during the 1990-99 as well as the 2000-09 periods for all the countries. The figures make evident that services growth has helped boost overall economic growth in the BRICS, particularly in the last decade. The latter may be indicative of certain internal factors such as economic reforms and liberalization as well as external factors such as globalization and advances in technology, which have made possible more rapid services as well as overall economic growth. The figures also highlight that in China and India, services have exhibited higher growth rates than overall output during both the previous and recent decades and further that their growth rates for services (and also for overall GDP) have been significantly higher than in the other three BRICS. Thus, while these countries exhibit some common patterns in the performance of their service sectors over time and relative to other parts of the economy, there are differences among them in terms of the strength and consistency of their service sector's performance.

FIGURE 7A: CAGR OF GDP AND SERVICES, 2000-09(%)



Source: Author's calculations based on UN Statistics, <http://unstats.un.org/> (accessed on November 29, 2011)

FIGURE 7B: CAGR OF SERVICES AND GDP 1990-99 (%)



Source: Author's calculations based on UN Statistics, <http://unstats.un.org/> (accessed on November 29, 2011)

Table 6 highlights the average annual growth rates in these countries for all three sectors over the 1990-2009 period. It once again illustrates the improved performance in more recent years as well as the superior performance of India and China compared to the other BRICS, through this entire period. What is clear is that services have been an important contributor to the overall economic dynamism exhibited by the BRICS in the last decade and in the case of Brazil, Russia and South Africa, services have also helped in offsetting the low and even negative growth rates experienced in the primary and secondary sectors. China again stands apart in that growth has been more balanced with both services and industry contributing in almost equal measure to overall economic growth.

TABLE 6: AVERAGE ANNUAL GROWTH RATES OF GDP (%)

		1991-95	1996-2000	2001-05	2006-09
Brazil	Gross Domestic Product	2.91	1.92	2.90	3.50
	Primary	4.19	3.28	4.21	2.53
	Secondary	3.54	0.98	3.21	1.28
	Tertiary (with construction)	2.61	2.16	2.69	4.33
Russia	Gross Domestic Product	-6.90	1.20	7.43	3.65
	Primary	-7.73	1.32	4.66	3.63
	Secondary	-9.56	0.67	11.28	-0.26
	Tertiary (with construction)	-5.40	1.48	6.09	5.58
India	Gross Domestic Product	5.33	5.85	7.03	7.77
	Primary	2.31	2.63	2.89	2.28
	Secondary	6.75	4.70	6.44	8.25
	Tertiary (with construction)	6.57	7.90	8.81	9.16
China	Gross Domestic Product	11.87	8.56	9.44	10.98
	Primary	4.16	3.46	3.94	7.49
	Secondary	16.03	9.74	10.40	12.00
	Tertiary (with construction)	13.10	9.65	10.32	10.98
South Africa	Gross Domestic Product	0.96	2.79	3.86	3.35
	Primary	-2.17	6.09	1.53	1.44
	Secondary	0.26	1.60	2.60	-0.14
	Tertiary (with construction)	1.55	3.24	4.50	4.78

Source: Author's calculations based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011)

As a result of the increase in service sector growth in both absolute terms and relative to the growth experienced in other sectors of the economy, the share of services in total value added has grown considerably for all the countries over the 1990-2009 period. At the same time, the share of the primary sector has declined and that of the secondary sector has declined marginally or remained stagnant in all the countries except China where the secondary sector's share has risen alongside that of services. The tertiary sector, including construction services, accounted for two-thirds or more of the economies of Brazil, Russia, India and South Africa in 2009. Its share was lower, though still significant at around 46 percent for China in 2010. The increase in services share of GDP has been the greatest for India, rising from 48 percent in 1990 to 64 percent in 2009. For the others, the rise in the service sector's share in GDP has been in the range of 6 to 9 percent between 1990 and 2009. Brazil is the sole exception with virtually no change in the structure of its economy and in the relative contribution of services to total output, over this entire period. Broadly, the share of services in overall GDP for the BRICS countries is only slightly less than that seen for the world economy where services constitute around 70 percent of world GDP.

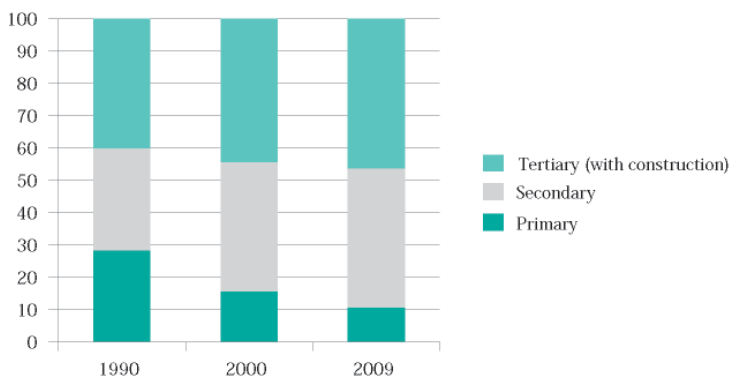
Figures 8A to 8E illustrate the change in sectoral composition of output for all the BRICS countries over the past two decades.

FIGURE 8A: COMPOSITION OF BRAZIL'S GDP, 1990-2009(%)



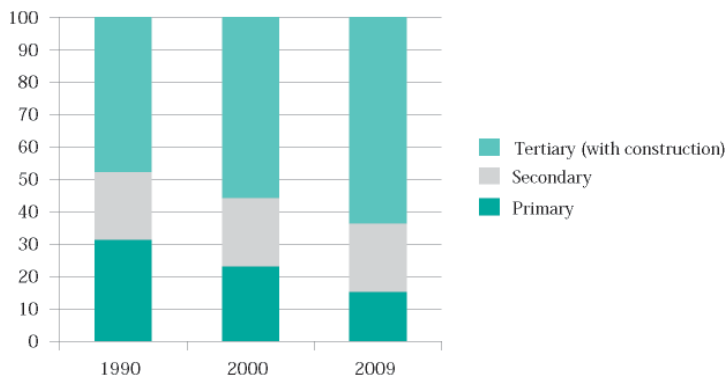
Source : Based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011)

FIGURE 8B: COMPOSITION OF CHINA'S GDP, 1990-2009 (%)



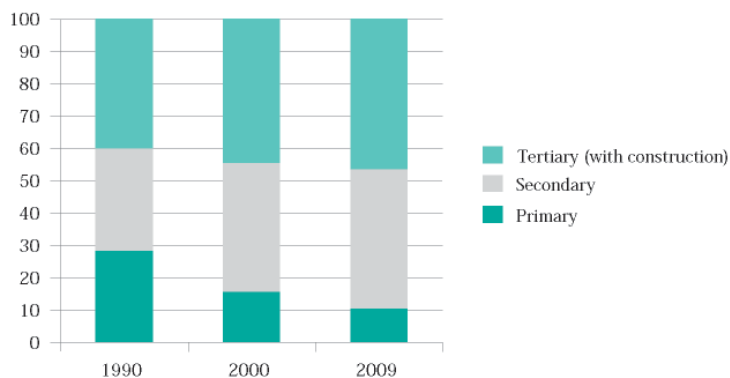
Source : Based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011)

FIGURE 8C: COMPOSITION OF INDIA'S GDP, 1990-2009 (%)



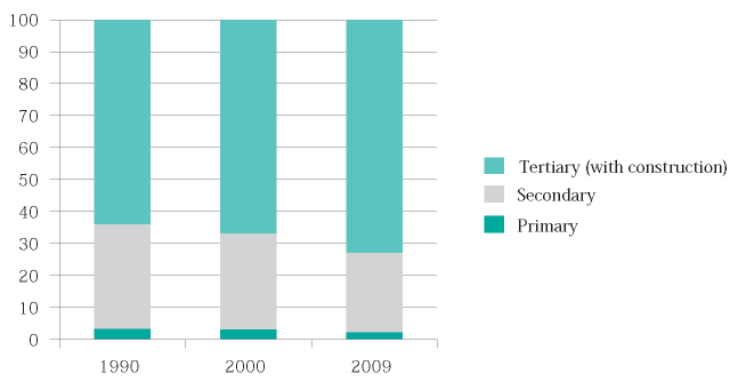
Source : Based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011)

FIGURE 8D: COMPOSITION OF RUSSIA'S GDP, 1990-2009 (%)



Source : Based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011)

FIGURE 8E: COMPOSITION OF SOUTH AFRICA'S GDP, 1990-2009 (%)



Source: Based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011)

Although disaggregated statistics on services output are difficult to obtain, available data for broad categories of services activities, namely, construction; trade and distribution; transport, storage and communication; and other services indicate that the overall composition of services output has not changed much over the 1990-2009 period. In 2009, construction services constituted between 8 to 13 percent of services GDP, except in the case of South Africa where their share is less than 5 percent. Trade and distribution services accounted for about one-fifth to a quarter of services output in all these economies and have marginally increased in importance in several BRICS (China, India, Russia) over the past two decades. Transport, storage and communication accounted for 10-16 percent of services GDP in 2009 and have declined slightly in importance in some of the BRICS (China and Russia). But it is the other services activities segment which has accounted for the bulk of services output throughout the 1990-2009 period and in countries where there have been any discernible shifts in the composition of services GDP, it is mainly this segment which has increased in relative importance. For example, in the case of Russia, the share of other activities has increased the most, from 35 percent of services output in 1990 to 46 percent in 2009, while the shares of segments such as construction and trade and distribution services have declined. Only in the case of China has there been a small decline in the share of other services. It is also worth noting that certain services segments constitute a very important part of the overall economy as well. Together, in 2010 the categories of trade and distribution services and of other services accounted for as much as 46 percent of Russia's total GDP, around 56 percent of South Africa's total GDP, and around 31 percent and 38 percent of total GDP of China and India, respectively.²¹

Table 7 shows the subsectoral breakdown of services output for selected years during the past two decades while Table 8 highlights the average growth rates of these different service segments over this period.

TABLE 7: SUB-SECTORAL COMPOSITION OF SERVICES GDP FOR SELECTED YEARS (%)

		1990	2000	2005	2009
Brazil	Construction	7.9	7.5	7.7	8.0
	Wholesale, retail trade, restaurants and hotels	26.5	26.6	26.6	26.5
	Transport, storage and communication	11.4	11.5	11.6	11.6
	Other Activities	54.2	54.3	54.1	53.9
Russia	Construction	17.4	12.6	11.0	10.3
	Wholesale, retail trade, restaurants and hotels	23.9	25.6	27.4	27.1
	Transport, storage and communication	23.2	18.2	16.4	16.5
	Other Activities	35.5	43.5	45.3	46.1
India	Construction	14.8	14.3	13.5	13.3
	Wholesale, retail trade, restaurants and hotels	25.6	25.1	25.4	26.3
	Transport, storage and communication	10.1	10.1	10.0	10.3
	Other Activities	49.5	50.5	51.1	50.0
China	Construction	8.0	9.4	10.1	10.8
	Wholesale, retail trade, restaurants and hotels	23.1	27.8	25.2	24.8
	Transport, storage and communication	17.0	15.6	15.8	15.0
	Other Activities	51.8	47.2	48.9	49.4
South Africa	Construction	4.7	4.2	3.9	3.9
	Wholesale, retail trade, restaurants and hotels	20.5	19.6	19.7	19.6
	Transport, storage and communication	10.4	10.3	10.5	10.7
	Other Activities	64.4	65.9	65.9	65.8

Source: Author's calculations based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011)

21 Author's calculations based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011). See Table 7

TABLE 8 : AVERAGE ANNUAL GROWTH RATES OF SERVICE SUBSECTORS (%)

		1991-95	1996-2000	2001-05	2006-09
Brazil	Services GDP	2.6	2.2	2.7	4.3
	Construction	2.7	2.4	0.2	2.9
	Wholesale, retail trade, restaurants and hotels	2.5	2.3	2.5	4.9
	Transport, storage and communication	1.9	4.6	3.4	3.9
	Other Activities	2.8	1.5	3.0	4.3
Russia	Services GDP	-5.4	1.5	6.1	5.6
	Construction (ISIC F)	-17.2	-1.0	9.3	5.4
	Wholesale, retail trade, restaurants and hotels	-2.4	2.3	8.7	6.1
	Transport, storage and communication	-12.1	1.3	7.1	4.4
	Other Activities	0.3	1.7	3.5	5.8
India	Services GDP	6.6	7.9	8.8	9.2
	Construction	3.6	6.5	10.5	8.1
	Wholesale, retail trade, restaurants and hotels	8.2	7.0	9.3	9.1
	Transport, storage and communication	7.4	9.2	13.0	10.6
	Other Activities	6.4	8.5	7.1	9.1
China	Services GDP	13.1	9.7	10.3	11.0
	Construction	21.3	10.0	11.6	10.5
	Wholesale, retail trade, restaurants and hotels	15.2	8.5	8.0	11.9
	Transport, storage and communication	9.0	9.8	7.6	9.3
	Other Activities	12.2	10.1	11.8	11.2
South Africa	Services GDP	1.6	3.2	4.5	4.8
	Construction	-2.3	0.8	7.9	10.5
	Wholesale, retail trade, restaurants and hotels	1.0	4.2	3.9	2.4
	Transport, storage and communication	3.4	6.5	6.3	4.0
	Other Activities	1.7	2.5	4.1	5.3

Source: Author's calculations based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011)

The growth performance for individual service segments indicates that there has been a general upward trend in growth across most categories of services over these two decades. The most consistent and the highest growth has tended to be in other services, thereby contributing to the latter's growing importance in services output and in overall GDP. But once again, one finds that India and China generally exhibit much higher growth rates across almost all the service segments, compared to the other BRICS, with China exhibiting double digit growth in most service segments through much of the period. Thus, the two most dynamic economies among the BRICS have experienced more rapid growth in individual service subsectors as well, indicating that overall economic trends are not only reflected at the broad sectoral

level but also at the sub-sectoral level. Figure 9 illustrates the trends in the cumulative average growth rate of individual service subsectors for each of the countries during the 1990s and post 2000.

FIGURE 9: CAGR OF SERVICE SUBSECTORS IN THE BRICS, 1990-99 AND 2000-09 (%)



Source: Author's calculations based on UN Statistics <http://unstats.un.org/> (accessed on November 29, 2011)

The trends in services output in the BRICS raise interesting questions about the possible driving factors and why India and China stand apart from the others in terms of having experienced much stronger and consistent performance in their service sectors and also within their service sectors. Further, the pattern of growth seen within the service sector, with the significant and often rising share of other services, and the trends in services versus non-services growth, raise interesting questions about the causal relationship between services and the rest of the economy. Some inferences can, however, be drawn at the country level.

The superior performance of transport, storage and communication services in the case of India in the post 2000 period probably reflects the liberalization of telecommunication services and the success of the ICT sector in that country in the last decade (as discussed later). The stronger growth in trade and distribution services, especially in India and China, possibly reflects their stronger overall growth dynamics and growing internal need for such supporting services. Likewise, their superior growth performance in other services may be a reflection of the growing role of social and personal services in these countries, on account of rising incomes and demand for such services, though one would need to see further disaggregation of this category to substantiate this inference. Construction services growth seems to reflect two kinds of driving forces. The first relates to pull factors from the rest of the economy as construction is closely linked to growth dynamics in the industrial sector, which would explain why China has experienced the highest growth in this segment among all the BRICS. The second relates to price and production trends in the mining sector as construction services are closely related to growth dynamics in mining, which would explain why South Africa shows a significant turnaround in this area

given the significance of its mining economy. It is also interesting to note that India alone has shown an improvement in growth performance across all service segments, even though within India some segments such as communication services have shown stronger growth than other segments and China has still outperformed India in absolute rates of growth.

PROJECTIONS FOR SERVICES OUTPUT AND DEMAND

Rough estimates were made for services output for the BRICS in 2020 and 2030. As the available data did not permit the use of econometric techniques to forecast future services GDP, a simple method was used. The average 5 year growth rate for services output (for different five year blocs) over the 1991-2009 period was applied to the average value of services output for the 2006-2009 period to obtain the estimated average services output for the 2010-14 period. Assuming that services output would grow at a similar rate between five year periods in future the projected value for 2010-14 was used to arrive at the next projections for 2015-19 and so on till 2030.²² These projections are constrained by the assumption of a constant growth rate services in future and implicitly assume a similar structure of output within the service sector. Notwithstanding this limitation, these estimates provide some idea of the relative size of the services economy in the BRICS countries.

TABLE 9: PROJECTED VALUE OF SERVICES OUTPUT IN THE BRICS FOR 5 YEAR PERIODS BETWEEN 2010-2030
(MN OF US \$ AND %)

	2010-2014	2015-2019	Share of total BRICS output by 2020	2020-2024	2025-2029	Share of total BRICS output by 2030
Brazil	611952	629998	16.8	648577	667704	15.4
Russia	512990	522935	14.0	533074	543409	12.6
India	655106	708236	18.9	765675	827773	19.1
China	1525823	1693859	45.3	1880401	2087487	48.2
South Africa	180313	186658	5.0	193227	200026	4.6

Source: Author's estimates based on UN statistics, <http://unstats.un.org/> (accessed on November 29, 2011)

The projections indicate that China will continue to dominate within the BRICS, accounting for over 40 percent of total BRICS' services output, with its share rising to nearly half by 2030. India will also experience a slight increase in its relative importance among the BRICS in the service sector, while the relative contributions of the other three economies will fall. This outlook is of course based on the assumption of the same five year average growth rates holding in future as in the past, when India and China were the best performers in services output growth among the BRICS. However, if there are significant changes in growth performance or the pattern of services growth, then this asymmetry in contributions need not be as large. But it is evident that considerable asymmetry in size and role within will continue among the BRICS and if one is considering opportunities for meeting services demand in each other's markets or prospects for exports, then China is likely to play an important role within the BRICS grouping, both as a market and as an exporter of services to other BRICS.

²² A second method was also attempted to find the estimated values for projected services output. This involved taking existing estimates for overall GDP for four of the BRICS (excluding South Africa) for 2020 and 2030 based on an earlier study available at <http://www.chicagobooth.edu/alumni/clubs/pakistan/docs/next11dream-march%20'07-goldmansachs.pdf> (accessed on January 18, 2012) and applying the actual share of services in GDP on the basis of the UN 2009 data to these future values of total GDP from the report to obtain the estimated services output for 2020 and 2030. The assumption made is that services would constitute the same share of GDP in 2020 and 2030 as they did in 2009. These projections do not include South Africa, however, as the earlier study was only for the BRICS.

3.3 Trends in services employment

Along with the growing role of services in the real sector, the contribution of services to employment has also risen in the BRICS, though not to the same degree or in the same manner across all the countries. Excepting India the service sector accounts for over 50 percent of total employment in the BRICS. Trade and distribution services generally account for the bulk of services employment, followed by services such as construction, education and public administration. China tends to have lower shares of employment in most service activities compared to Brazil, Russia and South Africa, possibly reflecting the much larger portion of its labour force which is absorbed by the manufacturing sector (over 25 percent) compared to that in the other BRICS (less than 20 percent). The two services where China has a high share of employment are public administration and education services, which reflect the presence of the public sector and government investment in social services. India is an exception among the BRICS with regard to services employment shares and pattern and the very high share of its total employment which still remains in agriculture. Services constituted less than 30 percent of India's overall employment in 2005, although latest figures indicate that this share has increased to about one-third. But this is still much lower than in the other BRICS. India is also different from the other BRICS with regard to the pattern of its services employment. Segments such as real estate, financial and social services account for a much smaller and often negligible share of employment than in the other BRICS.

Table 10 presents the trends in employment across different sectors and activities for the BRICS economies and highlights these differences.

TABLE 10: SERVICES EMPLOYMENT IN THE BRICS (% SHARES)

	Brazil		China		India	Russia		South Africa	
	2000	2009	2003	2007	2005	2000	2009	2000	2009
Total employment ('000s)	65,623	92,689	109,697	120,244	40,825	65,070	66,995	12,238	13,713
Agriculture, hunting, forestry	17.9	17	4.4	3.5	58.2	14.2	9.5	15.6	5.7
Fishing	0.5	0.4 a/	...	...	0.3	0.3	0.2	....	....
Mining	0.4	0.8	4.5	4.4	0.6	2	1.5	4.9	2.4
Manufacturing	13.3	13.8	27.2	28.8	11.7	18.7	15.6	12.9	14.3
Electricity, gas and water supply	0.5	0.4 b/	2.7	2.5	0.3	2.6	2.80	0.8	0.7
Construction	7	7.4	7.6	8.7	5.6	5.1	7.90	5.6	8.3
Wholesale and retail trade	16.6	17.8	5.7	4.2	9	12.1	17.7	20.2	22.9
Hotels and restaurants	4.7	3.90	1.6	1.50	1.3	1.40	1.8	....	....
Transport, storage and communication	5.1	4.80	5.8	5.20	3.8	8.40	7.9	4.80	5.6
Financial intermediaries	1.3	7.7	3.2	3.2	0.6	1.3	1.7	8	12
Real estate, renting and business activities	5.7	6.1 c/	4.8	5.5	0.9	3.1	7.7	....	....
Public administration	5.4	5.1	10.7	10.7	1.8	7.4	5.7	17	19.1
Education	5.8	9.4	13.2	12.6	2.4	9.1	8.9	....	....

Health and social work	3.3	3.7d/	4.4	4.5	0.8	6.7	7	....	....
Community, personal and social services	3.6	4.2	1.2	1	1.8	7.4	3.9	....	....
Activities of privatehouseholds	7.6	7.8	....	....	1	0	....	9.4	9

Source: ILO Statistics, Key Indicators of the Labour Market (Table 4c. Employment by 1-digit sector level (ISIC- Rev.3, 1990; by sex)) (Accessed on: October 20, 2011) <http://laborsta.ilo.org/>

Note: The years for which employment data are available for the 5 countries vary.

a/ data as per year 2007 as 2009 not reported

b/ data as per year 2007 as 2009 not reported

c/ data as per year 2007 as 2009 not reported

d/ data as per year 2007 as 2009 not reported

The trends in services employment, when juxtaposed with the trends in services output discussed earlier and the anomalies in these trends across the BRICS, may be on account of several reasons. First, the fact that services employment is not that significant in India despite the very high growth in India's overall services output and output in several service segments may in part reflect problems in capturing employment in activities such as real estate, distribution, personal and community services, which tend to be highly unorganized and fragmented in nature. But such data limitations are not likely to be particular to India alone.

A second possible explanation relates to differences in labour productivity across the BRICS. Russia, South Africa and Brazil have on average experienced lower growth in their services output but have a higher share of employment in services which would imply that these countries have had growth in labour productivity in their service sectors. In contrast, growth in labour productivity in services appears to have been higher for India and China where services output has grown more rapidly but employment shares are lower.

A third and related explanation concerns the pattern of services growth and its employment intensity. One might infer that services which have grown more rapidly in India for instance (e.g., communication services), may have had low employment elasticity compared to those activities which have shown higher growth in other BRICS countries, even if growth in the latter has been more moderate. It is, however, difficult to substantiate this argument unless one has more uniformly disaggregated statistics on output and employment for different service activities for all the BRICS countries in order to draw inferences about the relative employment intensities of their service sector.

A fourth and final inference that can be drawn from the services employment data pertains to overall employment opportunities in these countries. To some extent, employment growth in activities such as personal and community services, household activities, or trade and distribution services could reflect growing opportunities in these areas. However, it could also reflect absorption of labour into self-employed and low productivity service activities for want of better employment opportunities in other parts of the economy. In the case of countries such as South Africa, where unemployment is a major concern, the high contribution of informal, personalized service activities may actually reflect underemployment and unemployment related pressures.

It is also important to note that demographics are likely to play an important role in determining the growth and competitiveness of the service sector in labour-intensive subsectors and will also affect the pattern of demand for services in future. While Brazil and India will experience continued growth in their population over the 2010-30 period, from 195 million to 227 million and from 1.2 billion to 1.6 billion,

respectively, Russia will experience a marginal increase in its population from 134 million to 140 million over this period and China's population will actually decline from 1.4 billion in 2010 to 1.39 billion in 2020 declining further to 1.32 billion in 2030.²³ In terms of the working age population, Russia and China will experience a decline while Brazil and India will witness an increase with India's being the most significant. South Africa will continue to remain a small player among the BRICS in terms of the size of its population and labour force. Contingent on labour force participation rates and the share of services within the labour force, as well as skill and productivity issues, these trends would broadly suggest that competitiveness based on labour costs may not remain in future for countries like China while others such as India could retain their labour cost advantage in services. Moreover, ageing populations would also result in shifting patterns of demand for services, such as for health services which could create new opportunities in the service sector.

Based on the estimated labour force for the BRICS and the share of the labour force occupied in the service sector (using the shares for the latest years available for each country), employment in the service sector for each of these countries has been provided for the 2010 to 2020 period.

TABLE 11 PROJECTED LABOUR FORCE IN SERVICES, SELECTED YEARS (MNS)

	2010	2015	2020
Brazil	67.0569	71.9864	76.4302
Russia	44.2633	43.7636	42.3356
India	160.6772	175.4922	189.3248
China	273.3415	280.8035	281.1915
South Africa	11.6529	12.4535	13.2184

Source: ILO Statistics, *Key Indicators of the Labour Market* (Table 4c. Employment by 1-digit sector level, (ISIC- Rev.3, 1990; by sex), (Accessed on: October 20, 2011) <http://laborsta.ilo.org/> and <https://www.cia.gov/> (accessed on November 29, 2011)

As is evident, services employment will increase only marginally in China and South Africa over the 2010-20 period and will actually decline in Russia over this period. India will be the main contributor to services employment among the BRICS. These estimates are of course subject to numerous limitations, in that they assume that the share of services in the labour force from earlier years will continue to apply in the future and that employment opportunities will indeed be created in line with the changes in the labour force. Moreover, these estimates do not account for possible shifts in employment between the formal and informal sectors. Nevertheless, these projected values suggest that there may be scope for greater engagement among the BRICS arising from demographic complementarities with some facing ageing populations and others continuing to retain their labour cost advantage.

Overall, one can infer from the output and employment trends in services that the BRICS cannot be treated as a homogeneous group. While at the broader level all of them have experienced a growing contribution of services to their economies and their service growth trajectories show an upward trend, they differ from one another in terms of the intensity, pattern and consistency of these trends and the interdependence between their service sectors and the rest of their economies. India and China generally fall into one subgroup and the rest of the BRICS into another. Hence, there are clearly country-specific drivers which have shaped their service sectors.

23 UN Population database, http://esa.un.org/unpd/wpp/unpp/panel_population.htm (accessed on January 10, 2012)

4. Services Trade and the BRICS

The BRICS are important because of their growing presence in global trade. However, the role played by the service sector in this integration is not well understood. The following discussion examines this issue. It also assesses the extent to which the BRICS differ in their services growth trends, pattern of services trade flows, competitiveness across different services, and contribution to global services trade.

As in the case of services output, there is considerable variation in the absolute level of exports and imports of services among the BRICS. In 2010, services exports ranged from a low of \$14 billion for South Africa to \$158 billion for China while services imports similarly ranged from \$18 billion for South Africa to \$182 billion for China. India also commands a very high level of services exports and imports at over \$100 billion while Brazil and Russia have significantly lower levels of services trade compared to both India and China. It is interesting to note that the total value of services exports for Brazil, Russia and South Africa combined was less than India's as well as China's services exports. India and China together accounted for 75 percent of the total services exports by the BRICS in 2010 with India accounting for 32 percent and China for 43 percent of total BRICS services exports that year. The other countries had shares of less than 10 percent. The higher weight of India and China within BRICS services exports compared to that for BRICS services output (shown earlier to be around 50 percent), indicates a relatively higher export orientation for their service sectors.

In the case of services imports, a similar picture emerges but the asymmetry is not as sharp. Although China and India again have very high levels of services imports at over \$100 billion in 2010, Brazil and Russia have over \$60 billion and \$70 billion in services imports, respectively. South Africa is again much smaller in comparison to the others. Overall, China and India together accounted for around 65 percent of BRICS' services imports in 2010, Brazil and Russia had shares of 14 and 16 percent, respectively, and South Africa accounted for less than 5 percent.²⁴

Table 12 shows the trends in value of services exports and imports for the BRICS over the 1995-2010 period. It illustrates that China and India are the two big players among the BRICS for both services exports and imports, while Russia and Brazil show a greater reliance on services imports compared to exports, and South Africa remains a very small player in both respects. This suggests possible differences among them in terms of service sector competencies and orientation and thus possibilities for complementarities in services trade, depending on the composition of their services trade baskets (to be discussed later). The data also highlight that there has been a spurt in services trade in the post 2000 period with much larger increases in both services exports and imports for all the countries after 2000. The increase in absolute terms is particularly striking for India, whose services exports trebled between 2000 and 2005 and again doubled between 2005 and 2010, possibly reflecting rapid growth in certain segments. Services imports have increased three to five times for all the countries, over the 2000 and 2010 period, possibly reflecting trends in services liberalization, growing tradability of some services, and rising demand for services accompanying economic growth.

24 Based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011). See Table 12.

TABLE 12: VALUE OF SERVICES EXPORTS AND IMPORTS (MNS OF US \$S)

ECONOMY	Exports				Imports			
	1995	2000	2005	2010	1995	2000	2005	2010
Brazil	6135	9498	16048	32837	13630	16660	24356	62892
Russia	10567	9565	24970	44476	20205	16230	38745	72270
India	6775	16685	52527	116320	10268	19188	47287	108593
China	19130	30431	74404	158170	25223	36031	83796	182642
South Africa	4619	5046	11300	14004	5971	5823	12125	18456
World	1227551	1529337	2564296	3745437	1259401	1538365	2465975	3560100

Source: UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

The trade balance in services for the BRICS economies further indicates that in the post 2000 period, excepting India, all the BRICS have a deficit in services trade and that this deficit has risen over the decade. In contrast, India has a small services trade surplus, which has grown over the decade. Such differences in the role of services in the trade balance across the BRICS again suggest differences in growth drivers, competencies, and patterns of service trade flows.

TABLE 13: TRADE BALANCE FOR SERVICES (MNS OF US\$S)

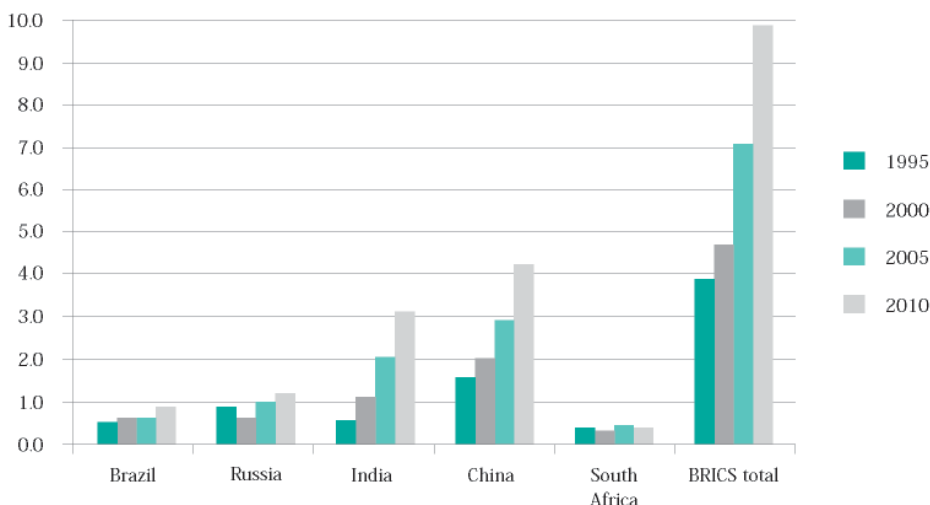
ECONOMY	1995	2000	2005	2010
Brazil	-7495	-7162.05	-8308.6	-30055.4
Russia	-9638.1	-6665.13	-13774.9	-27794
India	-3493.08	-2502.9	5240.8	7727
China	-6092.5	-5600.1	-9391.4	-24472
South Africa	-1352.04	-777.15	-825.3	-4452.9
World	-31850	-9028	98321	185337

Source: Author's calculations based on UNCTAD Statistics, <http://unctadstat.unctad.org/> (accessed on Nov 29, 2011)

4.1 Examining trends in services exports

The contribution of the BRICS to global services exports has grown very much along the lines of their contribution to global services output as well as global trade. As shown in Figure 10, the share of the BRICS in world services exports has more than doubled from less than 4 percent in 1995 to nearly 10 percent in 2010. However, it is India and China which have steadily increased their contribution to world services exports over this period, trebling in the case of India and doubling in the case of China between 2000 and 2010. In contrast, South Africa has seen no change in its share of world services exports over this period while the shares of Brazil and Russia have increased only marginally.

FIGURE 10: SHARE OF BRICS IN WORLD SERVICES EXPORTS (%)



Source: UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

The difference among the BRICS in terms of their relative export orientation in services is also evident if one considers their reliance on services exports. The share of services in total exports has remained at around 12 percent through the 1995-2010 period, indicating that services have not played a growing role in terms of their trade flows and their engagement with world markets.²⁵ For the individual economies, excepting India, the contribution of services to total exports was quite small, in the range of 10 to 14 percent in 2010 and has remained roughly the same through this period. India's case is very different in that the share of services in its total exports have risen significantly, from 18 percent in 1995 to 28 percent in 2000 and stood at 35 percent in 2010. So, not only has the increase been steep, but the share has also become significant at over 30 percent. It has been projected that services could account for as much as half of total exports from India by 2015. Table 14 illustrates the contribution of services to the export basket for all the BRICS.

TABLE 14: SERVICES EXPORTS AS A SHARE OF TOTAL EXPORTS OF MERCHANDISE AND SERVICES

	1995	2000	2005	2010
Brazil	11.65	14.70	11.92	13.99
Russia	11.30	8.31	9.29	10.01
India	18.11	28.25	34.52	34.91
China	11.39	10.88	8.90	9.11
South Africa	13.43	13.64	16.73	14.03
BRICS	12.24	12.82	12.28	12.84

Source: UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

²⁵ Based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011). See Table 14.

This difference in the extent of dependence on services exports could imply lack of export opportunities in services or could suggest relatively slower growth of services exports compared to merchandise exports and therefore a constant or declining share in the export basket. The data on average growth rates for services exports presented in Table 15 indicate that India has experienced very rapid growth in its services exports, thereby raising the overall contribution of services to its export basket. However, China, which too has experienced very high growth rates for services exports, has clearly experienced even higher growth rates in its merchandise exports, thereby resulting in a lower share of services in China's export basket notwithstanding such high growth in services exports. For the other BRICS, services export growth has picked up in the post 2000 period but has been roughly comparable to that for merchandise exports, thereby resulting in a roughly similar share of services in their export baskets.

TABLE 15: AVERAGE ANNUAL GROWTH RATES AND CAGR (%) FOR SERVICES EXPORTS BY THE BRICS

	5-Year Average			CAGR	
	1995-1999	2000-2004	2005-2009	1995-2002	2003-2010
Brazil	10.23	12.51	18.01	-28.19	10.13
Russia	3.66	18.06	16.78	-1.90	-11.90
India	19.47	22.83	20.29	0.18	3.24
China	9.83	19.18	16.82	3.51	3.31
South Africa	7.18	16.41	4.44	-25.72	-18.54

Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

The year-on-year services export performance for the BRICS shown in Figure 11 similarly highlights the superior performance exhibited by India. The spurt in the 2001-2004 period, most likely reflects the takeoff in IT services exports in the last decade. It is worth noting, however, that most of the countries have shown an upward trend in their services exports in the last decade and that all of them were severely hit by the 2008-2009 global financial crisis, with exports plummeting in 2009 and recovering in 2010. Hence, although the countries differ with regard to their relative competitiveness across different sectors of their economies, their sources of competitiveness, their dependence on services exports, and the extent to which they are integrated with world services trade, they seem to be equally susceptible to the fluctuations in the world economy and there is a broad convergence among them in their growth trajectories for services exports.

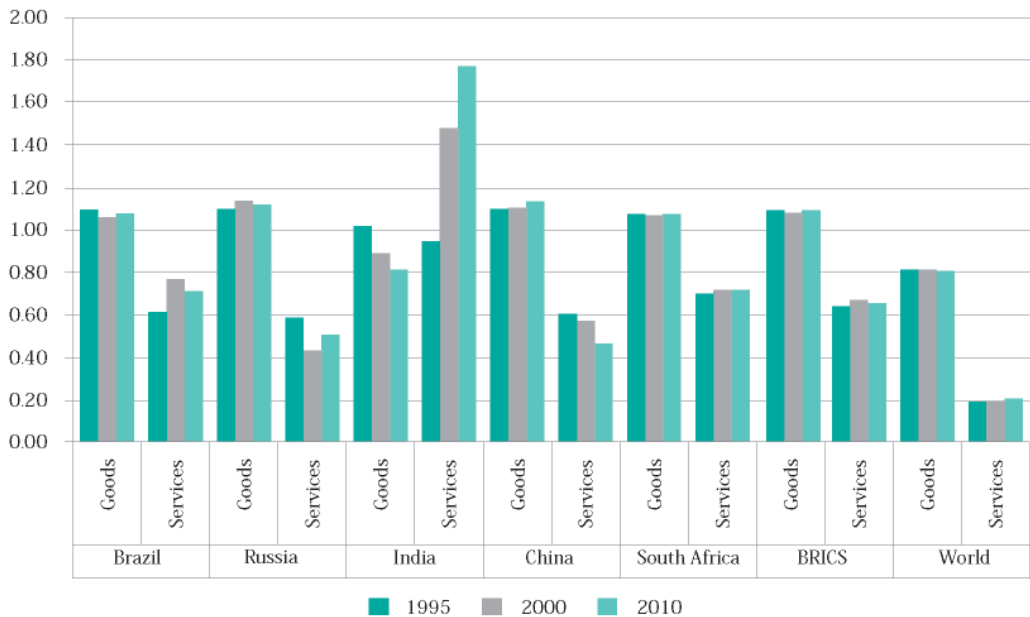
Overall, the data presented above on services export trends and contribution of services to exports suggest that India's service sector shows a much stronger dynamism compared to other sectors of its economy and has become more competitive over the concerned period while China's dynamism is more broad-based and its competitiveness in industry not only exceeds that in services but has also risen relative to that in services. The remaining BRICS do not reveal any particular changes in the relative competitiveness of their goods or services sectors. These inferences are corroborated by the estimates for revealed comparative advantage for all the countries as shown in Figure 12 and Figure 13a to 13e.

FIGURE 11: GROWTH IN SERVICES EXPORTS, 2001-10 (%)



Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

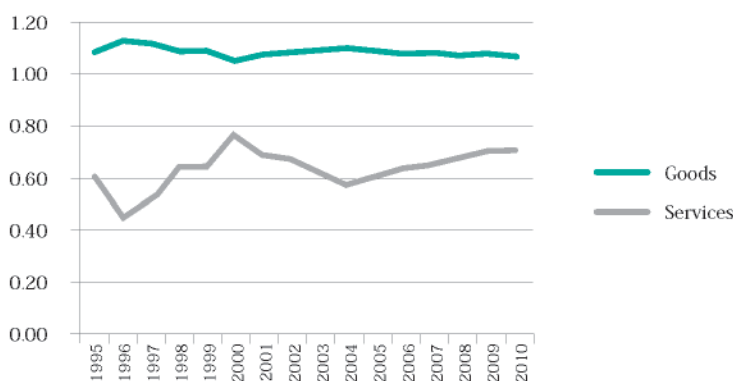
FIGURE 12: RCA FOR GOODS AND SERVICES FOR THE BRICS, 1995, 2000, 2010



Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

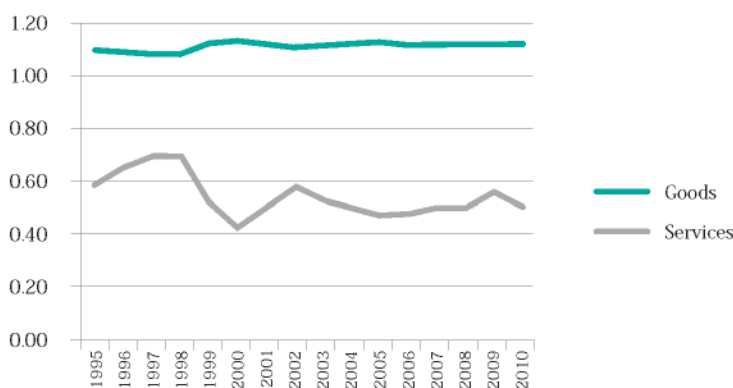
The Revealed Comparative Advantage (RCA) estimates for goods and services indicate that overall, the BRICS are more competitive in goods (with RCA of about 1) than in services (with RCAs below 1) and as a group, there has been virtually no change in their revealed comparative advantage over the 1995-2010 period. Within the group, it is interesting to note that only India has significantly improved its competitiveness in services (as was also highlighted earlier) with much higher RCAs than all the other BRICS in the 2000-2010 period. Its RCA in goods has meanwhile declined, which would explain the growing share of services in its export basket. All the other BRICS have RCAs of less than 1 in services (even lower than 0.5 in some cases) and RCAs greater than 1 for goods. Hence, while services constitute a significant part of total output of these countries, the estimates for RCAs and the data on services contribution to exports indicate that excepting the case of India, services growth is more internally driven for the BRICS. Figures 13a to 13f show the trends in goods and services RCAs for each of the BRICS and for the group as a whole.

FIGURE 13A RCA FOR GOODS AND SERVICES FOR BRAZIL, 1995-2010



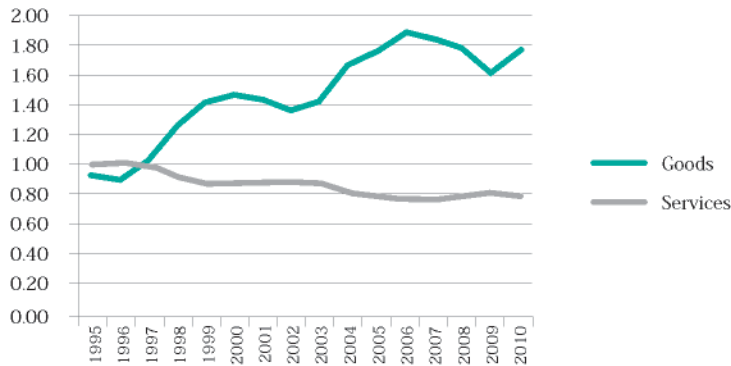
Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

FIGURE 13B RCA FOR GOODS AND SERVICES FOR RUSSIA, 1995-2010



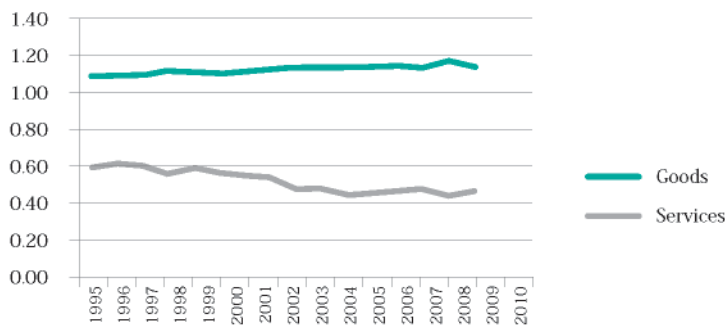
Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

FIGURE 13C RCA FOR GOODS AND SERVICES FOR INDIA, 1995-2010



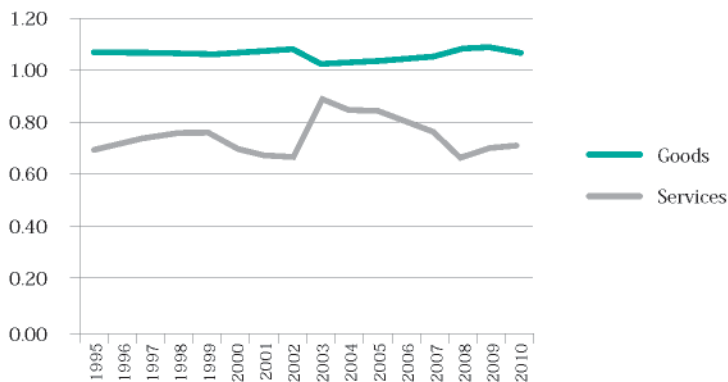
Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

FIGURE 13D RCA FOR GOODS AND SERVICES FOR CHINA, 1995-2010



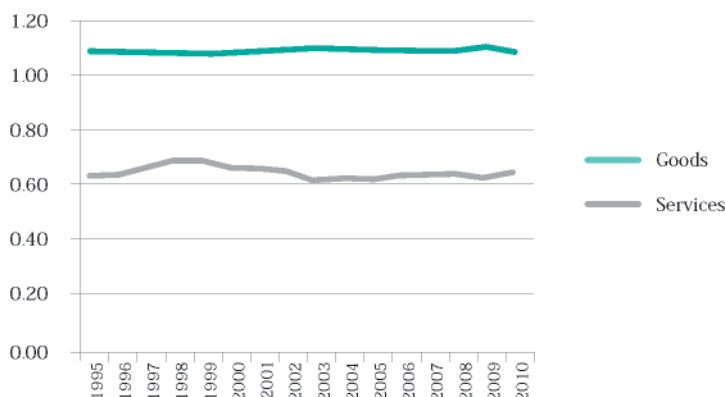
Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

FIGURE 13E RCA FOR GOODS AND SERVICES FOR SOUTH AFRICA, 1995-2010



Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

FIGURE 13F RCA FOR GOODS AND SERVICES FOR THE BRICS, 1995-2010



Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctaorg/> (accessed on November 29, 2011)

So the BRICS as a whole have not witnessed much change in either their goods or services RCAs, which reflects similar RCA trends over this period for all the countries, except India. The latter stands apart from the rest of the BRICS as its service sector is much more export oriented and competitive. It is also the only country in this group to see an increase in its RCA for services and a decline in the competitiveness of its merchandise exports. Thus, there is potentially some broad sectoral complementarity (goods versus services) between India and the other BRICS. However, the extent of complementarity within services requires one to examine the composition of their services exports.

Table 16 shows the change in sectoral composition of services exports for the BRICS. The data presented indicate that there are both similarities and differences in the pattern of their services exports. All the BRICS, save South Africa exhibit a very high share of services other than transport and travel (termed “other services”) in their total services exports. This share ranges from around 50 percent for Russia and China to two-thirds for Brazil and to over 70 percent for India in 2010. In contrast, only 25 percent of South Africa’s services exports comprise of “other services.” Its dominant service export is travel and tourism services with a share of over 60 percent. None of the other BRICS exhibit such a high contribution of travel services, although in all cases travel services constitute a significant share of total services exports (around 20 percent in all the other countries excepting India) implying that this is an area of interest for all the BRICS, within the service sector. Construction services also vary considerably in importance from less than 1 percent in the case of Brazil, India and South Africa to over 7 percent in the case of Russia and China.

Complementarities are also indicated within the “other services” segment. Although these account for a large share of the services export basket for Brazil, Russia, India and China, there are differences in the composition of exports within this segment. For instance, while computer and information services constitute more than half of “other services” exports for India and have almost doubled in share between 2000 and 2010, their share in the services export basket of the other BRICS is 5 percent or less. In contrast, other business services account for half of Brazil’s total services exports and are also significant for Russia and China at over 25 percent of their services exports. Available information on the disaggregated nature of other services exports for Brazil indicates the growing contribution of architectural, engineering and design services, mainly driven by the internationalization of Brazilian firms and their increased demand for supporting business services. However, in the absence of bilateral trade data at a disaggregated level

for “other business services,” it is difficult to assess the extent of potential complementarity among the BRICS.²⁶ It is also interesting to note that some services such as finance, insurance and communication services, which have grown rapidly and have increased their contribution to GDP, still account for a very small share of the BRICS’ services exports, indicating that their growth is primarily inward oriented.

TABLE 16: SHARE OF DIFFERENT SERVICE SUBSECTORS IN TOTAL SERVICES EXPORTS OF BRICS (%), 2000 AND 2010

	Brazil		Russia		India		China		South Africa	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Transport	14.8	15.5	37.2	33.6	11.9	10.7	12.1	20.0	23.4	11.5
Travel	19.1	18.6	35.9	20.2	20.7	11.4	53.3	26.8	53.0	64.9
Communications	0.4	1.4	4.0	3.0	3.6	1.1	4.4	0.7	1.1	1.6
Construction	2.4	0.1	1.8	5.9	3.0	0.4	2.0	8.5	..	0.4
Insurance	3.3	1.3	0.4	1.0	1.5	1.4	0.4	1.0	8.9	1.9
Financial services	4.0	6.5	1.0	2.4	1.7	4.9	0.3	0.8	..	5.9
Computer and information	0.4	0.7	0.6	3.1	28.3	45.8	1.2	5.4	..	2.1
Royalties and licence fees	1.3	1.2	1.0	1.4	0.5	0.1	0.3	0.5	1.0	0.4
Other business services	48.1	49.6	18.2	27.1	24.9	23.4	25.2	35.8	9.4	8.0
Personal, cultural and recreational services	0.7	0.3	..	1.1	..	0.3	0.0	0.1	..	0.5
Government services n.i.e.	5.7	4.8	..	1.2	3.9	0.4	0.9	0.6	3.1	2.8

Source: Author’s calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on December 5, 2011)

Note: Cells shaded in grey are for those cases where there has been a large increase in the share of that service in the country’s total services exports or where the share remains significant (over 20 percent) in both 2000 and 2010. These are meant to highlight services where countries appear to be competitive and also to indicate possible complementarities in export interests among the BRICS in the service sector.

Overall, the general pattern that emerges is that traditional services exports (transport and travel services) have declined in importance for all the BRICS except South Africa and this decline has been most significant for India. Russia and China have a more balanced distribution between traditional and other services exports. The differences in the composition of services exports across the BRICS combined with the observed trends in RCAs indicate scope for trade and cooperation among them in both traditional and emerging services. The services where such opportunities are indicated include travel, transport, computer and information services, construction, and other business services. There is little overlap in their areas of strength. However, in the absence of data on bilateral trade in services among the BRICS, only inferences can be drawn regarding potential opportunity segments for engagement among these countries.

26 Bilateral trade data for Brazil indicates that other commercial services exports consisting mainly of business, professional and technical services, were mainly directed at the regional, Latin American market followed by the US and the EU. There was little export to other BRICS countries.

TABLE 17: SHARE OF THE BRICS IN WORLD SERVICES EXPORTS, 2000, 2010 (%)

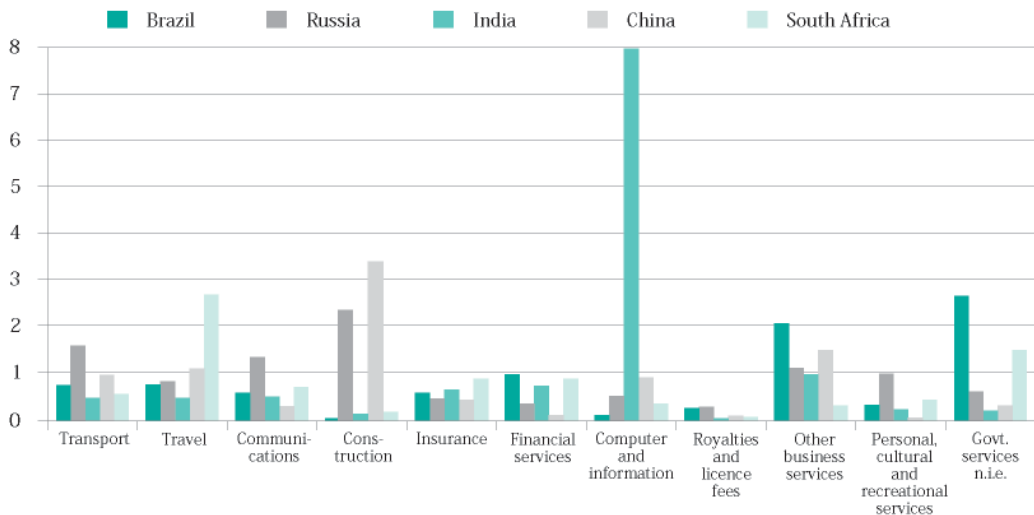
	Brazil		Russia		India		China		South Africa	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Total services	0.61	0.85	0.62	1.18	1.08	3.29	1.97	4.56	0.33	0.37
Transport	0.40	0.64	1.02	1.94	0.57	1.72	1.05	4.45	0.34	0.21
Travel	0.39	0.65	0.73	0.99	0.74	1.56	3.47	5.05	0.57	1.00
Other services	0.88	1.04	0.36	1.02	1.57	4.78	1.47	4.53	0.17	0.16
Communications	0.11	0.51	1.19	1.60	1.85	1.67	4.16	1.44	0.18	0.26
Construction	0.76	0.03	0.57	2.80	1.68	0.56	2.02	15.46	..	0.07
Insurance	1.11	0.51	0.12	0.57	0.92	2.18	0.38	2.11	1.61	0.33
Financial services	0.37	0.84	0.10	0.43	0.27	2.43	0.08	0.54	..	0.33
Computer and information	0.08	0.10	0.14	0.63	10.88	26.14	0.82	4.27	..	0.13
Royalties and licence fees	0.16	0.20	0.11	0.31	0.10	0.06	0.10	0.41	0.06	0.03
Other business services	1.34	1.76	0.51	1.34	1.22	3.23	2.24	6.83	0.14	0.12
Personal, cultural and recreational services	0.30	0.27	..	1.19	..	0.84	0.05	0.31	..	0.17
Government services n.i.e.	1.33	2.25	..	0.76	1.62	0.71	0.71	1.40	0.39	0.57
Memo item: Commercial services	0.62	0.91	..	1.32	1.11	3.71	2.09	5.12	0.34	0.41

Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on December 5, 2011)

Note: Cells in grey indicate those services where the country has a significant share in absolute terms (over 10 percent) or in relative terms (compared to the other BRICS) in world services exports, or where there has been a noteworthy increase.

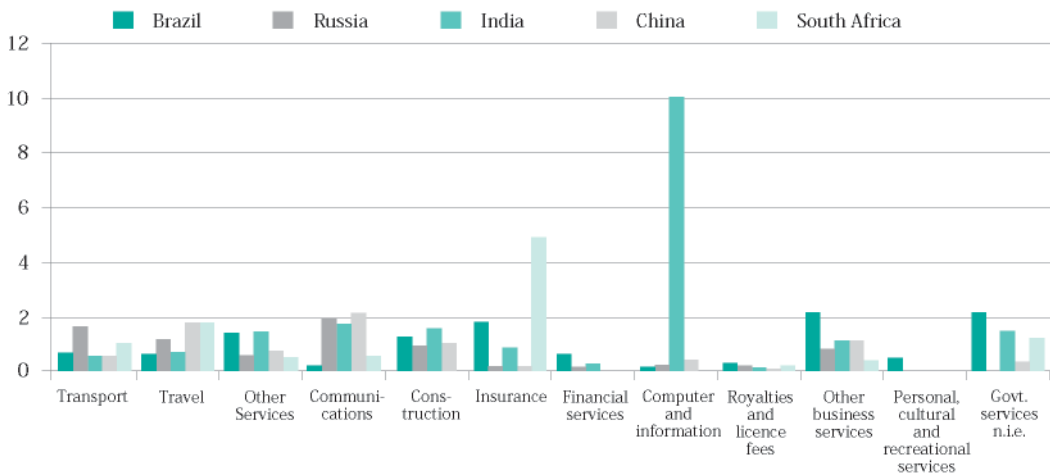
Figures 14A and 14B which show the RCAs for each of the countries in specific services also confirm that the BRICS differ with regard to their different areas of competitiveness within the service sector. India shows very high potential in computer and information services, South Africa and China show competitiveness in travel services, Russia in transport services, China and Russia in construction services, and Brazil and China in other business services. There is also a general downward trend in the RCAs for all the countries across most services as well as a clear divergence across the countries with regard to their relative RCAs in different services over the 2000-2010 period. From a clustering of countries in individual services around broadly similar levels of RCAs, the countries have moved apart in certain services such as construction, travel and transport services. At the same time, there is some convergence evident in some other areas such as computer and information services and other business services. These are indicative of services which need to be examined further as areas for expanding commercial relations and cooperation among the BRICS. There appear to be relatively few areas of competition and more areas of complementarity.

FIGURE 14A: RCA OF THE BRICS IN SERVICE SUBSECTORS, 2010



Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on December 5, 2011)

FIGURE 14B: RCA OF THE BRICS IN SERVICE SUBSECTORS, 2000



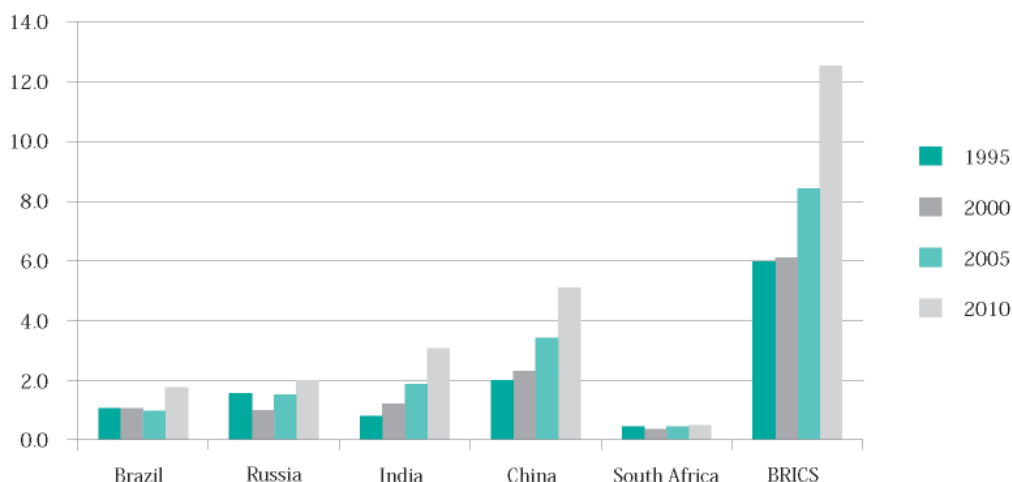
Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on December 5, 2011)

4.2 Examining trends in services imports

As with services exports, the BRICS have become integrated with the world economy through services imports. The share of the BRICS in world services imports has doubled from 6 percent in 1995 to over 12 percent in 2010. However, as with services exports, this increase is mainly due to the more than doubled shares of India and China in global services imports. Among the other BRICS, Brazil and Russia

have increased their shares of world services imports only marginally between 2005 and 2010 while South Africa's share has remained stagnant.

FIGURE 15 SHARE OF THE BRICS IN WORLD SERVICES IMPORTS (%)



Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

It is thus evident that there is asymmetry across the BRICS with regard to their importance in global services trade (exports and imports) and their trends in services trade have not been equally strong. However, this asymmetry in trends also suggests that there is possible scope for the BRICS to engage in services trade with each other. In order to assess the areas where this scope exists, one needs to examine the trends in services imports and to place the composition of their services imports against the structure of their services exports highlighted earlier.

TABLE 18: SHARE OF SERVICES IMPORTS IN TOTAL IMPORTS OF GOODS AND SERVICES

	1995	2000	2005	2010
Brazil	21.49	23.59	25.43	26.31
Russia	24.18	26.42	23.38	22.33
India	24.33	28.82	26.46	26.73
China	17.19	14.82	12.12	12.46
South Africa	17.33	17.32	17.01	20.72
BRICS	20.33	19.76	17.17	17.63

Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

The data on contribution of services to total imports of the BRICS countries indicates that there has been little change over the 1995-2010 period. For the BRICS as a whole, the share of services in their total imports has in fact declined, mainly due to the steady decline in this share for China and the latter's large weight among the BRICS. Brazil and South Africa have on the other hand experienced a slight increase in the contribution of services to their total imports.

The average growth rates for services imports, however, indicates that almost all the BRICS have seen a considerably increase in their services imports, especially in the last decade. The fact that this growth is not reflected in a significantly higher contribution of services to their import basket only reflects the fact that their other imports have grown even more rapidly.

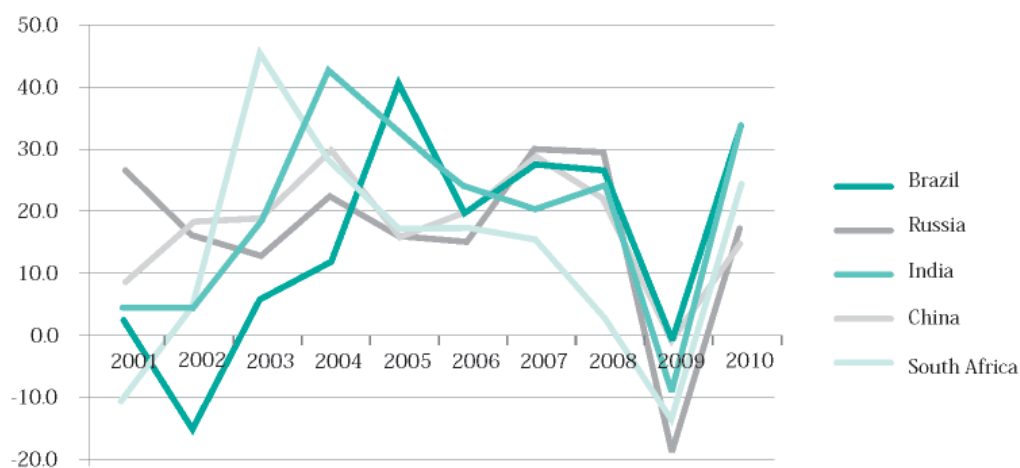
TABLE 19: AVERAGE ANNUAL GROWTH RATES AND CAGR (%) FOR SERVICES IMPORTS BY THE BRICS

	5-YearAverages			CAGR	
	1995-99	2000-2004	2005-2009	1995-2002	2003-2010
Brazil	8.10	4.65	22.96	0.90	22.29
Russia	-1.22	20.14	14.65	2.45	15.03
India	16.21	16.41	18.77	10.79	23.43
China	16.39	18.17	17.54	9.14	18.61
South Africa	2.82	14.14	8.16	-1.16	12.59

Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

The annual trends in services imports for the BRICS as shown in Figure 16 highlight the general upward trajectory in the growth of services imports for all these countries, except South Africa. There is much greater uniformity among them in the case of services imports than for services exports, probably reflecting growth dynamics and liberalization trends in all these countries which have contributed to increased services imports, as also highlighted earlier. The impact of the recent global financial crisis has been severe for all the BRICS, indicating the fact that services imports are closely tied to their overall economic performance, which is in turn linked to the world economy.

FIGURE 16 : YEAR-WISE GROWTH IN SERVICES IMPORTS FOR THE BRICS, 2001-2010 (%)



Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011)

The pickup in the growth of services imports for the BRICS along with the growing role of services in their exports, the pickup in services export growth for some of the BRICS, and differences among them in their areas of export competitiveness within the service sector suggest that there is some scope for expanding intra BRICS services trade. This is also indicated by the composition of services imports among the BRICS. Traditional services such as transport and travel services constitute over 50 percent of total services imports for all the countries. Travel services are one segment which accounts for over 20 percent of total imports in almost all the countries. As shown earlier, this is also an important export segment for some of the BRICS and thus it is clearly one area for expanding intra BRICS trade. Another segment of potential interest is transport services which accounts for over 40 percent of services imports in some of the BRICS (India, South Africa, Russia) and is also important in services exports of some other BRICS (China, Russia). Other business services are an important part of total services imports for all the BRICS (except South Africa) and is another potential area for expanding trade and cooperation as it constitutes a large share of services exports for all the countries (excepting South Africa). It is also worth noting that some of the BRICS have both export and import interests in certain segments such as travel and other business services.

TABLE 20: COMPOSITION OF SERVICES IMPORTS IN THE BRICS, 2000 AND 2010 (%)

	Brazil		Russia		India		China		South Africa	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Transport	25.8	18.1	14.4	16.4	45.4	39.7	28.9	32.7	41.9	38.4
Travel	23.4	26.2	54.5	36.1	14.0	9.1	36.4	28.4	35.8	30.3
Communications	0.2	0.4	1.8	2.9	0.5	1.0	0.7	0.6	1.4	2.2
Construction	0.0	0.0	2.5	6.9	0.7	0.8	2.8	2.6	..	0.0
Insurance	1.9	2.4	2.5	1.4	4.2	4.3	6.9	8.1	6.5	2.9
Financial services	4.0	2.7	0.2	2.3	6.7	5.8	0.3	0.7	..	0.7
Computer and information	6.9	5.6	2.9	2.6	3.0	2.2	0.7	1.5	..	1.0
Royalties and licence fees	8.5	4.6	0.4	6.9	1.5	2.1	3.6	6.7	4.2	10.5
Other business services	20.6	33.3	20.7	20.4	22.5	34.0	19.3	17.7	7.2	11.6
Personal, cultural and recreational services	2.2	2.0	..	1.4	..	0.4	0.1	0.2	..	0.1
Government services n.i.e.	6.5	4.6	..	2.8	1.5	0.6	0.5	0.6	2.8	2.3

Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on December 5, 2011)

Note: Grey cells indicate those services which account for a large (over 20 percent) or growing share of services imports. This share is only chosen on an indicative basis.

Trends in the significance of the BRICS in global services imports as shown in Table 21 similarly highlight that the BRICS, in particular India and China, have become increasingly important (i.e., with shares of over 2.5 percent in world services imports) across several service segments. These include travel, construction, computer and information, financial, insurance, royalties and licenses, and other business services. However, as shown earlier, in several of these services (e.g., finance, insurance, royalties and licenses), the BRICS are not major exporters in the world market and nor do these account for a significant share of their services exports. Hence, although there are several segments where services imports have grown for the BRICS, one can infer that these imports are from other countries and not from each other. But in segments such as travel, transport, and computer and information services, there are potential synergies among some of the BRICS as these not only constitute a significant share in the services exports

of certain BRICS but are also a growing share of their services imports and in terms of their presence as service importers in the world market.

TABLE 21: SHARE OF BRICS IN WORLD SERVICES IMPORTS, 2000 AND 2010 (%)

	Brazil		Russia		India		China		South Africa	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Total services	1.08	1.76	1.05	2.06	1.24	3.28	2.33	5.42	0.38	0.52
Transport	1.23	1.28	0.67	1.36	2.49	5.23	2.97	7.13	0.70	0.80
Travel	0.83	2.02	1.89	3.26	0.58	1.31	2.80	6.75	0.45	0.69
Other services	1.18	2.04	0.71	2.05	1.09	3.50	1.75	4.40	0.18	0.34
Communications	0.10	0.36	0.89	2.75	0.32	1.56	0.75	1.49	0.26	0.52
Construction	0.00	0.01	1.36	8.64	0.43	1.68	3.33	8.59	..	0.01
Insurance	1.13	0.96	1.47	0.65	2.90	3.14	8.81	9.89	1.36	0.33
Financial services	0.66	1.54	0.04	1.58	1.27	6.24	0.10	1.27	..	0.12
Computer and information	2.64	3.61	1.09	1.94	1.33	2.60	0.61	3.05	..	0.19
Royalties and licence fees	1.78	1.30	0.09	2.32	0.36	1.11	1.61	5.96	0.31	0.89
Other business services	1.01	2.64	0.99	1.90	1.27	5.02	2.04	4.34	0.12	0.27
Personal, cultural and recreational services	1.74	3.63	..	2.86	..	1.33	0.18	1.06	..	0.04
Government services n.i.e.	2.70	2.72	..	1.94	0.72	0.66	0.43	1.08	0.41	0.41
Memo item: Commercial services	1.08	1.91	..	2.29	1.31	3.72	2.49	6.16	0.39	0.58

Source: Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on December 5, 2011)

Note: Grey cells are for services where the BRICS account for 2.5 percent or more of world services imports. This benchmark share is only indicative

If one juxtaposes the data presented above for services imports and services exports, then one finds that there is scope for intra BRICS engagement in both traditional and emerging services. Travel and tourism shows promise as do other business services and professional services, such as in IT consulting and software services.²⁷ Although quality information regarding the opportunities for intra BRICS engagement is limited, a few reports highlight specific areas of opportunity, especially within business and professional services. For instance, the Consultancy Development Centre in one of its reports on India's potential for consultancy exports to Latin America highlights opportunities in areas such as management consulting, engineering consulting, and IT/other services for Indian firms in the Brazilian market.²⁸ Some thrust areas identified in this report include software development; BPO and KPO in Portuguese in IT services (through R&D and joint ventures); prospecting, exploration and production in the area of engineering consultancy services (for the oil and gas industry through joint ventures); IT support and consultancy services for the banking and financial services industry (through strategic alliances); design of aircraft components (for the aviation industry) in the area of engineering consultancy services through strategic alliances; R&D services for manufacturing and design in the automobile industry (through joint ventures); and planning, designing and implementation related consultancy services in the area of water and sanitation

²⁷ Author's calculations based on UNCTAD database, <http://unctadstat.unctad.org/> (accessed on November 29, 2011). See Table 16.

²⁸ Segments within these services highlighted in the report include, market studies; financial analysis, and system development under management consultancy services; project management, business incubation, and turnkey projects under engineering consultancy services, and Business processing outsourcing, knowledge process outsourcing, and IT-enabled services provision in banking and financial services, manufacturing, and R&D under IT/Other Services.

services (through turnkey projects and feasibility studies). The report also notes the possibilities for Indian consultants to tie up with local Brazilian consultants for export of services to third countries in the Latin American region. What emerges clearly from such reports is that although most of India's current exports of business and professional services are with non-BRICS countries, there are opportunities in other BRICS markets, as reflected by the presence of leading Indian IT firms such as TCS, Wipro and Infosys in other BRICS countries, in areas such as IT support and consulting services. Similarly, there are Brazilian software companies which are entering the Indian and Chinese markets and trying to diversify outside Latin America. Light Infocon, for example, has established a joint venture, Online Productivity Solutions with the Indian company Goan, to produce software. In sum, there appears to be scope for diversification of services trade towards the BRICS in some areas of "other" commercial services.

5. Services Investment and the BRICS

An important part of services globalization is investment flows. Many services cannot be traded except through overseas commercial presence. Hence, a simple mapping of services exports and imports across the BRICS may not provide the complete picture of all the services where the BRICS can engage with each other. A nuanced approach is needed to understand the possible complementarities among the BRICS in services trade. For instance, segments such as computer and information services, where certain BRICS such as India are very export competitive, do not account for a significant or growing share of services imports in any of the countries. The same is true to some extent for construction services where certain BRICS such as China are competitive but which account for a negligible share of services imports in the other BRICS. This does not necessarily mean that there is no scope for trade in these segments among them as trade in these services may be in the form of FDI flows in these areas. Therefore, in order to arrive at a complete picture in this regard, one needs to examine the trends and patterns in investment flows for the BRICS, as discussed in this section. In fact, some of the areas of opportunity and existing engagements highlighted above hinge on commercial presence.

The following discussion provides an overview of the trends and characteristics of FDI into and from the BRICS. It discusses the overall significance of services in these FDI flows as well as the composition of FDI within the service sector. This is followed by an examination of the sources and destinations for FDI for the BRICS and the extent of transnationalization of BRICS country firms that are engaged in services operations in other countries. The discussion on the composition and geographic distribution of FDI and the transnational presence of BRICS firms in services provides some indication of the current or prospective engagement among these countries through investment flows in the service sector. It is important to note that in the absence of data which provides investment information by a combination of both country and sector, only inferences can be drawn regarding investment complementarities and mutual interests by juxtaposing the information on sectoral and partner country profiles for FDI for each of the BRICS.

FDI IN SERVICES

The BRICS have over the past decade, emerged as increasingly important destinations for FDI and in recent years, also as growing source countries for FDI. This trend is, however, not uniform across all the BRICS. Table 22 shows the trends in outward and inward FDI flows for each of the BRICS.

TABLE 22: OUTWARD AND INWARD FDI FLOWS FOR THE BRICS, 1995-2010 SELECTED YEARS (MN OF US\$ AND %)

		OUTWARD FDI FLOW				INWARD FDI FLOW			
		1995	2000	2005	2010	1995	2000	2005	2010
Brazil	US\$ at current prices and current exchange rates (mns)	1,095.64	2,281.59	2516.70	11,519.00	4,405.12	32,779.24	15,066.29	48,438.00
	US\$ at current prices and current exchange rates per capita	6.77	13.08	13.53	59.09	27.22	187.93	81.01	248.47
	% of total world	0.30	0.19	0.29	0.87	1.29	2.34	1.53	3.89
	% of GDP	0.14	0.35	0.29	0.56	0.57	5.08	1.71	2.35
	% of Gross Fixed Capital Formation	0.78	2.11	1.79	..	3.13	30.26	10.72	..
Russia	US\$ at current prices and current exchange rates (mns)	605.78	3176.78	12,767.47	51,696.80	2065.72	2714.23	12,885.81	41,194.40
	US\$ at current prices and current exchange rates per capita	4.07	21.65	88.76	361.62	13.89	18.49	89.58	288.16
	% of total world	0.17	0.26	1.45	3.91	0.60	0.19	1.31	3.31
	% of GDP	0.15	1.22	1.67	3.51	0.52	1.05	1.69	2.80
	% of Gross Fixed Capital Formation	0.72	7.25	9.41	..	2.46	6.20	9.50	..
India	US\$ at current prices and current exchange rates (mns)	119.00	514.45	2985.49	14,626.10	2151.00	3587.99	7621.77	24,639.92
	US\$ at current prices and current exchange rates per capita	0.12	0.49	2.62	11.94	2.23	3.40	6.69	20.12
	% of total world	0.03	0.04	0.34	1.11	0.63	0.26	0.78	1.98
	% of GDP	0.03	0.11	0.36	0.90	0.58	0.77	0.91	1.52
	% of Gross Fixed Capital Formation	0.12	0.47	1.13	..	2.23	3.27	2.88	..
China	US\$ at current prices and current exchange rates (mns)	2000.00	915.78	12,261.17	68,000.00	37,520.53	40,714.81	72,406.00	105,735.00
	US\$ at current prices and current exchange rates per capita	1.68	0.73	9.54	51.59	31.46	32.65	56.35	80.21
	% of total world	0.55	0.07	1.39	5.14	10.96	2.90	7.37	8.50
	% of GDP	0.26	0.08	0.53	1.16	4.96	3.41	3.14	1.80
	% of Gross Fixed Capital Formation	0.80	0.22	1.30	..	15.00	9.96	7.68	..
South Africa	US\$ at current prices and current exchange rates (mns)	2497.70	270.61	930.29	450.33	1241.30	887.34	6646.93	1553.02
	US\$ at current prices and current exchange rates per capita	60.33	6.05	19.47	8.98	29.98	19.82	139.08	30.98
	% of total world	0.69	0.02	0.11	0.03	0.36	0.06	0.68	0.12
	% of GDP	1.65	0.20	0.38	0.12	0.82	0.67	2.69	0.43
	% of Gross Fixed Capital Formation	10.41	1.36	2.24	..	5.17	4.47	16.03	..

Source: UNCTAD database, <http://unctadstat.unctad.org/> (accessed on October 29, 2011)

The above table illustrates that the BRICS have become increasingly important destination countries for FDI. Their share in global FDI inflows has increased from around 6 percent in 2000 to nearly 20 percent in 2010. This increase is, however, dominated by China which accounts for the bulk of FDI inflows among the BRICS with a share of over 8 percent of global FDI inflows in 2010, followed by Brazil and Russia with shares between 3 to 4 percent and India with a share of around 2 percent. South Africa accounts for a negligible share of these inflows. For the most part, excepting the case of South Africa, there is a significance increase in the absolute volume of FDI inflows for all the other countries through the 2000-10 period. This trend possibly reflects the growing globalization of firms in the past decade and the opening up of these economies to FDI and their integration with world markets. But what is interesting to note is the growing share of the BRICS in outward FDI flows, from a share of 0.6 percent in 2000 to over 16 percent in 2010. This increase is again dominated by China whose contribution to global FDI outflows has risen seventy-fold over this period followed by India and Russia. South Africa's importance as a source country for FDI has not changed during this period.

The overall trends in FDI inflows and outflows suggest that there is growing scope for engagement among the BRICS through investment flows. This has a bearing on the possibilities for cooperation and engagement among them in the service sector as many services are mainly tradable through FDI. It is thus important to examine the role services play in these flows. Tables 23a to 23d provide the sectoral distribution of FDI inflows for four of the BRICS, for selected years.

TABLE 23A: SECTORAL BREAKDOWN OF FDI INFLOWS FOR BRAZIL, SELECTED YEARS (MN OF US \$ AND % SHARES)

BRAZIL	2009		2005		2000	
	Value	Share of total	Value	Share of total	Value	Share of total
Total (merchandise & services)	30444	100.0	21522	100.0	33331	100.0
Primary	3475	11.42	3675	17.08	1186	3.56
Secondary	13886	45.61	6455	29.99	7582	22.75
Services	13083	42.97	11392	52.93	21109	63.33
o/w Finance	4948	16.25	2155	10.01	6398	19.20
Wholesale and retail trade	2833	9.31	2843	13.21	1635	4.90
Business activities	1946	6.39	3479	16.16	1957	5.87
Construction	1165	3.83	204	0.95	12	0.04
Transport, storage and communications	1145	3.76	2112	9.82	10979	32.94
Public administration and defence	349	1.15				
Hotels and restaurants	276	0.91	128	0.59		
Publishing, printing and reproduction of recorded media	213	0.70	26	0.12	16	0.05
Community, social and personal service activities	146	0.48	373	1.73	113	0.34
Education	57	0.19	51	0.24		
Health and social services	4	0.01	3	0.01		
Other services	2	0.01	2	0.01		
Unspecified tertiary					0	0.00
Recycling			18	0.08		

Source: International Trade Centre; Investment Map, <http://www.investmentmap.org> (accessed on December 6, 2011)

TABLE 23B: SECTORAL BREAKDOWN OF FDI INFLOWS FOR RUSSIA, SELECTED YEARS (MN OF US \$ AND % SHARES)

RUSSIA	2009		2005		2000	
	Value	Share of total	Value	Share of total	Value	Share of total
Total (merchandise & services)	15,906.00	100.0	13,072.00	100.0	4,429.00	100.0
Primary	1624	10.21	1192	9.12	993	22.42
Secondary	6032	37.92	9116	69.74	882	19.91
Services	8250	51.87	2862	21.15	2412	54.46
o/w Wholesale and retail trade	3518	22.12	767	5.87	865	19.53
Business activities	2739	17.22	930	7.11	150	3.39
Construction	744	4.68	117	0.90	45	1.02
Finance	634	3.99	589	4.51	26	0.59
Transport, storage and communications	480	3.02	245	1.87	1326	29.94
Community, social and personal service activities	67	0.42	83	0.63		
Hotels and restaurants	43	0.27	21	0.16		
Health and social services	25	0.16	12	0.09		
Education	0	0.00	0	0.00		

Source: International Trade Centre; Investment Map, <http://www.investmentmap.org> (accessed on December 6, 2011)

TABLE 23C: SECTORAL BREAKDOWN OF FDI INFLOWS FOR INDIA, SELECTED YEARS (MN OF US \$ AND % SHARES)

INDIA	2009		2005		2000	
	Value	Share of total	Value	Share of total	Value	Share of total
Total (merchandise & services)	22,461.30	100.0	3,359.00	100.0	1,910.00	100.0
Primary					75	3.93
Secondary	7,287.20	32.44	1,487.00	44.27	412	21.57
Services	14,790.10	65.85	1685	50.16	845	44.2408
o/w Business activities	4,611.60	20.53	875	26.05	579	30.31
Construction	3,515.80	15.65	191	5.69		
Finance	2,205.90	9.82	318	9.47	40	2.09
Transport, storage and communications	2,072.60	9.23	95	2.83		
Unspecified tertiary	1,085.90	4.83	118	3.51	226	11.83
Hotels and restaurants	671.3	2.99	67	1.99		
Wholesale and retail trade	535.8	2.39	11	0.33		
Education	91.2	0.41	10	0.30		
Health and social services						

Source: International Trade Centre; Investment Map, <http://www.investmentmap.org> (accessed on December 6, 2011)

TABLE 23D: SECTORAL BREAKDOWN OF FDI INFLOWS FOR CHINA, SELECTED YEARS (MN OF US \$ AND % SHARES)

CHINA	2009		2005		2001	
	Value	Share of total	Value	Share of total	Value	Share of total
Total (merchandise & services)	90033	100.0	72406	100.0	46878	100.0
Primary	1929	2.14	2451	3.39		
Secondary	48884	54.30	42469	58.65	33180	70.78
Services	39220	43.56	25462	35.17	10937	23.33
o/w Business activities	26795	29.76	9504	13.13	5267	11.24
Community, social and personal service activities	874	0.97			2631	5.61
Construction	692	0.77	490	0.68	807	1.72
Education	14	0.01	18	0.02		
Finance	456	0.51	12301	16.99	35	0.07
Health and social services	43	0.05	39	0.05	119	0.25
Hotels and restaurants	844	0.94				
Other services	1586	1.76	260	0.36		
Transport, storage and communications	2527	2.81	1812	2.50	909	1.94
Unspecified tertiary						
Wholesale and retail trade	5390	5.99	1039	1.43	1169	2.49

Source: International Trade Centre; Investment Map, <http://www.investmentmap.org> (accessed on December 6, 2011)

The sectoral composition of FDI inflows for Brazil, Russia, India, and China, as shown in the tables above indicate that services accounted for around 40 percent or more of all FDI inflows into these countries in 2010 and that the sector's share in inward FDI flows has increased considerably in the cases of India and China. As with trade flows, among the BRICS, India had the highest share for services in total inward FDI flows, at over 60 percent in 2010 and with cumulative FDI inflows into services amounting to \$76.9 billion or 64 percent of total cumulative FDI inflows over the January 2000-May 2010 period. Only Brazil experienced a decline in the share of services FDI in total FDI inflows over the 2001 to 2010 period, mainly due to a sharp decline in FDI inflows to transport, storage, and communication services. The share of services in its FDI inflows nevertheless remained significant at over 40 percent.

The sub-sectoral breakdown of FDI shows commonalities across the four countries. The most important services within overall services FDI are distribution, business and financial services, most likely reflecting the liberalization of these services in these countries over the past decade (albeit to varying degrees) and the globalization of these activities with the emergence of transnational firms and advances in information and communication technologies.²⁹ Other services which are recipients of significant FDI inflows in these countries include transport, storage & communication services and construction services (though their shares vary considerably across these countries). Overall, there is clearly some competition in terms of attracting inward investment into these services.

In order to assess the possible complementarities among the BRICS with respect to FDI in services, one needs to examine the sectoral composition of their outward FDI flows to identify if there are subsectors

²⁹ An earlier study similarly found that through the last two decades, business and other services along with transport and trade and distribution services have attracted the bulk of FDI inflows in the BRIC countries.

across different BRICS which are important in both inward and FDI flows and where they could potentially act as source and destination markets for each other. A problem in this regard is that it is difficult to obtain consistent and up to date data on the distribution of outward FDI for these countries. However, based on a few earlier studies and evidence on transnational firms from UNCTAD, there appears to be potential for intra BRICS FDI in services.

Emerging countries such as the BRICS are becoming increasingly important sources of investment. Most of their outward investments are in developing countries and tend to be concentrated in the infrastructure and extractive sectors. According to one study, between 1998 and 2003, emerging country TNCs, including several from the BRICS, accounted for around US \$30 billion in infrastructure projects in developing countries.³⁰ More recent evidence on developing country TNCs confirms this fact. Services account for the bulk of Brazil's outward FDI, which is mainly directed at the Latin American and Caribbean region. Its main outward investment service industries are energy, trade-related transport, offshore financial services, and more recently also certain business services such as software. Russia's TNCs are mostly resource-based companies and are present in areas such as energy, telecommunication, and shipping services. India has significant outward FDI in non-financial services such as IT, business process outsourcing, and entertainment and broadcasting though its TNCs do not figure among the top developing country TNCs. Services also account for a growing share of its outward FDI flows, contributing to over 50 percent of total FDI outflows for the 1999-2008 period, with non-financial services such as communication, software and business services constituting the main segments. China's overseas FDI presence is mainly in resource-based extractive industries such as energy services and more recently its TNCs have also entered in IT and trading services. Several of its TNCs are positioned among the leading developing country international firms. South Africa's TNCs are mainly in financial and extractive industries. A listing of the 2011 Financial Times Top 500 sector rankings likewise indicates the presence of one or more of the BRICS in sectors such as banking, telecom, software, energy and construction services. The evidence overall suggests some degree of competition in areas such as energy, transport, and financial services and also complementarity in areas such as transport, financial and selected business services.³¹

Tables 24A to 24D provide the breakdown for outward FDI or activities of TNCs for four of the BRICS for the most recent available year. The significance of services as well as the range of service activities (especially the importance of various business activities) covered by these outflows from the BRICS is evident.

TABLE 24A: BRAZIL'S OUTWARD FDI STOCK, BY SECTOR AND INDUSTRY, 2003 (US \$ MN)

Sector/Industry	Value
TOTAL	44,769
Primary	259
Secondary	1,190
Tertiary	43,319
Electricity, gas, water	20
Construction	695

³⁰ See, Gammeltoft (2008)

³¹ This discussion on transnationals and outward investment from the BRICS is based on a variety of studies and reports.

Trade	1,908
Hotels and restaurants	207
Transport, storage, communications	207
Finance	22,355
Business activities	17,982
Education	1
Community, social and personal services	138

Source: Based on Sauvart (2005), Table 9, p. 658

TABLE 24B: RUSSIA: INDUSTRY DISTRIBUTION OF CROSS-BORDER M&A PURCHASES BY RUSSIAN COMPANIES, 2004 (NUMBER OF DEALS)

Sector/Industry	Value
TOTAL	25
Primary	-
Secondary	10
Tertiary	15
Electricity, gas, water	2
Trade	2
Transport, storage, communications	4
Finance	5

Source: Based on Sauvart (2005), Table 13, p. 664

TABLE 24C: INDIA: COMPOSITION OF APPROVED OUTWARD FDI FROM INDIA (% OF TOTAL), SELECTED YEARS

Category	2005-06	2006-07	2007-08	1999-2008
Manufacturing	59.9	24.9	43.7	42.7
Financial services	5.9	0.2	0.2	0.7
Non-financial services	24.8	54.7	12.1	30.3
Trading	4.7	8.3	3.2	5.1
Other	4.7	12.0	40.7	21.3
TOTAL (US \$ mn)	2,866	15,053	22,480	52,299

Source: Reproduced from Athukorala (2009), Table 3, p.136 (based on RBI Annual Report, various years)

Note: Data are on the basis of the Indian financial year

TABLE 24D: CHINA'S OUTWARD FDI STOCK, BY SECTOR AND INDUSTRY, 2004 AND 2009 (US \$ BN, % OF TOTAL)

SECTOR / INDUSTRY	2004 ^a	2009
All sectors / industries	44.8	245.8
	100%	100%
Primary	6.8	42.6
	15.2%	17.3%
Agriculture, forestry, and fishing	0.8	2
	1.8%	0.8%
Mining, quarrying and petroleum	6	40.6
	13.4%	16.5%
Secondary	4.5	13.6
	10.0%	5.5%
Manufacturing	4.5	13.6
	10.0%	5.5%
Tertiary of which:	33.5	189.6
	74.8%	77.1%
Leasing and commercial services	16.4	7.3
	36.6%	3.0%
Financial services	n.a.	46
		18.7%
Wholesale and retail	7.8	35.7
	17.4%	14.5%
Transport, storage and postal services	4.6	16.6
	10.3%	6.8%

Source: Davies (2010), Annex Table 3, p.264

Note: a/ Not including financial OFDI

TABLE 25: SERVICE INDUSTRY TNCs FROM BRICS IN TOP 100 NON-FINANCIAL TNCs FROM DEVELOPING AND TRANSITION ECONOMIES (MN OF US \$ AND NUMBER OF EMPLOYEES)

Ranking by:		Corporation	Home economy	Industry ^c	Assets		Sales		TNI ^b (Per cent)
For- eign assets	TNI ^b				For- eign	Total	For- eign	Total	
50	89	JSFC Sistema	Russia	Telecommunications	5 698	29 159	3 983	16 671	19.1
74	83	VimpelCom	Russia	Telecommunications	3 726	15 725	1 520	10 117	21.8
54	15	Suzlon Energy Limited	India	Diversified	5 310	7 370	4 714	5 685	75.7
2	88	CITIC Group	China	Diversified	43 750	238 725	5 427	22 230	21.0

7	46	China Ocean Shipping (Group) Company	China	Transport and storage	28 066	36 253	18 041	27 431	49.9
37	90	China State Construction Engineering Corp.	China	Construction and real estate	7 015	29 873	3 619	29 080	16.6
67	94	China Communications Construction Co.	China	Construction and real estate	4 010	31 911	5 599	25 740	12.1
75	14	Beijing Enterprises Holdings Ltd.	China	Diversified	3 662	6 670	2 524	2 530	77.0
78	99	China Railway Construction Corporation Ltd	China	Construction	3 146	32 204	2 475	31 571	9.1
98	19	TPV Technology Limited	China	Wholesale trade	2 266	3 354	6 860	9 247	69.8
1	9	Hutchison Whampoa Limited	Hong Kong, China	Diversified	70 762	87 745	25 006	30 236	82.0
12	22	Jardine Matheson Holdings Ltd	Hong Kong, China	Diversified	17 544	22 098	16 831	22 362	69.2
28	69	New World Development Co., Ltd.	Hong Kong, China	Diversified	9 061	22 775	1 304	3 144	37.5
35	2	China Merchants Holdings International	Hong Kong, China	Diversified	7 154	7 388	564	595	96.8
45	32	Shangri-La Asia Limited	Hong Kong, China	Other consumer services	6 587	6 923	1 120	1 353	61.0
46	25	Orient Overseas International Ltd	Hong Kong, China	Transport and storage	6 412	7 702	2 196	6 545	67.3
60	5	Li & Fung Limited	Hong Kong, China	Wholesale trade	4 761	4 839	13 873	14 218	90.3
65	60	Noble Group Limited	Hong Kong, China	Wholesale trade	4 346	8 153	11 404	36 090	42.2
69	68	Swire Pacific Limited	Hong Kong, China	Business services	3 903	25 552	1 879	3 168	37.7
73	3	Guangdong Investment Limited	Hong Kong, China	Diversified	3 749	4 031	946	975	95.1
93	4	Road King Infrastructure Limited	Hong Kong, China	Transport and storage	2 428	2 698	535	595	90.4
21	24	MTN Group Limited	South Africa	Telecommunications	13 266	18 281	7 868	12 403	67.4

51	37	Netcare Limited	South Africa	Other consumer services	5 590	6 642	1 516	2 904	56.1
59	13	Medi Clinic Corp. Limited	South Africa	Other consumer services	4 788	5 395	1 341	2 294	78.7
70	39	Naspers Limited	South Africa	Other consumer services	3 821	5 746	995	3 018	55.3

Source: UNCTAD/Erasmus University database. Annex table 27. The top 100 non-financial TNCs from developing and transition economies, ranked by foreign assets, 2008 (accessed on October 31, 2011) <http://www.unctad.org/templates/page.asp?intItemID=2443&lang=1>

Notes:

- All data are based on the companies' annual reports unless otherwise stated.
- TNI, the Transnationality Index, is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.
- Industry classification for companies follows the United States Standard Industrial Classification as used by the United States Securities and Exchange Commission (SEC).
- In a number of cases foreign employment data were calculated by applying the share of foreign employment in total employment of the previous year to total employment of 2008.

The listing of leading non-financial TNCs from developing countries also confirms the emergence of the BRICS as source countries for FDI across various services. Table 25 presents service industry TNCs from the BRICS which feature in the top 100 non-financial TNCs from developing and transition economies, as ranked by foreign assets.

As illustrated by the list of leading BRICS TNCs engaged in service sector investments overseas, the main areas are infrastructure services such as energy, transport, telecommunications, as well as construction and business services.³² As these are also important recipients of FDI inflows in most of the BRICS, there is complementarity in FDI interests in services among these countries. Moreover, as most of the outward FDI from these countries flows to other developing countries, there is scope for intra-BRICS engagement through cross border capital flows in services.

Growing outward FDI (mode 3 exports) from the BRICS and internationalization of their firms not only in services but also in other sectors are also driving "other" commercial services exports by the BRICS, in particular business and professional services. The case of Brazil highlights the link between outward FDI in both the goods and services sectors and "other" commercial services exports. For instance, the internationalization of Brazilian firms and the related demand for support services has resulted in increased cross border sales of business services such as financial, ICT, logistics and consulting. Brazilian banks have increased the provision of cross border financial services alongside the internationalization of Brazilian companies. Public and private sector banks have set up offices abroad and foreign banks have integrated their Brazilian offices into their global network. Brazil's logistics companies are becoming international to meet growing business demand in the country. Professional services such as legal, business consulting, project management services have also grown with the internationalization of Brazilian firms. Brazilian law firms have established international presence through partnerships, associations with other firms, or independent offices. Consultancy services exports in audit, accounting, management, environmental issues have increased, mostly through cross border trade but also through commercial presence in other countries via partnerships with local consultancy firms. Design services exports have grown mainly due to the demand from Brazilian companies which are present in other countries and which need the same

³² See, UNCTAD/Erasmus University database (accessed on October 31, 2011), Annex table 27. See Table 25 in this paper. <http://www.unctad.org/templates/page.asp?intItemID=2443&lang=1>

service design provider. Brazil has also penetrated the niche market for engineering and construction services. There are several large companies with strong international presence. In 2007, three Brazilian companies were among the 225 largest construction exporters in the world.

The Brazilian case shows that outward FDI has not only emerged as a mode of services exports for the BRICS in certain areas (as highlighted earlier) but that it has also led to the growth of supporting services exports through FDI and other modes of services trade. There is thus scope for greater service sector engagement among the BRICS in business and professional services as their firms become more internationalized and require supporting services to carry out overseas operations. Limited data available on the geographic distribution of their FDI inflows, as shown in Table 26, however, suggest that at present there is very limited engagement among these countries through overall investments, and thus also service sector investments.

TABLE 26: SELECTED SOURCE COUNTRIES FOR FDI FOR BRAZIL, RUSSIA, INDIA, CHINA, 2006-10 (US \$MN)

Foreign investment flows by country	2006	2007	2008	2009	2010
Brazil					
United States	3,746	6,197	8,598	5,212	9,633
Netherlands	2,953	8,328	10,242	5,592	11,992
Spain	1,279	2,220	4,997	2,113	6,098
Russia	1	1	n/a	n/a	n/a
China	6	25	n/a	n/a	n/a
India	15	29	n/a	n/a	n/a
South Africa	8	2	n/a	n/a	n/a
Russia					
United States	7,784	15,121	21,200	9,932	12,079
Germany	3,708	7,117	9,864	4,664	5,728
Netherlands	4,483	8,562	11,810	5,601	6,887
United Kingdom	1,992	3,774	5,349	2,604	3,164
Japan	1,582	3,149	4,365	1,995	2,420
India					
United States	1,883	2,310	3,531	3,074	2,376
France	689	894	1,491	1,275	935
Japan	755	971	1,551	1,316	973
Netherlands	649	764	1,099	979	787
United Kingdom	705	806	1,121	1,027	845
China					
Hong Kong	41,203	55,477	63,652	43,201	72,591
Japan	12,460	16,477	18,464	12,895	20,594
South Korea	9,045	10,986	12,361	9,573	13,537
Taiwan	6,899	9,702	11,320	7,423	12,966
Brazil	38	44	47	38	50
South Africa	123	132	137	124	141
Russia	142	167	178	144	199

Source: EIU country investment service reports

For the four BRICS for which this distribution was available, the data indicate that till date overall intra-BRICS FDI is limited. With the exception of China, which reports investment inflows from almost all the other BRICS (though this FDI is quite small relative to that received from neighbouring countries in Asia and from developed countries), it is evident that the BRICS are currently not important sources or destinations for overall or services FDI.

Table 27 highlights all the major M&A deals and Greenfield projects involving a BRICS country firm in another BRICS country for the 2007-09 period. The very small number of such cases as against the large number of such investment deals by BRICS firms shown in Table 25 above and in Appendix Tables A1 to A4 confirms the fact that intra-BRICS services FDI is very limited at present.

TABLE 27: KEY M&A DEALS AND GREENFIELD INVESTMENTS BY CHINA, INDIA, AND RUSSIA, SELECTED YEARS

M&A DEALS BY OUTWARD INVESTING FIRM, 2007-09						
Year	Acquiring company	Target company	Target industry	Target economy	Shares acquired (%)	Transaction value
2009	China Investment Corp (CIC)	Nobel Oil Group	Oil and gas	Russia	45	300
2008	ICBC	Standard Bank Group Ltd	Banking	South Africa	20	5,617
2007	Videocon/Bharat Petro Resources	Encana Brasil Petroleo	Energy and power	Brazil	50%	0.4
MAIN GREENFIELD PROJECTS, BY OUTWARD INVESTING FIRM, 2008-2009						
Year	Investing company		Industry		Host economy	Investment value
2009	China Petroleum and Chemical (Sinopec)		Coal, oil and natural gas		Russia	220
2009	China North Industries Group (NORINCO)		Building and construction materials		Russia	616

Source: EIU Country Investment Service Reports

Clearly, China dominates whatever little outward FDI in services is currently occurring among the BRICS. This outward investment is dominated by energy services but other services such as construction and finance also feature. India's presence is much smaller but also reflects its strength in the IT and ITeS segment. Although Russian firms are also engaged in outward investment deals through M&As and Greenfield projects, particularly in energy services, the geographic orientation is towards Central Asia. Similar information is not available for Brazil or South Africa. Overall, the data on FDI suggests scope for increased cooperation as well as competition among the BRICS. There is both complementarity and overlap in the sectoral composition of their inward and outward FDI flows and in the sectoral profile of their TNCs.

6. Regulatory Reforms and Liberalization in Services

The growth of the services sector in GDP and in FDI is indicative of the liberalization undertaken in all these economies over the past decade or two. An overview of the Trade Policy Reviews for the WTO member countries among the BRICS and other available information on their regulatory barriers highlight the general thrust towards liberalization of services and increased private participation in their service sectors in recent years. The following discussion provides an overview of the business environment in these

countries, as measured by the usual doing business indicators and rankings. It also highlights the overall foreign investment framework in these countries. The focus on investment and business environment indicators is warranted by the significance of FDI and establishment of commercial presence as a mode of trade in many services. This broader discussion of the regulatory environment is followed by an overview of the nature and extent of liberalization and regulatory reforms for selected services in each of these countries. The commonalities and differences across these countries as well as the implications for intra-BRICS engagement are highlighted.

6.1 Liberalization and reforms in selected services

An examination of the business indicators for the BRICS indicates that there is considerable divergence among them in terms of the ease of doing business. Among 183 countries that were ranked, barring South Africa which ranked within the top 50 countries, most of the BRICS were in the middle to lower ranks on a wide range of business environment indicators. On most key indicators pertaining to the establishment and operation of business, the BRICS, in particular India followed by Brazil, fare quite poorly. These rankings suggest that the BRICS, save South Africa, do not fare very well in the list of business friendly nations, which would be a deterrent to not only overall investment but also intra-BRICS investment and cooperation. They rank poorly on a variety of parameters, including availability of basic infrastructure and legislative and contractual aspects.

TABLE 28: DOING BUSINESS RANKING

Economy	Ease of Doing Business Rank	Starting a Business	Dealing with Construction Permits	Getting Electricity	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Resolving Insolvency
Brazil	126	120	127	51	114	98	79	150	121	118	136
China	91	151	179	115	40	67	97	122	60	16	75
India	132	166	181	98	97	40	46	147	109	182	128
Russia	120	111	178	183	45	98	111	105	160	13	60
South Africa	35	44	31	124	76	1	10	44	144	81	77

Source: The World Bank Doing Business Database: <http://www.doingbusiness.org> (accessed on December 13, 2011)

Note: All Doing Business 2011 rankings have been recalculated to reflect changes to the methodology. For Paying Taxes, economies that have total tax rates below 32.5% in Doing Business 2012 are assigned a total tax rate of 32.5% for the purpose of calculating the rankings. For Doing Business 2011, the total tax rate is 32.7%.

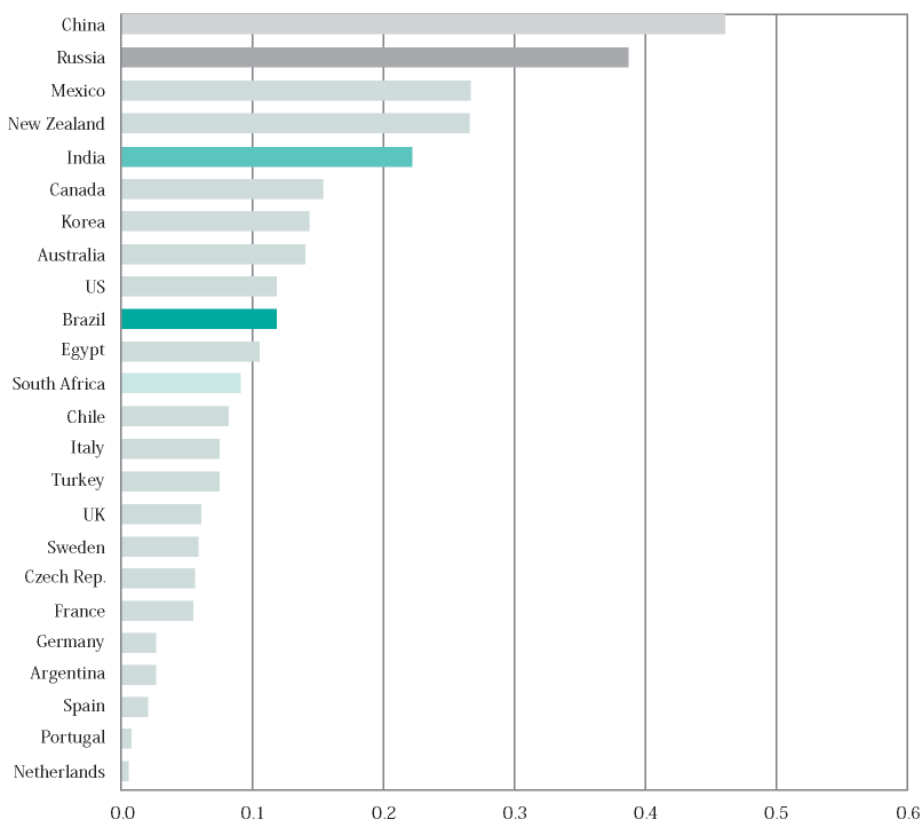
As FDI constitutes a significant part of cross border delivery of services, an overview of the FDI indicators for these economies at the aggregate as well as at the sectoral and subsectoral levels is useful for understanding how liberal or restrictive these countries have been in services and the trends in this regard. The following table provides the overall FDI index for 2010 as estimated by the OECD (for 48 countries and across 22 sectors) and the incidence of restrictions on different regulations affecting FDI. The component-wise indices indicate that for the most part, equity restrictions are the main contributor to FDI barriers. South Africa emerges as the most open to FDI, followed by Brazil, among the BRICS, for both border level and behind-the-border regulations. Both Brazil and South Africa are less restrictive than the average non-OECD country and South Africa compares favourably relative to even the OECD countries. China, India and Russia have a more restrictive FDI regime than the average developing country.

TABLE 29: FDI INDEX SCORES BY COUNTRY AND TYPE OF MEASURE (CLOSED = 1, OPEN = 0)

	Equity Restrictions	Screening	Key Personnel	Operational Restrictions	Total FDI Index
ALL COUNTRIES	0.072	0.02	0.006	0.021	0.117
OECD	0.059	0.024	0.001	0.013	0.095
NON-OECD	0.096	0.014	0.014	0.036	0.157
Brazil	0.08	0	0.005	0.033	0.116
China	0.226	0.135	0.048	0.069	0.457
India	0.191	0.025	0.005	0	0.22
Russia	0.216	0.04	0.005	0.122	0.384
South Africa	0.022	0	0	0.067	0.089

Source: Kalinova, Palerm, and Thomsen (2010), OECD's FDI Regulatory Restrictiveness Index, 2010 Update

FIGURE 17: OECD FDI REGULATORY RESTRICTIVENESS INDEX 2010: SELECTED ECONOMIES
(0= OPEN, 1= CLOSED)

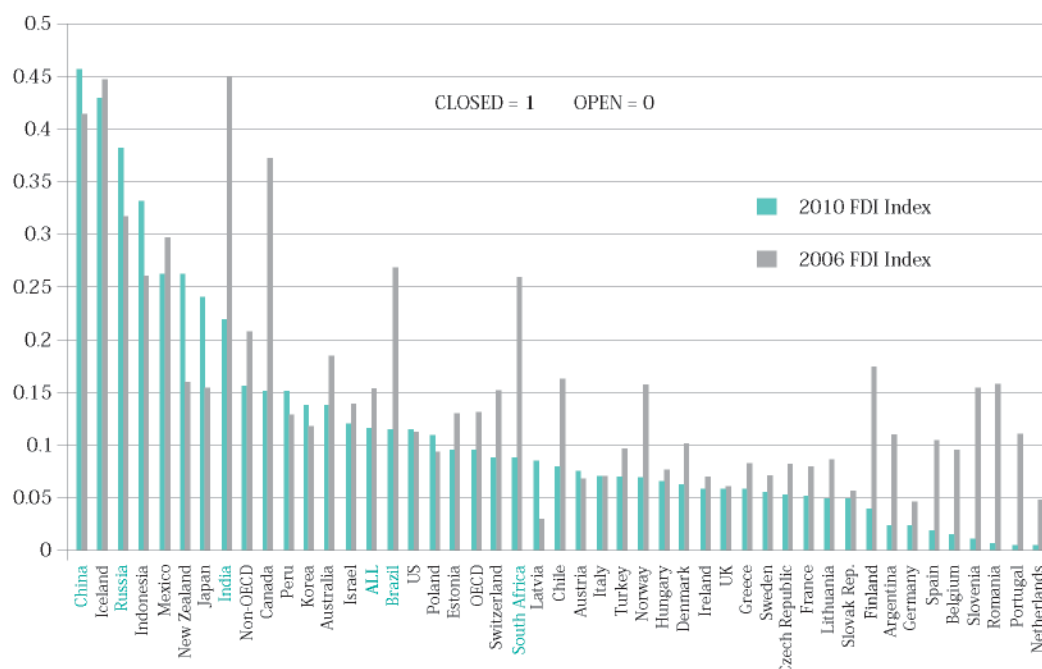


Source: Kalinova, B., A. Palerm and S. Thomsen (2010), "OECD's FDI Regulatory Restrictiveness Index: 2010 Update", OECD Working Papers on International Investment No. 2010/3, OECD Investment Division

The relative position of the BRICS vis a vis selected developing and developed countries is illustrated in Figure 17. This too highlights the more restrictive FDI environment in China, Russia and India compared to Brazil and South Africa. So, clearly the policy frameworks for FDI and the degree and nature of FDI liberalization vary across the BRICS. However, these indices only capture the presence of restrictions specific to FDI and do not necessarily reflect on the broader regulatory environment in these countries.

Figure 18 shows the change in the FDI restrictiveness between 2006 and 2010 for the BRICS as well as several other developed and developing countries. An interesting feature that emerges is that the overall regulatory environment for FDI has actually become slightly more restrictive between 2006 and 2010 in the case of China and Russia while it has become significantly more liberal for the other BRICS over this same period. To a large extent, the overall FDI indices in the BRICS and the changes observed in this index over time capture changes in the regulatory environment governing the service sector in these countries, as discussed next.

FIGURE 18: FDI INDICES FOR 2006 AND 2010 FOR SELECTED COUNTRIES



Source: Kalinova, B., A. Palerm and S. Thomsen (2010), "OECD's FDI Regulatory Restrictiveness Index: 2010 Update", OECD Working Papers on International Investment No. 2010/3, OECD Investment Division

6.2 Policy environment in services

Foreign entry and ownership limits are restricted in several services in the BRICS, including in services as varied as broadcasting and print media, telecommunications, financial, business, and transport services, among others. Tables 30 and 31 highlight the trends in the FDI restrictiveness indices for different sectors of these economies and reflect the role of FDI regulations in the service sector in shaping these trends.

TABLE 30: FDI RESTRICTIVENESS INDEX SCORES BY COUNTRY AND SECTOR, 2010
(CLOSED = 1, OPEN = 0)

	OECD	NON-OECD	Brazil	China	India	Russia	South Africa
Agri. & For. 1/	0.163	0.128	0.095	0.545	0.451	0.650	0.060
Fishing	0.324	0.320	1.000	1.000	0.000	0.383	0.060
Mining	0.153	0.122	0.025	0.390	0.525	0.943	0.060
Manuf. 2/	0.040	0.030	0.025	0.252	0.026	0.197	0.060
Electricity	0.123	0.123	0.025	0.608	0.000	0.249	0.060
Construction	0.057	0.055	0.025	0.265	0.000	0.183	0.060
Distribution 3/	0.062	0.029	0.025	0.238	0.420	0.183	0.060
Hotels & res.	0.047	0.030	0.025	0.250	0.000	0.348	0.060
Transport	0.249	0.227	0.292	0.665	0.174	0.375	0.227
Media	0.228	0.180	0.675	1.000	0.600	0.383	0.060
Telecom	0.121	0.092	0.025	0.800	0.425	0.283	0.060
Financial Serv. 4/	0.081	0.053	0.025	0.610	0.248	0.533	0.127
Business Serv.	0.102	0.067	0.025	0.138	0.500	0.308	0.385
Real Estate	0.281	0.283	0.000	0.275	0.000	0.733	0.010
Total FDI Index	0.117	0.095	0.116	0.457	0.220	0.384	0.089

Source: Kalinova, Palerm, and Thomsen (2010), OECD's FDI Regulatory Restrictiveness Index 2010 Update

Notes:

1/ Average scores for Agriculture and for Forestry.

2/ Average scores for 5 manufacturing sectors.

3/ Average scores for Retail and Wholesale Distribution.

4/ Average scores for Banking, Insurance and Other finance.

TABLE 31: FDI REGULATORY RESTRICTIVENESS SCORES BY COUNTRY AND SECTOR, 2006
(1 = CLOSED, 0 = OPEN)

	Brazil	China	India	Russia	South Africa	All Average
Business services						
Legal	0.1	0.3	1	0.175	0.125	0.239
Accounting	0.1	0.425	1	0.175	0.125	0.191
Architecture	0.1	0.1	1	0.175	0.125	0.11
Engineering	0.1	0.1	0.05	0.175	0.125	0.087
Total	0.1	0.231	0.863	0.175	0.125	0.16
Telecoms						
Fixed	0.2	0.55	0.35	0.4	0.65	0.196
Mobile	0.2	0.45	0.35	0.35	0.6	0.152

Total	0.2	0.525	0.35	0.388	0.638	0.185
Construction	0.1	0.15	0.25	0.2	0.15	0.08
Distribution	0.1	0.45	0.6	0.1	0.15	0.092
Finance						
Insurance	0.15	0.35	0.45	0.85	0.35	0.152
Banking	0.4	0.55	0.35	0.55	0.25	0.172
Total	0.343	0.504	0.373	0.619	0.273	0.167
Hotels & Restaurants	0.1	0.15	0.05	0.1	0.1	0.071
Transport						
Air	0.6	0.55	0.55	0.6	0.25	0.454
Maritime	0.2	0.55	0.05	0.4	0.25	0.27
Road	0.6	0.15	0.05	0.2	0.3	0.128
Total	0.416	0.466	0.215	0.424	0.261	0.302
Electricity	0.1	0.75	0.15	0.75	1	0.376
Manufacturing	0.1	0.4	0.2	0.23	0.2	0.086
TOTAL	0.195	0.405	0.401	0.318	0.234	0.159

Source: OECD, *OECD's FDI Restrictiveness Index, 2006 Update*

The sectoral and subsectoral FDI restrictiveness indices indicate that services tend to be more restricted than manufacturing in most of the BRICS and hence the overall indices highlighted earlier do reflect the presence of regulatory barriers in the service sector. Within services, there has been a reduction in FDI restrictions in several segments. However, China has become more restrictive in financial, construction, telecom, transport, and hotel and restaurant services while Russia has become more restrictive in distribution, business, and hotel and restaurant services over the 2006-2010 period.³³ Hence, services have clearly contributed to the rise in the overall FDI restrictiveness index, highlighted earlier in the case of China and Russia, although without further disaggregation of the components of the index it is difficult to say whether entry restrictions or operational restrictions underlie this increased restrictiveness for the two countries.³⁴ Among the BRICS, South Africa and Brazil exhibit the most liberal FDI environment and also compare very favourably with developed countries. Along with India, they exhibit the most significant liberalization in FDI regulations over the 2006-2010 period.³⁵

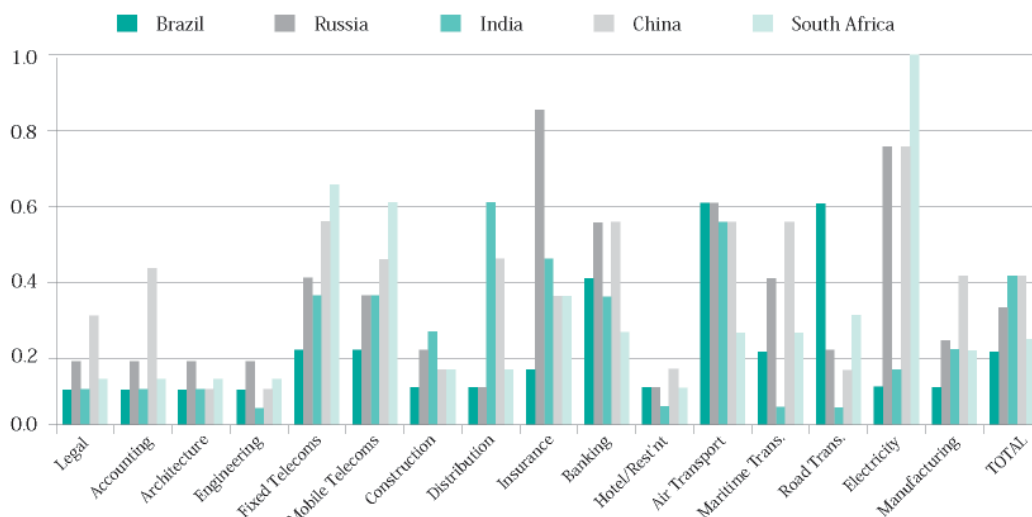
The following figures position the BRICS against each other and against the OECD average in terms of their regulatory restrictiveness scores in selected services for the year 2010. They highlight the considerable variability in restrictions across different services but also reveal a certain degree of uniformity among them in terms of which services tend to be more restricted than others, indicating that similar sensitivities and concerns may underlie the degree and nature of liberalization undertaken in various services.

³³ Based on OECD's FDI Restrictiveness Index for 2006 and 2010

³⁴ There are several reports and papers which note that the Russian government has become increasingly restrictive in recent years about majority foreign ownership of Russian companies and entry of foreign providers.

³⁵ Based on OECD's FDI Restrictiveness Index, 2006 and 2010

FIGURE 19 OECD FDI REGULATORY RESTRICTIVENESS SCORES FOR BRICS, INDEX 0 TO 1 (CLOSED =1, OPEN = 0)



Source: Koyuma and Golub (2006), *OECD's FDI Regulatory Restrictiveness Index: Revision and Extension more Economies*, Economic Department Working Papers No. 525, pp. 8-10

Banking, insurance, telecom, transport and electricity services tend to be more restricted services across all the BRICS. The public utilities nature of these services and presence of government service providers in these areas possibly explains this feature. The service which shows the most variability in the degree of restrictiveness is distribution reflecting the fact that in some of the BRICS, parts of this sector are only partially open and lot of operating restrictions apply. It is also worth noting that on average services show a higher degree of FDI restrictiveness compared to manufacturing, for all the countries. The trade 2006 restrictiveness indices for the generally more regulated services are highlighted in Figures 20 to 24.

FIGURE 20: OECD TRADE RESTRICTIVENESS INDEX FOR BRICS IN BANKING

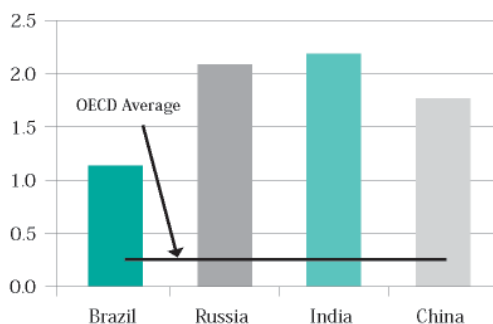
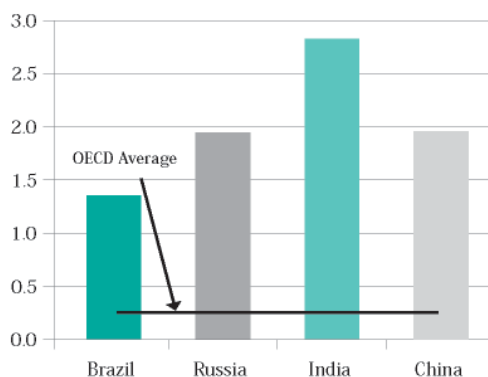


FIGURE 21: OECD TRADE RESTRICTIVENESS INDEX FOR BRICS IN INSURANCE



Source: OECD (2007), *Modal Estimates of Services Barriers*, OECD Trade Policy Working Paper No. 51, pp. 23-27

FIGURE 22: OECD TRADE RESTRICTIVENESS INDEX FOR BRICS IN FIXED TELECOM

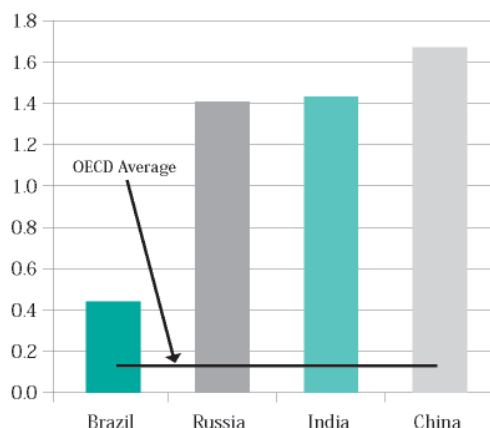
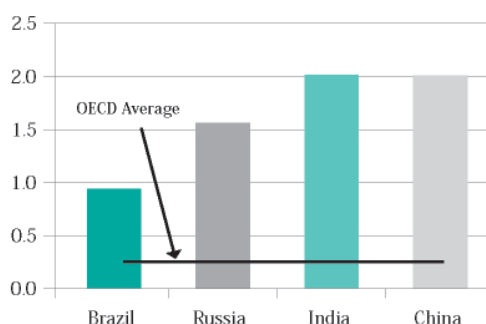
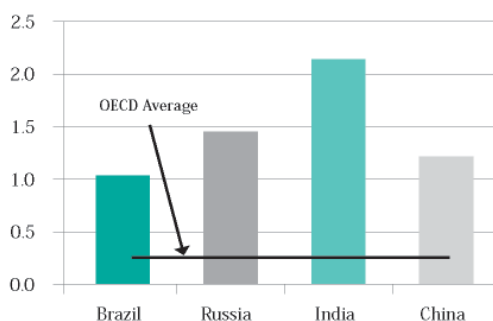


FIGURE 23: OECD TRADE RESTRICTIVENESS INDEX FOR BRICS IN MOBILE TELECOM



Source: OECD (2007), *Modal Estimates of Services Barriers*, OECD Trade Policy Working Paper No. 51, pp. 23-27

FIGURE 24 OECD TRADE RESTRICTIVENESS INDEX FOR BRICS IN DISTRIBUTION



Source: OECD (2007), *Modal Estimates of Services Barriers*, OECD Trade Policy Working Paper No. 51, pp. 23-27

6.3 Reforms and Liberalization in Selected Services

Liberalization of services in the BRICS has involved a variety of measures, including the removal of government monopolies, entry of private providers both domestic and foreign, changes in the framework for regulatory oversight and transparency, and removal or relaxation of FDI entry and operating restrictions. The case of a few selected services for each of the BRICS provides an understanding of the measures that have characterized reforms and liberalization initiatives in the service sector of these countries.

6.3.1 Telecommunication services

This is a sector which has witnessed considerable expansion in the number of subscribers and in tele-density in all the BRICS, particularly in the mobile telephony segment. In recent years, telecom services

have undergone both privatization and liberalization in these countries, though the process has been fraught with regulatory problems and delays in several of the countries.

(A) SOUTH AFRICA

In South Africa, the privatization process in telecommunications began in May 1997 when 30 percent of the fixed line operator, Telkom, which was wholly owned by the government, was sold to a foreign consortium. The second state of privatization, with an initial IPO of shares in Telkom was postponed till 2002-03 due to adverse market conditions and delays in finalizing the policy framework.³⁶ Three joint ventures between South African and foreign companies have since been permitted in the mobile segment but in the basic public switched telecommunications services, the government monopoly continues. Suppliers providing private value added network services and license holders are required to use the Telkom infrastructure. Although a second network operator has become operational, foreign equity participation in this operator is limited to 51 percent, with the remaining shares being held by the BEE and para-stats. There are also stipulations regarding the geographic coverage to be provided by the second network operator within 10 years. An international gateway has been issued to a state owned company. The Independent Communications Authority of South Africa is the regulatory authority. It approves all telecommunications tariffs, grants licenses, sets standards, and also addresses issues such as unfair competition and cross-subsidization. However, there has been criticism about the creation of this regulatory body as its decisions have often been challenged by the state operator. The subsector is also plagued by problems of fraud and non-payment which has led to disconnection of fixed lines and could affect the prospects for increasing internet penetration in the country.

(B) CHINA

The telecommunications sector has undergone continued liberalization and growing competition with the introduction of new players and technologies. The basic telecom market has been restructured resulting in three country-wide basic telecom service providers, which are all state owned enterprises that provide fixed, mobile, data, IP telephony and satellite services. Steps have also been taken to promote transparency. The state remains the majority owner of all basic telecom service providers though there has been a gradual increase in private participation and foreign investment in this segment.³⁷ The Ministry of Information Industries and Technology is the regulatory authority in the telecom sector. It sets tariffs, supervises their implementation and issues licenses. It is an independent regulator. As there is no specific license for resale of telecom services, enterprises are allowed to choose the manner in which they provide the services after obtaining a basic telecom license, either by setting up their own facilities or by providing services on a resale basis.

Liberalization measures have included reductions in the minimum registered capital requirement for foreign invested telecom enterprises engaged in providing basic telecom services across the country and within specific geographies in the country. The government has also eliminated the approval requirement for domestic companies to be listed abroad, thus encouraging internationalization in this sector. Foreign equity participation is restricted up to 49 percent for basic telecom services and up to 50 percent for value added telecom services. There is provision for government set, government guided and market adjusted tariffs and in areas where there is adequate competition, such as in value added services, tariffs have been liberalized gradually and to be determined by the market.

³⁶ See WTO Trade Policy Review, SACU South Africa, WT/TPR/S/114/ZAF, 2003, p. A4-278

³⁷ WTO Trade Policy Review 2011 China WT/TPR/S/241/Rev.1, p.70 & Hong Kong / China Industry Focus; China Telecom Sector DBS Group Research, February 24, 2010

(C) INDIA³⁸

The telecom sector has undergone extensive liberalization and reforms since the introduction of the National Telecom Policy in 1994. The main steps in the liberalization of this sector have been the entry of private participants in the basic telecom segment and gradual relaxation of the foreign equity ceiling in both basic and mobile services. The second phase of telecommunications reforms starting in 1999 saw the opening up of national long distance telephony to private operators and subsequent opening up of international long distance service to competition in 2001 by privatizing the public provider and removing restrictions on the number of operators in this segment. Other liberalization measures include the opening up of internet telephony, disinvestment and corporatization of public sector telecommunications providers, introduction of new technologies and forms of service delivery, and approval for internet service providers to set up international internet gateways. There have, however, been repeated problems with regulating the sector due to conflicts between incumbent state providers and private entrants and criticism regarding the independence of the regulator in the issuance of licenses.

The foreign investment regime has been significantly liberalized. Since February 2005 the government has increased the foreign holding limit from an earlier limit of 49% to 74%. The affected services are fixed-line basic services, cellular services, unified access services, national and international long-distance telephony, public mobile trunked services, global mobile personal communication services, and various value-added services such as voice mail and e-mail services. Subsequently, FDI has been permitted up to 100% in value-added services such as e-mail, voice mail, electronic data interchange, on-line information and data processing, and internet service provision without gateways. Competition has thus been encouraged, with the entry of both local and foreign providers, the granting of greater flexibility to existing participants with the waiver of various obligations and permission to provide additional services, and substantial reductions in entry and licensing fee shares from providers.

(D) BRAZIL³⁹

The telecom sector was privatized in Brazil in 1998 and further liberalized in 2001-02. Competition was encouraged by dividing the country into geographical regions by type of service provided and by establishing a duopoly between the privatized state monopoly and another company in the case of fixed telephony and between two licensed operators in the case of mobile telephony. New authorizations have been granted to provide fixed local, national, and international long distance services. The subsector has also seen consolidation with the acquisition of operators by the main telecom holding companies. Market concentration disciplines have been modified recently to permit telecom companies to own fixed telephony incumbents in more than one region. Incumbent operators of fixed telephony receive concessions under the public regime which come with strict requirements on issues of universal service obligations and pricing while authorizations have been granted to new operators under the private regime which tend to be more liberal. Since 2005, the regime for long distance authorizations has been relaxed and coverage requirements have been eliminated. Notwithstanding the entry of new providers, incumbents continue to dominate the fixed line segment, controlling more than 90 percent of fixed lines, though there is growing competition from mobile telephony.

Although Brazil has not made any specific commitments in basic telecom under the GATS and thus has the right to limit new foreign participation in the telecom sector the policies regarding foreign

38 WTO Trade Policy Review 2011 India WT/TPR/S/249, p.159 & Report presented in India Telecom 2009. (This report was compiled by FICCI and KPMG and released by the Department of Telecommunications).

39 WTO Trade Policy Review 2009 Brazil WT/TPR/S/212/Rev.1, p. 128 and Report on Brazil's Telecom Industry, prepared by the Massachusetts South America Office, June 2007.

investment have been liberal. As per the latest TPR for Brazil, the telecom regulatory structure follows international best practice and the telecom regulator is administratively independent and financially autonomous. However, it has been noted that in order to signal the country's commitment to open trade and investment policies, regulatory action is needed in various areas, including pricing, interconnection, portability and universal access.

6.3.2 Financial Services

This is another sector where one finds a similar pattern of gradual phasing in of liberalization through increased foreign equity participation limits, entry of private players and increased domestic competition, and institution of new regulatory frameworks. There is also continued dominance of the public sector in some of the BRICS.

(A) SOUTH AFRICA⁴⁰

South Africa made further commitments during the 1997 WTO financial services negotiations. It made commitments on commercial presence for all financial services excluding insurance services. Its national treatment commitment in banking services requires branches of banks not incorporated in South Africa to maintain a minimum balance of R 1 million on the deposit accounts of natural persons, while its market access commitment in banking services requires companies to be incorporated as public companies in South Africa, and registered with the Registrar of Banks in order to carry on business in the country. It has made market access and national treatment commitments in insurance services for modes 2 and 3, wherein the acquisition of shares or any other interest (by a resident or non-resident) in a registered insurer which results in holding 25% or more of the value of all shares requires the written approval of the Registrar of Insurance. South Africa also maintains MFN exemptions as it allows members of the Common Monetary Area, namely, Lesotho, Namibia, and Swaziland to enjoy preferential access (exemptions from exchange controls) to its capital and money markets, and transfers of funds.

The banking system is regulated by the Bank Supervision Department of the South African Reserve Bank. Over time several changes have been effected in the legislative framework for banking, including allowing greater flexibility to banks in the utilization of assets, better regulation and protection of investments, and deregulation of charges. Regulations concerning ownership and operations are quite liberal. Non-banking financial institutions are required to register with the Financial Services Board, an independent institution which regulates and supervises the financial markets and all non bank institutions. There are no state-owned commercial banks, although there are several development finance institutions.

The policies for both banking and insurance services are quite liberal. In the insurance services segment, any person, South African or foreigner, may control an insurance company. However, foreign insurers are not allowed to open branches and may only register subsidiaries. Control of banks is permitted for South Africans or foreigners. Three forms of banking operations are permitted, which include forming a separate banking company, setting up a branch of an international bank or banking group, and setting up a representative office of an international bank. All these forms of operation require prior approval of the Registrar of Banks. The criteria for the registration of a bank are the same for domestic or foreign investors but foreign banks are required to include additional information with their application, such as foreign bank holding company resolution approving proposed formation of the bank and letter of no objection from the foreign bank's home regulatory authority. With the opening up of banking services, there has been an increase in the number of registered domestic and foreign banks. The number of

40 WTO Trade Policy Review, SACU South Africa, WT/TPR/S/114/ZAF, 2003, p. A4-279

local branches of foreign banks and their representative offices have increased and the concentration of ownership of assets and deposits among the largest banks has reduced with increased competition. The overseas exposures of South African Banks have also increased steadily.

(B) CHINA⁴¹

There has been substantial liberalization in the financial sector. Foreign banks are permitted in the form of wholly owned subsidiaries, joint ventures between Chinese and foreign banks, or branches. Wholly foreign funded and joint venture banks are allowed to engage in the same operations as domestic commercial banks. The minimum asset requirements are higher for the establishment of branches than for locally incorporated entities. In its WTO commitments, China agreed to open its financial markets substantially but in a phased manner. It permitted foreign banks to undertake some local currency business with their customers after two years of its accession and to fully engage in local currency services as well as receive national treatment without restrictions on branching, scope or geography after five years of its entry into the WTO. Some restrictions remain, however. Branches of foreign banks are not allowed to issue credit cards for prudential reasons. Branches of foreign banks may receive time deposits of not less than Yuan 1 million each from Chinese citizens within China. Differential treatment between domestic and foreign funded banks is in place for prudential reasons. Notwithstanding liberalization, this segment remains underdeveloped and a high degree of state ownership continues.

Foreign insurance companies are allowed to enter the market as 100% foreign-owned subsidiaries for non-life insurance and up to 50% foreign owned for life insurance. There are conditions for the establishment of representative offices by foreign insurance companies, including a minimum asset requirement of US\$2 billion. Of 112 insurance companies operating in China in end 2008, 48 were foreign companies. The market, however, remains very concentrated and foreign insurance companies accounted for a little over 4 percent of insurance premiums as well as total assets in this sector.

The securities market has been partially liberalized. Foreign suppliers are allowed to enter China's securities markets through the establishment of a new joint-venture with a Chinese partner or by taking a stake in an existing listed securities firm. The foreign equity participation limit in listed Chinese securities firms was raised to 25% (accumulated total foreign participation) in end 2007 with a limit of 20 percent for a single foreign investor and a maximum limit of 25 percent for aggregate ownership of shares by foreign companies (the earlier limits being 10 percent and 20 percent, respectively). The period of continuous operation in securities required to get approval for foreign equity participation in such firms has been reduced from ten to five years. Joint-venture securities firms have also been approved for business, with a foreign equity limit of 33 percent. The asset management segment has also been partly opened up, with foreign equity participation for joint venture fund management companies limited to 49 percent.

(C) INDIA⁴²

The financial services sector in India, particularly banking and insurance, continues to be dominated by state owned companies, notwithstanding measures to promote private sector competition. Reforms have been introduced since 1992 with the objective of relaxing external constraints, strengthening the sector, and putting in place an institutional framework to oversee its functioning.

41 WTO Trade Policy Review 2011 China WT/TPR/S/241/Rev.1, 2010, p. 63

42 WTO Trade Policy Review 2011 India WT/TPR/S/249, 2010, p.140

Banking system reforms have included the relaxation of restrictions on foreign banks' ownership and establishment conditions, allowing the participation of domestic private banks, introduction of improved prudential regulations, deregulation of interest rates, liberalization of bank branching policy and entry norms for private domestic and foreign banks. FDI limits in the banking system have been increased gradually, from only minority participation of up to 20 percent through technical collaborations or subject to FIPB approval earlier to a limit of 49 percent limit under automatic route. This limit was further raised to 74 percent for all forms of foreign investment in private banks and of 20 percent in public banks. The form of establishment has also been relaxed with foreign banks now permitted to operate as wholly owned subsidiaries and not just branches. Foreign banks require a license from the Central Bank to undertake banking operations and authorization is required for opening new branches. There are lending requirements on domestic and foreign commercial banks. Foreign banks are required to allocate 32 percent of their net lending to priority sectors, which may have an impact on the overall cost of financial intermediation and increase financial risk.⁴³

The Reserve Bank of India has formulated guidelines on the ownership and governance of private banks, including foreign banks in India. These guidelines cover minimum capital requirements, provisions on ownership structure, procedures for acquisition and transfer of shares, voting rights, and administrative conditions. The roadmap for implementing these guidelines has been divided into two phases, from 2005-2009 and from 2009. In the first phase, foreign banks willing to have a presence in India for the first time could choose to operate through a branch or could set up a 100% wholly owned subsidiary. Foreign banks already operating in India were allowed to convert their existing branches to a wholly owned subsidiary, which would be treated as existing branches of foreign banks for branch expansion in India. However, all foreign banks have so far continued as branches and none have applied for conversion to wholly owned subsidiary ⁴⁴status. In the second phase, foreign banks were to be permitted to enter into mergers and acquisitions with any private bank in India, subject to an overall investment limit of 74%. However, this phase has been delayed as it coincided with the global financial crisis and clarity on the stability and recovery of the global financial system was sought before its introduction. Views on the most convenient form of foreign bank presence in India are currently being sought and guidelines will be finalized after feedback is received.

The insurance sector has been regulated by the Insurance Regulatory and Development Authority since 2000. Foreign participation is permitted at 26 percent and stands at 24.1 percent of total private equity as of end 2010. Although many private insurance companies have entered this segment, the industry continues to be dominated by public sector enterprises with the latter accounting for over half of gross premium income. Competition has been limited by high entry barriers in the form of minimum capital requirements for setting up an insurance company, the restriction of 26 percent on foreign equity participation, and requirements for placing a certain share of policies with the rural and social sectors.⁴⁵ It is anticipated that the foreign equity limit will be raised in the near future to 49 percent and foreign reinsurers will be permitted to open branches for reinsurance business in India. ⁴⁶

The capital market has also been liberalized. Foreign investment is allowed, in the form of FDI or portfolio investment (FII). However, investments by individual FIIs may not exceed 10 percent of the

43 WTO Trade Policy Review 2011 India WT/TPR/S/249, p. 141.

44 Ibid 43, p. 145. Under India's GATS commitments, foreign banks were allowed to access the Indian market only through branches. Restrictions were also imposed on the number of banking licences (12 per year, both for new entrants and existing banks), and on the value of the banking system's assets in the hands of foreign banks (15% of total assets).

45 Ibid 43, p. 145.

46 Ibid 43, p. 153.

issued capital of a company and all FIIs together cannot acquire more than 24 percent of the paid up capital of an Indian company. Foreign investment in the stock exchange is limited to 49%. There are also restrictions on the value and maturity profile of portfolio investment in government and corporate debt securities. The government has also opened up the possibility for mutual funds to accept subscriptions from foreign investors in equity oriented schemes, increasing foreign investment possibilities in the mutual funds industry.

(D) BRAZIL

Foreign financial institutions are permitted to establish in Brazil, but commercial presence restrictions apply in principle.⁴⁷ Establishment of new branches of foreign financial institutions or increased participation of foreigners or foreign entities in the capital of Brazilian financial institutions is allowed subject to approval by Presidential decree, upon recommendation by the Central Bank. Foreign financial institutions or individuals seeking to participate in Brazilian financial institutions must seek authorization. They must submit company information to the Central Bank and must specify the amount of foreign participation in the total capital, the accruing benefits to the Brazilian economy, and provide a description of the existing activities of the foreign investor in the country's financial system, where applicable. There are minimum capital requirements which vary by type of bank or financial institution. Financial institutions can request the installation of up to ten branches without additional capital requirements, beyond which there are additional capital requirements for paid-in capital and net equity per branch in different states of the country.

Banks incorporated in Brazil may be 100% owned by foreign capital. Foreign banks must be established as a subsidiary or branch in order to be able to take deposits or to lend in Brazil. Representative offices are not allowed to receive deposits or to undertake other commercial transactions.⁴⁸ Once established, foreign banks can in principle engage in the same activities and are subject to the same prudential requirements as domestic banks. They are subject to the same requirements (minimum capital requirements, prudential regulations and specifications regarding the qualifications of the administrators of the institution) to obtain a license as domestic banks. However, foreign banks established in Brazil before 5 October 1988 are not allowed to open new local branches. Representatives and directors of financial institutions are not required to be Brazilian nationals but must be Brazilian residents. While mode 3 is permitted, subject to conditions, cross-border supply of banking services or mode 1 is not permitted and there are no legal provisions with respect to consumption abroad of banking services.

Foreign participation in the financial institutions has increased with liberalization. In 2007, there were 135 multiple banks of which 43 were controlled by foreign capital and 6 had foreign capital participation. There were also 20 commercial banks of which 8 were foreign banks. There was foreign capital participation in the ownership of about a third of all financial institutions. Among the top 50 banks in the country, 20 are foreign controlled private banks and one is a private bank with foreign participation. With liberalization, the share of total assets of foreign and domestic private banks has increased. Foreign banks hold a little over 20 percent of the banking system's assets.⁴⁹ However, notwithstanding some progress in improving efficiency, bringing down interest rate spreads, and improving transparency, problems of operational inefficiency, high delinquency rates and difficulties in accessing credit continue to affect the sector.

47 WTO Trade Policy Review 2009 Brazil WT/TPR/S/212/Rev.1, p. 120 and Trusted Source (May 2009), "The Challenges and Opportunities for Financial Services in Brazil".

48 Ibid 47, p. 122

49 Ibid 47, p. 120

Establishment of a foreign life or non-life insurance company is allowed but requires prior approval from the concerned regulatory authority and sanction under the Minister of Finance Act. Authorizations to operate are granted directly by the regulator. National treatment is granted once authorization is received. Foreign insurance companies (except reinsurance) are required to be incorporated in the form of a corporation under Brazilian law. They are subject to minimum capital requirements and like domestic insurance companies, are not permitted to engage in other financial activities. Cross-border supply of insurance services, earlier prohibited, is now permitted. There have been significant changes in the reinsurance industry, with the opening of the subsector to private, including foreign owned reinsurance companies. Reinsurance and retrocession is allowed to be held with a local reinsurer, or an admitted reinsurer based abroad which has a representative office in Brazil and the required authorization from the regulator to carry out reinsurance activities in the country or with a foreign reinsurance company based abroad but without a representative office in Brazil.

(E) RUSSIA

There is significant scope for liberalization and improvements in efficiency and regulatory frameworks in Russia's financial sector. The Russian banking system is characterized by a large number of players (over-banking) but highly concentrated ownership. The 30 largest banks control about 70 percent of the assets.⁵⁰ The capital base is also quite low. To encourage consolidation, the government has raised the minimum capital requirement and has also introduced a deposit insurance system. However, administrative barriers as well as non transparent ownership structure of many banks are seen to have impeded mergers and acquisitions in the sector and delayed consolidation.

The state banks dominate the banking system with state owned banks controlling over one third of banking sector assets. Even with gradual privatization of the banking system, the role of private banks in ownership of assets has increased very gradually. There are no limits on foreign bank participation but foreign banks are permitted to operate only through subsidiaries as opening branches is not allowed. At present, there are very few foreign owned banks and their share in banking sector assets is low at around 12 percent.

A major problem faced by the banking system is declining capital adequacy ratios given the growing demand for capital by Russian firms. This places the Russian banking sector at risk given its underdeveloped risk management systems. The government has taken steps recently to address this problem and to ease banks' access to capital. It has allowed foreign banks to buy up to 20 percent stake in any bank without the permission of the central bank so as to permit them to inject capital in the banking system. A law has also been enacted allowing the issuance of hybrid capital instruments to increase the capital base. In addition, steps have also been taken to improve risk assessment and the legal framework for lending. The government is considering legislation to modernize the banking system and is encouraging the adoption of international standards (IFRS) and measures to increase transparency. The central bank has also increased its efforts to monitor the activity of banks to weed out inefficient banks.

The insurance services industry is similarly characterized by fragmentation, with a large number of insurers, but with the top 10 collecting over half the gross premiums. Consolidation is being encouraged with the raising of minimum capital requirements to weed out undercapitalized and unqualified players. As insurance penetration is low, there is scope for growth. However, the sector faces problems of inadequate regulatory frameworks for capital adequacy and solvency, lack of transparency in ownership structures and corporate governance, and lack of efficient distribution networks.

⁵⁰ Kononova (February 2011)

Under its accession commitments, Russia has undertaken obligations to liberalize its financial sector. It has raised the quota on the maximum share that can be held by foreign banks and insurance companies from 15 percent to 50 percent and committed to phasing out the prohibition on foreign participation in mandatory insurance segments. It has permitted subsidiaries of foreign banks, which must be registered as Russian entities.⁵¹ It has allowed 100 percent foreign ownership of banks and financial institutions, liberalized cross border financial services and allowed internal securities trading by foreign firms.⁵² However, it has not accorded separate legal status to foreign bank branches as the Russian central bank feels it would not be in a position to regulate or supervise these branches adequately, putting customers at risk. (Hence, Russia today is the only non LDC acceding country which has not made a commitment on bank branches).⁵³ In the insurance area, it has committed to allowing 100 percent foreign ownership to foreign non-life insurance issuers and will gradually phase-out limits on the number of life insurance licenses granted to foreign firms. Such obligations mark a significant step towards liberalization and could open up the country as a potential recipient of FDI in financial services.⁵⁴

6.3.3 Tourism Services

This is a sector where one finds considerable variation in the policy environment. In South Africa, barring exchange controls and immigration regulations, there are no barriers to foreign entry.⁵⁵ A tourism growth strategy has also been launched, which aimed at promoting foreign and domestic investment in the tourism industry.

In India, although steps have been taken in the form of new and revised air services agreements and bilateral tourism cooperation agreements to promote tourist inflows, the sector remains subject to various FDI restrictions and other impediments. Foreign presence is not permitted in the travel agency, tour operator, and tourist transport operator segments of the tourism industry. Foreigners are not allowed to register as regional, state, or local guides. Although foreigners are allowed to provide interpretation services to tourists, there is a limit of 500 interpreters per year.⁵⁶ Major international hotel chains typically operate under management or franchise contracts. Due to the various restrictions on FDI as well as the presence of multiple taxes at the state and central level, foreign investment in this sector remains low.⁵⁷

China liberalized the tourism sector prior to making its GATS commitments. In 2008, there were 30 foreign travel agencies operating regularly in China, of which 15 were wholly owned by foreign companies and 8 were foreign controlled. Regulations introduced recently in 2008 have liberalized the entry and operating conditions for foreign agencies. Foreign-invested travel agencies already established in China have been allowed to open branch offices. Foreign natural or legal persons have been allowed to establish travel agencies in China whereas earlier, only foreign travel agencies or foreign enterprises whose core business was in the tourism sector were permitted to invest in China. Foreign-invested tourism agencies have been granted national treatment by lowering the amount of required registered capital. However, foreign-invested travel agencies were earlier not permitted to provide outbound travel services but under

⁵¹ Tarr and Volchkova (March 2010), p. 7

⁵² Griswold and Petersen (Dec 2011)

⁵³ *Ibid* 51

⁵⁴ *Ibid* 52

⁵⁵ WTO Trade Policy Review 2003 SACU South Africa, WT/TPR/S/114/ZAF, 2003, p. A4-284

⁵⁶ WTO Trade Policy Review 2011 India WT/TPR/S/249, p.176

⁵⁷ *Ibid* 56, p. 178

the revised regulations, they have been allowed to undertake such business subject to government approval and under certain FTAs. A pilot programme is also underway to allow foreign companies to provide outbound travel businesses.⁵⁸

6.3.4 Energy Services

This is a service sector where there is strong complementarity of interest among some of the BRICS, between supplier countries such as Russia and high demand countries such as India and China. It is also an area where despite the strong potential for growth, considerable regulatory and infrastructural challenges remain. The case of Russia and Brazil are presented here to highlight the nature of the reforms and policies that would be required in future if intra BRICS opportunities in this service sector are to be realized.

(A) RUSSIA

Russia is the world's second biggest oil producer and also holds the largest share of proven gas reserves in the world.⁵⁹ It produces and exports more gas than any other country. It is also the world's second largest gas market after North America.⁶⁰ Hence, demand and supply dynamics in the Russian market are important for understanding the future of global energy markets.

The gas industry is characterized by a monopoly. Gazprom owns the Russian gas pipeline system and also has a legal monopoly on gas exports. Though there are independent producers in the gas industry, they can only sell domestically. Russia is increasingly looking at new markets such as China and India for gas exports. However, in order to meet growing markets, it will need to expand supply. At present, there is declining supply in the existing fields and three super giant fields which account for half of Russian production are declining rapidly. There is need for investment for exploration of new gas fields, exploiting of new geographical structures in existing fields, and for addressing various technical and practical challenges, along with the need for price reforms and better conditions for independent producers.⁶¹

The oil industry, unlike the gas industry was privatized in the 1990s and the domestic market for oil and oil products has been liberalized. Although foreign investment is allowed, in recent years, the government has taken steps to increase state ownership of this industry along with imposing restrictions on foreign investment in a bid to increase state control over strategically important sectors in the economy. These steps have been direct and indirect, i.e., combining all state shares into one holding company and using this to buy additional stakes while restricting foreign ownership by legal means as well as using publicity and allegations of legal misconduct (on tax, safety, and environmental lines) to reduce foreign holdings in the industry. Issues of corporate governance and lack of a consistent regulatory framework plague the industry.⁶²

Overall, the presence of state monopolies, lack of pro-competitive regulatory frameworks, and inadequate incentives for modernization have led to inefficiencies and hurt prospects for growth in Russia's energy services sector. There is scope for deregulation and liberalization of foreign investment, which could facilitate cross border investment and trade with energy importers such as China and India.

⁵⁸ *Trade Policy Review 2011 China WT/TPR/S/241/Rev.1*, p.83

⁵⁹ *Kusznir and Pleines (February 2008)*

⁶⁰ *Simmons and Murray (February 2008)*

⁶¹ *Ibid* 60

⁶² *Ibid* 59

(B) BRAZIL

Brazil has considerable potential for exploration and production of energy resources. It was listed as the 9th largest oil producer as of 2009, with proven oil reserves of 13.9 billion barrels and growing production in recent years to reach 2 million barrels per day in 2010. Its proven natural gas reserves are 423 billion m³. It also has considerable potential in renewable sources of energy. Brazil's state owned Petrobras company is ranked as the third largest energy company in the world in terms of market capitalization. Brazil's oil exploration and production are expected to grow in the future with further exploitation of pre-salt offshore deposits and heavy investment by domestic and foreign companies. Brazil is expected to emerge as the single largest source of new oil supply outside the OPEC over the next 20 to 25 years.

The regulatory framework in the oil and gas sector has undergone many changes in the past 15 years. Prior to 1997, Petrobras had a monopoly in exploration, production, refining, oil and natural gas trade and transportation, petrochemicals and derivatives, electricity, biofuels, renewable energies and distribution. In 1997, a law was enacted which permitted petroleum exploration and production to be carried out by private companies, following the granting of a concession agreement, after a competitive bidding round. There have been 10 bidding rounds since 1997. Exploration periods of 3 to 9 years have been granted to concessionaires, with the latter being subject to payment of taxes, royalties, rental fees in case of discovery. As a result of this deregulation, as many as 36 foreign companies, including some from other BRICS countries (Sinopec from China and Indian Oil Corporation from India) as well as local companies have entered Brazil's oil and gas sector and are engaged in exploration, production and upstream activities.

There are two regulatory challenges in the sector. The first is that Petrobras continues to dominate the sector, accounting for around 90 percent of crude oil production. Many companies choose to partner rather than compete with it. In part, Petrobras' continued dominance is a result of the new regulatory framework which allowed a recapitalization of Petrobras through a public share offering and a federal government grant of around 5 billion barrels of reserves in unlicensed pre-salt acreage in return for an increased stake in the company. As a result, today, Petrobras is a mixed capital company whose major shareholder is the Brazilian government. The government now directly or indirectly controls 64 percent of all Petrobras common shares and about 48 percent of its preferred shares and political control has increased over the company following the recapitalization. The second regulatory challenge pertains to steep local content requirements imposed by the Brazilian government in this sector. Owing to sensitivities over allowing private participation in this sector and expropriation of benefits by foreign companies, local content requirements have been imposed on companies under the Mobilization Program for the National Oil and Natural Gas Industry. The local content requirement starts at 55 percent, rising to 65 percent in 2016 and with the potential to reach up to 95 percent by 2017. While this ordinance has the potential of generating a large number of jobs (estimated at 640,000 between 2003 and 2009) in the sector and of increasing local participation from \$35 billion to \$190 billion over this period, it is expected to drive up costs, create production bottlenecks and make it harder for foreign companies to operate in this country. Notwithstanding such regulatory hurdles, however, there is growing interest by foreign companies to enter the Brazilian market, reflecting the growth prospects of this sector.

Given the huge demand for energy in the BRICS countries, Brazil's huge investment requirements in this sector, regulatory changes which permit foreign participation, and the presence of major energy companies from other BRICS in the Brazilian market, clearly, this is a sector with lot of potential for cooperation and commercial engagement among the BRICS. There are synergies in terms of endowments, expertise and needs. But as highlighted above, there are regulatory challenges due to the presence of a

state monopoly, local content requirements, uncertainties about the tax and regulatory structure and a high degree of government control over financial and operational decisions.

6.3.5 Summary of reform and liberalization measures

Both similarities and differences emerge across the countries with regard to their approach to liberalization and degree to which they have opened up selected services. The policy environment in tourism services shows considerable variability, with a completely open sector in the case of South Africa to a relatively restricted sector in the case of India. In contrast, in telecom services, largely similar trends and measures are evident across the countries. Policy objectives of providing telecom services at affordable prices, meeting universal service obligations, fostering competition and transparency, and promoting the sector's development in line with the countries' development goals underlie the nature of regulations in this sector in all the countries. It is also evident that despite the entry of foreign providers and competing private operators, incumbent state monopoly operators continue to play an important role in this sector and that issues of regulatory conflict and transparency have affected reforms in this sector.

The financial sector exhibits different levels of liberalization across the countries. It also varies in structure, from a heavily state dominated sector as in the case of India and China to one where the private sector plays a bigger role as in the case of South Africa. However, limitations on foreign participation tend to be similar across the countries, including ceilings on foreign equity participation, authorization requirements, minimum capital requirements, restrictions on the form of establishment, and various ownership conditions. Objectives of financial inclusion, financial stability, social and rural development, efficiency and transparency underlie the regulatory framework and its evolution in all the countries.

Overall, the liberalization process in all the countries is shaped by sectoral interests, sensitivities, market structures, regulatory objectives, and sectoral strengths and weaknesses. In the more regulated and government dominated sectors, there is usually a more calibrated and phased approach to liberalization and private participation, with institution of regulators and gradual relaxation of entry and operating restrictions. Issues of transparency, independence of regulator, public sector dominance, and tradeoffs between commercial and other objectives are prevalent.

7. Negotiating Services Liberalization

The preceding section has highlighted the general trend towards liberalizing services in all the BRICS, especially during the past decade. This liberalization has also been supported by the institution of regulatory bodies and introduction of new or amended legislation. This section tries to assess the extent to which the BRICS have engaged multilaterally and regionally or bilaterally in services negotiations and the extent to which the BRICS this unilateral liberalization has been formally bound by these countries in their multilateral commitments under the GATS and in their commitments under regional and bilateral trade agreements spanning services. The objective is to understand if there is likely to be willingness among the BRICS to enter into plurilateral or bilateral agreements covering services amongst themselves and if so, how far would they be willing to bind in their unilateral liberalization vis a vis other BRICS nations.

7.1 BRICS RTAs

A representative set of bilateral and regional agreements signed or under negotiation by the individual BRICS countries, as shown in Table 32 suggests that there is considerable asymmetry among them with

regard to their sectoral and geographic interests. There is also little or no commercial engagement among them under formal legally binding arrangements.

TABLE 32: REPRESENTATIVE LIST OF RTAS IN FORCE OR UNDER NEGOTIATION BY THE BRICS

RTAS in Force/ Announced	Status of RTAs (in force or under discussion, involving multiple BRICS nations)
BRAZIL	
Global System of Trade Preferences among Developing Countries (GSTP)	
Latin American Integration Association (LAIA)	
India-MERCOSUR PTA	Operational since 2009; Agreement covering goods exists; Negotiations underway to expand coverage under goods.
Protocol on Trade Negotiations (PTN)	
Brazil United States Trade and Economic Cooperation Agreement	
Southern Cone Common Market (MERCOSUR)	
RUSSIA	
Armenia - Russian Federation FTA	
Common Economic Zone (CEZ)	
Commonwealth of Independent States (CIS)	
Eurasian Economic Community (EAEC)	
Georgia - Russian Federation FTA	
Kyrgyz Republic - Russian Federation FTA	
Ukraine - Russian Federation	
EFTA - Russian Federation / Belarus / Kazakhstan	Announced
SOUTH AFRICA	
EC - South Africa Trade, Development and Cooperation Agreement	Under negotiation
EFTA – SACU	
Southern African Customs Union (SACU)	
Southern African Development Community (SADC)	
INDIA-SACU PTA	Under negotiation
INDIA	
ASEAN – India Free Trade Agreement	
Asia Pacific Trade Agreement (APTA) (includes China and India in addition to Bangladesh, Korea, Sri Lanka)	Agreement covering goods exists; negotiations underway for significant expansion of coverage to include services and investment
Asia Pacific Trade Agreement (APTA) - Accession of China	
Chile – India Preferential Trade Agreement	Under negotiation
Bengal Initiative on Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)	
Global System of Trade Preferences among Developing Countries (GSTP)	

India – Afghanistan PTA	
India – Bhutan Free Trade Agreement	
India – Japan Comprehensive Economic Partnership Agreement	
India – Malaysia Comprehensive Economic Cooperation Agreement	
India – Nepal Trade Treaty	
India-Thailand Framework Agreement	
India – Singapore Comprehensive Economic Cooperation Agreement	
India - Sri Lanka FTA	
India-Korea Comprehensive Economic Partnership Agreement	
India- MERCOSUR PTA	Operational since 2009; Agreement covering goods exists; Negotiations underway to expand coverage under goods.
India – SACU PTA	Under negotiation
South Asian Free Trade Area (SAFTA)	
South Asian Preferential Trade Arrangement (SAPTA)	
EC – India FTA	Under negotiation
EFTA – India	Under negotiation
SAARC Agreement on Trade in Services	Under negotiation
CHINA	
China-ASEAN Free Trade Agreement	
Asia Pacific Trade Agreement (APTA)	Agreement covering goods exists; negotiations underway for significant expansion of coverage to include services and investment
Chile – China FTA	
Mainland and Hong Kong Closer Economic Partnership Agreement	
China - Macao, China CEPA	
China - New Zealand Free Trade Agreement	
China – Singapore Free Trade Agreement	
China- Pakistan Free Trade Agreement	
China-Peru Free Trade Agreement	
Australia-China FTA	Under negotiation
China-Norway FTA	Under negotiation
Switzerland-China FTA	Under negotiation
The Cross-Straits Economic Cooperation Framework Agreement (ECFA)	Under negotiation [early announcement, signed]
Costa Rica-China FTA	Under negotiation [early announcement, signed]

Source: WTO RTA Database, <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx> (accessed on October 11, 2011)

Note: Dark Grey cells denote RTAs which cover services. Light Grey cells denote RTAs which involve two or more BRICS.

Several interesting features can be noted. Firstly, India and China are clearly more engaged than the other BRICS in bilateral/regional agreements. They have entered into or are in the process of negotiating many more RTAs than the other BRICS. Secondly, India and China have demonstrated greater interest in negotiating broad-based agreement covering not only goods but also services and investment. For the remaining BRICS, except for Brazil's Mercosur agreement which covers services, none of the agreements signed by or under negotiation by South Africa and Russia involve services. Third, although both India and China have negotiated several services agreements, their regional orientation seems to differ with India's services inclusive RTAs involving only Asian partners while China's include both Asian and non-Asian (Latin American) partners. Fourth, there are very few agreements between two BRICS countries (only Mercosur-India, India-SACU, and APTA) and even these agreements involve one or more of the BRICS along with other regional partners and not the BRICS alone. Also, none of these agreements currently include services (though expanded coverage to include services is under discussion in APTA). There is also no plurilateral agreement (more than 2 BRICS members) at present (check about IBSA and its status). A final feature that emerges is that most agreements signed by the BRICS are intraregional in nature, involving neighbouring countries. In particular, Brazil, Russia and South Africa are largely focused within the region while India has only recently entered into some cross-regional negotiations. China is by far the most extensive geographically among the BRICS.

Overall, one can conclude from the current level of engagement in RTAs by the BRICS that the scope for intra-BRICS negotiations and more broad-based agreements among them covering services and investment remains untapped. However, the absence of such arrangements, bilateral or plurilateral, among the BRICS may also indicate that these countries do not see each other as significant trade or investment partners in services and may also reflect a lack of realization among them regarding the potential opportunities that may exist in each other's service sectors in future. The failure to deepen integration to include services in the case of Russia, Brazil and South Africa is also in consonance with the relatively lower share of services in their export baskets compared to those for India and China. But clearly given the areas of complementarity in services trade and investment flows among the BRICS and the transnational presence of several BRICS firms in the service sector, there are possibilities for broader service and investment inclusive agreements or bilateral investment treaties among the countries.

7.2 Multilateral commitments in services

The BRICS are members of the WTO and have scheduled commitments under the GATS. The scope and nature of their GATS commitments provide some indication of their likely willingness to participate in services negotiations and to bind in their unilateral liberalization policies. As the following tables indicate, the countries have generally scheduled the same services or additional services under their RTAs compared to that under the GATS. Hence, the BRICS appear to be more willing to expand the scope of their commitments under RTAs relative to the GATS. A similar more liberal stance is visible in their commitments under RTAs compared to those under the GATS. Restrictions imposed in certain modes, especially mode 3 (in the form of joint venture requirements, foreign equity participation limits, or geographic restrictions) have been relaxed or even removed under their RTA commitments. Even the horizontal commitments, which pertain to mode 4, tend to be more liberal under the RTAs in that they go beyond the usual GATS mode 4 commitment categories of business visitors and executives to also include categories such as contractual service suppliers, which are pertinent to developing countries and have been demanded by the latter in the GATS negotiations. However, if one compares the RTA commitments with the extent of unilateral liberalization undertaken in the same services, one finds that the former falls short (with more restrictive conditions, lower foreign equity ceilings, or absence of scheduling).

Table 33 highlights the scope of sectors scheduled by India, China, Brazil and South Africa under the GATS versus in selected RTAs. It indicates that there is scheduling of additional services by India and China under their RTAs. However, no inference can be drawn for Brazil and South Africa as either their schedules of services commitments are not available (as in the case of Mercosur) or there are no commitments in services.

TABLE 33: COMPARISON OF THE SECTORS SCHEDULED UNDER THE GATS AND SELECTED RTAs FOR CHINA, INDIA, BRAZIL, SOUTH AFRICA

		Sectors Scheduled
China		
GATS		Professional, Computer, Real Estate, Other Business, Communication, Transportation, Construction, Financial, Distribution, Education, Environmental, Tourism
FTA/RTA	China-Singapore	All sectors scheduled in GATS; Recreational and Sports
	China-ASEAN	Computer, Real Estate, Other Business, Construction, Environmental, Recreational, Transportation
	China-NZ	Same as China-Singapore FTA
	China-Chile	Professional, Computer, Real Estate, Construction, Distribution, Educational, Environmental, Tourism, Transport, Recreational
	China-Pakistan	All sectors scheduled in GATS; Recreational and Sports
India		
GATS		Professional, Computer, Other Business, Communication, Transportation, Construction, Financial, Recreational, Tourism, Health
FTA/RTA	India-Singapore CECA	Same as GATS plus Distribution and Real Estate
	India-Korea CEPA	
	India-Japan CEPA	
	India-Malaysia CECA	
Brazil		
GATS		Business[Engineering(professional), Computer and Related , Real Estate, Management consulting (Other Business)], Communication, Construction and related engineering, Distribution, Environmental, Financial, Tourism and Travel, Transport (and Services not listed elsewhere)
FTA/RTA	GSTP	NA
	LAIA	NA
	MERCOSUR-India	NA
	PTN	NA
	MERCOSUR	Covers services but schedule of commitments not provided/available
South Africa		
GATS		Business[Engineering(professional), Computer and Related , Real Estate, Management consulting (Other Business)], Communication, Construction and related engineering, Distribution, Environmental, Financial, Tourism and Travel, Transport (and Services not listed elsewhere)
FTA/RTA	EC-South Africa	NA
	EFTA-SACU	NA
	SACU	NA
	SADC	NA
	India- SACU	NA

Source: Country-wise Schedule of commitments under GATS and Country-wise RTA

Tables 34 to 37 summarize the nature of commitments made by these countries for a representative set of services under the GATS and, where relevant, for these same services under selected RTAs.

TABLE 34: GATS AND RTA COMMITMENTS IN SELECTED SERVICES BY INDIA

Country	GATS		RTAs		Unilateral Liberalization
India	Services Scheduled	Nature of Commitments	Partner Country/Region	Nature of Commitments	
	Hospital Services	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Foreign equity ceiling of 51%; Mode 4: Unbound except as indicated in Horizontal commitments		Mode 1: No restrictions for services between two established institutions; Mode 2: No restrictions; Mode 3: KOREA: Foreign equity ceiling of 74%; SINGAPORE: No restrictions as long as latest technology will be brought in and differential rates for services apply only to foreign persons and not Indians; Mode 4: Unbound except as indicated in Horizontal commitments	100 per cent FDI subject to FIPB approval; The health insurance market was opened to private competition in 2000, which permitted both general and life insurance companies to offer health insurance.
	Computer	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Foreign equity ceiling of 51%; Mode 4: Unbound except as indicated in Horizontal commitments	India-Korea CEPA; India-Singapore CECA	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in Horizontal commitments	
	Telecom	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Subject to obtaining license from concerned authority; Total foreign equity not to exceed 25% (wire based services). Mode 4: Unbound except as indicated in Horizontal commitments.	India-Korea CEPA; India-Singapore CECA	Mode 1: Unbound; Mode 2: No restrictions; Mode 3: KOREA: FIPB approval required; Number of licenses to 2 in each service area; Foreign equity not to exceed 49%. SINGAPORE: Foreign equity not to exceed 49%. Mode 4: Unbound except as indicated in Horizontal commitments	FDI ceiling on fixed line basic services raised to 74 percent.
	Distribution (Retail)	Not scheduled	India-Korea CEPA; India-Singapore CECA	Not scheduled	FDI participation of upto 51 per cent permitted in single brand products with FIPB approval. Foreign companies allowed to invest up to 51% in joint ventures

	Banking and Financial	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Only through branch operations; limit of 12 licenses per year; Investments in financial services not to exceed 30% of invested company's capital; Mode 4: Unbound except as indicated in Horizontal commitments	India-Korea CEPA; India-Singapore CECA	Mode 1: Unbound; Mode 2: Unbound; Mode 3: KOREA and SINGAPORE: Subject to RBI approval; Through branches and wholly owned subsidiaries; Licenses to foreignbanks may be denied if their share of assets exceed 15%. SINGAPORE: Singapore banks allowed to invest through automatic route up to 74%, but limited to one mode presence, viz. either as a branch or a subsidiary. Mode 4: Unbound except as indicated in Horizontal commitments	Public ownership in public sector banks reduced by allowing them to raise capital from equity market up to 49 per cent of paid-up capital; FDI limit in private sector banks raised to 74 per cent under the automatic route including investment by FIIs.
	Tourism	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Foreign equity ceiling of 51%; Mode 4: Unbound except as indicated in Horizontal commitments	India-Korea CEPA; India-Singapore CECA	(Doesn't apply to Tourist Guide services) Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in Horizontal commitments	
	Business Services - Research & Development	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Only through incorporation with a foreign equity ceiling of 51 per cent; Mode 4: Unbound except as indicated in horizontal commitments.	India-Japan RTA India-Korea CEPA India-Singapore CECA	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.	
	Other Business Services - Management Consulting	Not scheduled in the GATS	India-Japan RTA India-Korea CEPA India-Singapore CECA	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.	
	Construction	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Only through incorporation with a foreign equity ceiling of 51 per cent; Mode 4: Unbound except as indicated in horizontal commitments.	India-Japan RTA India-Korea CEPA India-Singapore CECA	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.	

	Transport	Not scheduled in the GATS	India-Japan RTA India-Korea CEPA India-Singapore CECA	Mode 1: Unbound; Mode 2: No restrictions; Mode 3: None except as indicated in horizontal commitments; Mode 4: Unbound except as indicated in horizontal commitments.	
	Horizontal Commitments	Mode 4: Business visitors - stay for not more than 90 days; Intra-corporate transferees - Entry for a maximum of 5 years; Professionals - allowed for a maximum of one year, subject to conditional extension.	India-Korea CEPA	Mode 4: Business visitors - stay for not more than 180 days; Same as GATS for the other categories.	

Source: Country-wise Schedule of commitments under GATS and Country-wise RTA

Note: Mode-wise commitments may tend to vary within the sub-sectors of certain sectors listed above.

The commitments made by India under the GATS and in selected RTAs covering services indicate clearly that India has had a much more liberal approach to liberalizing services under bilateral agreements. It has scheduled some additional services which it had not under the GATS and in general has made more liberal commitments in mode 3 by relaxing foreign equity ceilings, allowing more flexibility in the form of commercial presence, and by allowing preferential access to partners in key services such as banking. However, the RTA commitments in services fall short of the unilateral liberalization undertaken in most services.

A similar picture emerges for China, which too has scheduled some additional services under its RTAs compared to that under the GATS and has also relaxed certain restrictions under its RTAs. However, the difference is not as sharp as in the case of India, suggesting that India has taken a more liberal stance on services under its RTAs than in the multilateral context, reflecting its strong interest in services exports. A further comparison of the two countries also shows that while both have mainly imposed restrictions on commercial presence, China has had a more varied approach across services, making use of equity participation limits, geographic and product restrictions, and a phased approach to liberalization while India's restrictions tend to be more uniform in nature across different types of services. Table 35 shows the commitments made by China under the GATS and under selected RTAs.

TABLE 35: GATS AND RTA COMMITMENTS IN SELECTED SERVICES BY CHINA

GATS			RTAs	
CHINA	Services Scheduled	Nature of Commitments	Partner Country/Region	Nature of Commitments
	Medical and dental	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: Foreign majority ownership permitted; Suppliers can establish joint venture hospitals or clinics with Chinese partners; Mode 4: Unbound except as indicated in Horizontal commitments	China-Singapore FTA; China-NZ FTA;	Same as GATS
	Computer	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in Horizontal commitments	China-Singapore FTA; China-ASEAN FTA; China-NZ FTA	Same as GATS

	Tele- commu- nication	Mode 1: Linked to Mode 2: No restrictions; Mode 3: Foreign Investments in Joint Ventures shall not exceed 30% for the first year after which it will be expanded to 49%; Geographical restrictions apply only for the first year; Mode 4: Unbound except as indicated in Horizontal commitments.	China-Singapore FTA; China-NZ FTA;	Mode 1: Linked to Mode 3; Mode 2: No restrictions Mode 3: Foreign Investments in Joint Ventures shall not exceed 50%; Mode 4: Unbound except as indicated in Horizontal commitments.
	Distribu- tion (Retail)	Mode 1: Unbound; Mode 2: No restrictions; Mode 3: Joint Ventures permitted; Geographical restrictions apply; Majority foreign ownership allowed; Restricted to very few products; Mode 4: Unbound except as indicated in Horizontal commitments;	China-Singapore FTA; China-NZ FTA;	Mode 1: Unbound; Mode 2: No restrictions; Mode 3: Wholly foreign owned enterprises allowed; No geographical restrictions; Product restrictions apply, but much more liberal than GATS commitments; Mode 4: Unbound except as indicated in Horizontal commitments;
	Banking and Fi- nancial	Mode 1: Restricted only to provision and transfer of financial information and data processing; Mode 2: No restrictions; Mode 3: No geographic restriction for foreign currency businesses to operate; Geographic restrictions apply for local currency businesses; Mode 4: Unbound except as indicated in Horizontal commitments	China-Singapore FTA; China-NZ FTA;	Same as GATS
	Con- struction	Mode 1: Unbound; Mode 2: No restrictions; Mode 3: Only in the form of JV's with foreign majority ownership permitted. Wholly foreign-owned enterprises will be permitted (within 3 years of china's accession to the WTO) and can only undertake the following four types of construction projects. 1. Construction projects wholly financed by foreign investment and/or grants. 2. Construction projects financed by loans of international financial institutions and awarded through international tendering according to the terms of loans. 3. Chinese-foreign jointly constructed projects with foreign investment equal to or more than 50 per cent; and Chinese-foreign jointly constructed projects with foreign investment less than 50 per cent but technically difficult to be implemented by Chinese construction enterprises alone. 4. Chinese invested construction projects which are difficult to be implemented by Chinese construction enterprises alone can be jointly undertaken by Chinese and foreign construction enterprises with the approval of provincial government. Mode 4: Unbound except as indicated in horizontal commitments.	China-Chile FTA China-Singapore FTA China-NZ FTA China-ASEAN FTA	

	Transport	<p>Mode 1: Unbound (Air transport and Auxiliary services) [Rail and Road transport services have no restrictions];</p> <p>Mode 2: No restrictions;</p> <p>Mode 3: Foreign service suppliers are permitted to establish JV aircraft repair and maintenance enterprises in China. The Chinese side shall hold controlling shares or be in a dominant position in the joint ventures. Licenses for the establishments of joint ventures are subject to economic needs test</p> <p>Mode 4: Unbound except as indicated in horizontal commitments.</p>	<p>China-Chile FTA</p> <p>China-Singapore FTA</p> <p>China-NZ FTA</p> <p>China-ASEAN FTA</p>	Same as GATS
	Other Business Services- Management Consulting	<p>Mode 1: None;</p> <p>Mode 2: None;</p> <p>Mode 3: Only in the form of joint ventures, with foreign majority ownership permitted.</p> <p>None, within six years of China's accession, foreign firms will be permitted to establish wholly foreign-owned subsidiaries;</p> <p>Mode 4: Unbound except as indicated in horizontal commitments</p>	<p>China-Chile FTA</p> <p>China-Singapore FTA</p> <p>China-ASEAN FTA</p> <p>China-NZ FTA</p>	Same as GATS (Mode 3 liberalized, all wholly owned subsidiaries are allowed)
	Other Business Services- Market Research Services	Not scheduled in the GATS	<p>China-Chile FTA</p> <p>China-Singapore FTA</p> <p>China-ASEAN FTA</p>	<p>Mode 1: Unbound;</p> <p>Mode 2: Unbound;</p> <p>Mode 3: Only in the form of joint ventures, with foreign majority ownership permitted. Economic needs tests are required;</p> <p>Mode 4: Unbound except as stated in horizontal commitments.</p>
	Tourism	<p>Mode 1: No restrictions;</p> <p>Mode 2: No restrictions;</p> <p>Mode 3: Foreign services suppliers may construct renovate and operate hotel and restaurant establishments in China in the form of JVs with foreign majority ownership permitted. None, within four years after accession, wholly foreign-owned subsidiaries will be permitted.</p> <p>Mode 4: Unbound, except as indicated in horizontal commitments and as follows:</p> <ul style="list-style-type: none"> - Foreign managers, specialists including chefs and senior executives who have signed contracts with joint venture hotels and restaurants in China shall be permitted to provide services in China. 	<p>China-Chile FTA</p> <p>China-Singapore FTA</p> <p>China-NZ FTA</p> <p>China-ASEAN FTA</p>	Same as GATS
	Hospital Services	Not scheduled	China-Singapore FTA	<p>Mode 1: Unbound;</p> <p>Mode 2: No restrictions;</p> <p>Mode 3: Joint Ventures permitted; Majority foreign ownership allowed (70%);</p> <p>Mode 4: Unbound except as indicated in Horizontal commitments;</p>

	Horizontal Commitments	Mode 4: Managers, executives and specialists shall be permitted entry for an initial stay of 3 years;	China-Singapore FTA; China-ASEAN FTA;	Mode 4: 6 months for business visitors; 3 years for intra-corporate transferees; Not exceeding 1 year for contractual service suppliers which is limited to accounting, medical, architectural, engineering, urban planning, computer, construction, education and tourism services.
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Source: Country-wise Schedule of commitments under GATS and County-wise RTA.

Note: Mode-wise commitments may tend to vary within the sub-sectors of certain sectors listed above.

The commitments made by Brazil and South Africa under the GATS are summarized in Tables 36 and 37, respectively. While Brazil's commitments in mode 3 tend to be liberal, its commitments are largely unbound in other modes and certain important sectors (computer and related services) are not scheduled. There are also horizontal limitations on commercial presence, in terms of the type of legal entity permitted. South Africa's commitments are generally liberal across modes 1 to 3. In both the countries, among the scheduled sectors, financial and telecom services are subject to more conditions on entry and operating requirements.

TABLE 36: GATS COMMITMENTS IN SELECTED SERVICES BY BRAZIL

Country	GATS	
BRAZIL	Services Scheduled	Nature of Commitments
	Hospital Services	Not scheduled in the GATS
	Computer	Not scheduled in the GATS
	Tele-communication	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Distribution (Retail)	Mode 1: Unbound; Mode 2: Unbound; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Banking and Financial	Mode 1: Unbound; Mode 2: Unbound; Mode 3: The establishment of new branches and subsidiaries of foreign financial institutions, as well as increases in the participation of foreign persons in the capital of financial institutions incorporated under Brazilian law, is only permitted when subject to a case by case authorization by the Executive Branch, by means of a Presidential decree. Applying investors may be required to fulfill specific conditions. Foreign persons may participate in the privatization program of public sector financial institutions and in each case commercial presence will be granted, also by means of a Presidential decree. Otherwise, commercial presence is not allowed. Mode 4: Unbound except as indicated in Horizontal commitments

	Tourism	Mode 1: Unbound; Mode 2: Unbound; Mode 3: No restrictions; Mode 4: Unbound except as indicated in Horizontal commitments
	Business Services - Market Research and public opinion polling	Mode 1: Unbound; Mode 2: Unbound; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Other Business Services - Management Consulting	Mode 1: Unbound; Mode 2: Unbound; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Construction	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Access will be granted 5 years after entering into force of Agreement establishing the WTO and no limitations after that date; Mode 4: Unbound except as indicated in horizontal commitments.
	Transport	Mode 1: Unbound; Mode 2: Unbound; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Horizontal Commitments	<p>Mode 3: Foreign service suppliers wishing to supply a service as a juridical person must be organized as a legal entity foreseen by the Brazilian law. A juridical person has full title and responsibility for its patrimonial rights and obligations. An entity earns the condition of private law juridical person when the correspondent incorporation act (By-Laws and/or Articles of Association) is duly filed with the appropriate Entities' Public Registry (EPR).</p> <p>A joint venture may be accomplished by a capital association through the formation of any type of business organization as set forth in the Brazilian law (usually a Private Limited Liability Company - Limitada).</p> <p>A joint venture may also be carried out through a consórcio, which is neither a juridical person nor a form of capital association. A consórcio is used mainly with major contracts for rendering of services. It is a contract of two or more enterprises for a joint accomplishment of one specific undertaking.</p> <p>Mode 4: Unbound, except for measures related to specialized technicians, highly qualified professionals, managers and directors. [Duration of stay not stated]</p>

Source: Country-wise Schedule of commitments under GATS and County-wise RTA

Note: Mode-wise commitments may tend to vary within the sub-sectors of certain sectors listed above.

TABLE 37: GATS COMMITMENTS IN SELECTED SERVICES BY SOUTH AFRICA

Country	GATS	
SOUTH AFRICA	Services Scheduled	Nature of Commitments
	Hospital Services	Not scheduled in the GATS
	Computer	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Tele-communication	Modes 1 to 3: General limitations: There are limitations on the bypass of South African facilities for routing of domestic and international traffic. Telkom is currently acting as a de facto regulator by means of agreements entered into with VANS providers in South Africa. VANS providers can only provide international services with the consent of Telkom SA Ltd. Legislation is currently being proposed to introduce a Regulator who might take over the licensing function. No formal policy exists and applications from international VANS are dealt with on an informal ad hoc basis. This situation may be addressed with the anticipated introduction of a new regulatory regime. Mode 4: Unbound except as indicated in horizontal commitments.
	Distribution (Retail)	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Banking and Financial	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Corporate membership of financial exchanges is unrestricted, except in the case of the Johannesburg Stock Exchange. The Minister of Finance may, however, grant permission to a bank or controlling company to issue more than 49 per cent of its shares to such a person, provided that competition is not impaired. This restriction does not apply to the allotment or issuing of shares in a bank or a controlling company registered in respect of that bank, or another bank or an institution which has been approved by the Registrar and which conducts business of a bank in a country other than South Africa. Foreign banks wishing to obtain a controlling interest in a local bank are required to establish a domestic public company. No person (domestic or foreign) shall conduct the business of a bank unless such person is a public company, and is registered in terms of the Banks Act. Mode 4: Unbound except as indicated in Horizontal commitments
	Tourism	Mode 1: Unbound; Mode 2: Unbound; Mode 3: No restrictions; Mode 4: Unbound except as indicated in Horizontal commitments
	Business Services - Market Research and public opinion polling	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.

	Other Business Services - Management Consulting	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Construction	Mode 1: Unbound; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Transport	Mode 1: Unbound; Mode 2: Unbound; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments.
	Horizontal Commitments	Mode 4: Unbound, except for the temporary presence for a period of up to three years (unless otherwise specified) without requiring compliance with an economic needs test for natural persons who are categorized as services salespersons, Intra-corporate Transferees, Executives, Managers, Specialists, Professionals.

Source: Country-wise Schedule of commitments under GATS and County-wise RTA

Note: Mode-wise commitments may tend to vary within the sub-sectors of certain sectors listed above.

A comparison of the commitments across all these WTO member countries shows that South Africa has the most liberal regulatory environment. This is in line with the restrictiveness indices highlighted earlier, where South Africa was shown as having the lowest level of regulatory restrictiveness barriers among the BRICS. The wedge between unilateral, multilateral, and preferential liberalization is also evident from the commitment tables and the earlier discussion on liberalization measures in the different countries.

Russia has only just recently acceded to the WTO and so information on its commitments is not as readily available yet. However, reports on Russia's accession process indicate that the business services sector had been under focus in the accession negotiations. Russia has agreed to accord market access and national treatment to a wide range of professionals, including lawyers, accountants, architects, engineers, marketing specialists and health professionals. It has permitted foreign enterprises to operate in the wholesale and retail trade distribution services sector, in franchising, and in express courier services. It has also made significant commitments in the financial services sector, as outlined earlier, such as raising the quota on the maximum share that can be held by foreign banks and insurance companies from 15 percent to 50 percent, phasing out the prohibition on foreign participation in mandatory insurance segments, allowing subsidiaries of foreign banks,⁶³ and allowing 100 percent foreign ownership of banks and financial institutions.⁶⁴ However, it has not permitted the entry of foreign bank branches and is thus the only non LDC acceding country which has not made a commitment on bank branches. Under its bilateral agreement with the US, it has allowed foreign bank subsidiaries to get greater market access and national treatment rights under a bilateral US-Russia agreement.⁶⁵ In its bilateral agreement with the EU, it has agreed to end monopoly on long distance fixed line telephone services. Although the EU has sought the rights of EU based companies other than Gazprom to construct a gas pipeline, this request has not been met.⁶⁶ Specific commitments made by Russia are, however, not available.⁶⁷

⁶³ Tarr and Volchkova (2010), p. 7

⁶⁴ Griswold and Petersen (Dec 2011)

⁶⁵ Ibid 63

⁶⁶ Ibid 63

⁶⁷ Tarr and Volchkova (2010), p.7

Table 38 highlights the commitments made in key subsectors of computer and related services by China, India and Brazil. This sector is chosen as it is one service industry where all the BRICS countries have a keen interest in promoting growth and competitiveness and where, as discussed earlier, there is scope for cooperation.

TABLE 38: COMMITMENTS BY CHINA, INDIA AND SOUTH AFRICA IN SUBSECTORS OF COMPUTER AND RELATED SERVICES UNDER THE GATS AND IN SELECTED RTAs

	GATS		RTAs	
	Services Scheduled	Nature of commitments	Partner country/Region	Nature of commitments
CHINA				
	Consultancy Services	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments	China-ASEAN FTA; China-Singapore FTA; China-NZ FTA	Same as GATS
	Data processing Services			
	Software implementation	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: Foreign majority ownership permitted; Suppliers can establish joint ventures with Chinese partners; Mode 4: Unbound except as indicated in Horizontal commitments	China-Singapore FTA; China-ASEAN FTA; China-NZ FTA	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: Wholly foreign-owned enterprises allowed; Mode 4: Unbound except as indicated in Horizontal commitments
INDIA				
	Consultancy Services	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Only through incorporation with a foreign equity ceiling of 51 percent; Mode 4: Unbound except as indicated in horizontal commitments	India-Korea CEPA; India-Singapore CECA	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in Horizontal commitments
	Data processing Services			
	Database services			
	Maintenance and repair services			
	Software implementation	Mode 1: Unbound; Mode 2: Unbound; Mode 3: Only through incorporation with a foreign equity ceiling of 51 percent; Mode 4: Unbound except as indicated in horizontal commitments	India-Korea CEPA; India-Singapore CECA	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in Horizontal commitments
SOUTH AFRICA				
	Consultancy Services	Mode 1: No restrictions; Mode 2: No restrictions; Mode 3: No restrictions; Mode 4: Unbound except as indicated in horizontal commitments		
	Software implementation			
	Data processing Services			
	Database services			
	Maintenance and repair services			

Source: Country-wise Schedule of commitments under GATS and Country-wise RTA

Note: Brazil has not scheduled Computer Services in GATS. There are no RTA commitments in services for South Africa or Brazil.

The summary of the detailed commitments for computer and related services indicates that barring mode 4, this is a largely unrestricted sector, including in mode 3. Moreover, under the FTAs, even the few limitations that have been inscribed under the GATS, have been removed. Hence, clearly there is willingness to open up this sector multilaterally and bilaterally making this an area where the commonality of interests and strengths of certain BRICS can be tapped to promote cooperation and cross border trade and investment flows.

But on the whole, the above tables indicate that most of the BRICS have yet to expand their trade and investment agreements to cover services and that it may be premature to expect any formal plurilateral agreements among them in the near future. A more likely possibility is that India and China which have been increasingly entering into agreements with countries across different geographies, may seek to expand their existing arrangements or to enter into new agreements with other BRICS, including agreements which cover services and investment. Analysis of the commitments further indicates that the BRICS may be willing to undertake more liberal commitments in such RTAs, though not necessarily beyond the extent of liberalization already offered under their unilateral policies. It is also worth noting that in several services where there is likely to be scope for engagement, such as in business services or construction, the commitments are either unbound or partial in modes that would be of interest. Some of these services have also not been scheduled. Thus, to what extent any agreement among these countries would cover sectors of strength and complementary interests remains an open question.

8. Current and prospective successful services in the BRICS

Discussion in earlier sections has highlighted that there are a few services where the BRICS exhibit potential as exporters through one or more modes. Some of these are services where there are likely to be complementary interests which could foster trade among the BRICS. Some are services where there are synergies which could foster cooperation among these countries. Moreover, the general trend towards service sector liberalization and regulatory reforms creates opportunities to realize these trade and cooperation possibilities.

The following discussion outlines the policies undertaken by the BRICS in some of these services in order to promote growth and exports. The services discussed here include tourism and financial services for South Africa, transport & logistics and construction services for China, energy and transport services for Russia, IT and business/professional services for India, and energy and business services for Brazil. Each of these services has been selected on the basis of its export prospects in the concerned country, which in turn is either based on the RCA estimates derived earlier for individual services in each country or the information on FDI outflows and presence of TNCs in that service for the country. A point to be noted is that current as well as potentially successful services are highlighted as both can provide useful learning for other countries. For instance, some of the services discussed here cannot be called success stories as their potential remains unrealized and there remain many recognized policy limitations. But even these are presented to indicate the kinds of policies and measures that would be required and how some of the BRICS have evolved their policy formulation and thinking on these services.

8.1 South Africa: Some Promising Services

The earlier discussion reveals that South Africa is not a very competitive player in services. However, given the large share of services in its economy and its significantly liberal regulatory environment compared to other BRICS, there is scope for services to play a bigger role in the country's trade and investment relations. The estimates for revealed comparative advantage in services exports and estimates for growth

in services exports indicate two service subsectors where South Africa has potential. These are tourism and financial services.

8.1.1 Tourism⁶⁸

South Africa ranks among the world's top 25 tourist destinations. Its main advantage is diversity including, accessible wildlife, natural scenery, diverse cultures, unspoiled wilderness, scope for special interest activities, internationally well known attractions (e.g., the Kruger National Park); the Cape Peninsula, the Garden Route (200 km of beaches, forests, and mountains; Kwazulu-Natal parks and mountains, including the Drakensberg range; the Sterkfontein Caves (the home of the ancestors of humankind); Robben Island; Blyde River Canon; Cango Caves Western Cape; and the Wine Route, relatively well developed infrastructure and network of national parks, good conference and exhibition facilities, good communication and medical services, and some well known companies which are already leaders in global best practices in niche areas such as ecotourism. The number of international tourist arrivals has grown steadily and the reception capacity (number of rooms) has also increased in the post apartheid period. However, the general view is that growth in tourism has been less than expected due to concerns over safety (crime and health related),⁶⁹ insufficient diversification of source markets outside Africa, lack of aggressive promotion of tourism investment and related incentives, inadequate funding, lack of rural infrastructure, lack of appropriate institutional frameworks at the national and provincial levels and failure to accord strategic importance to the sector.⁷⁰ The contribution of tourism to employment, small business development, GDP, foreign exchange earnings (though it is among the top few sources of foreign exchange receipts), and other sectors of the economy remains limited thus far.

In May 2000, South Africa launched the Tourism Growth Strategy with the objective of marketing the country internationally as a top global tourism destination. The strategy aimed at increasing tourism arrivals in South Africa by broadening the geographical spread of arrivals; increasing the length of stay; and increasing investment, both foreign and domestic, in the tourism industry. The strategy focused on Africa, the United States, Europe (chiefly, the UK, Germany, France, the Netherlands and Italy), and Asia (China, Japan, India). The Department of Environmental Affairs and Tourism (DEAT), in partnership with the private sector, also formulated a three-year strategy to transform this industry by ensuring support of all government departments.⁷¹

Under the Tourism Growth Strategy and the government's Reconstruction and Development Programme, tourism is recognized as an important sector in terms of employment creation, helping small businesses, creating economic linkages with other sectors, and promoting environmental sustainability. In the past decade, the government has committed itself to responsible tourism for which several actions have been undertaken in the areas of safety and security, education and training, access to finance, investment incentives, foreign investment policies, environmental management, product development, cultural resource management, air and ground transportation, infrastructure, marketing and promotion, product quality and standards, regional cooperation, and youth development.⁷² Some of these initiatives include

68 WTO Trade Policy Review 2003 SACU South Africa, WT/TPR/S/114/ZAF, p. A4 283

69 More new hotels have been built in the last three years than in the previous 20, but almost half of their beds remain unoccupied, *The Economist* (December 16, 2000) and WTO Trade Policy Review 2003 SACU South Africa, WT/TPR/S/114/ZAF, p. A4 284

70 World Tourism Organization (2001), based on WTO Trade Policy Review 2003 SACU South Africa, WT/TPR/S/114/ZAF, p. A4-284

71 *Ibid* 70

72 WTO Trade Policy Review 2003 SACU South Africa, WT/TPR/S/114/ZAF, p. A4-255

working with national and international funding agencies as well as local and international private sector agencies and NGOs to set standards, assigning NGOs with the responsibility of certifying tourism providers and monitoring their performance, actively marketing and promoting the country as a premier tourism destination, providing incentives for tourism providers through government procurement policies, providing preferential access to national marketing funds only to responsible tourism providers, encouraging the development of partnerships between the private tourism sector and local communities, and skill development for the sector. Steps have also been taken to improve the institutional framework for the tourism industry with Amendments to the 1993 Tourism Act.

One of the core areas for policy action has been human resource development, in view of skill shortages and problems of poor service quality which affect this sector. The main policies relating to human resource development have included supporting the provision of introductory/bridging courses to facilitate the entry of previously neglected groups and others; providing scholarships, loans, and incentive schemes to improve access to training opportunities; developing skills programmes and specialized courses for accreditation; creating a dedicated funding mechanism for training based on the experience and practices of other countries such as Australia; supporting the design, marketing, production, and packaging skills of craftsmen; and creating a tourism education and training database, among others.

Another important area for policy action has been access to finance. The lack of finance on favourable terms in the past has hurt investment in tourism development in South Africa. To address this problem, several initiatives have been undertaken, including large capital injections by the government for various projects identified in the implementation strategy; broadening the tourism funding base through a single departure tax; coordinating the collection of tourism levies nationally and providing a share to the provinces; providing access to the RDP and donor funds for the tourism industry especially for small business and community tourism projects, establishing a dedicated tourism development fund to provide funds for tourism enterprises and activities which are not financed by existing state financing agencies, and creating a subsidized financing facility to enable the entry of previously neglected enterprises and groups. The Industrial Development Corporation (IDC) provides medium-term finance in the form of loans, suspensive sales, equity and quasi-equity for the development and expansion of the tourism industry, while the Department of Trade and Industry (DTI) provides financial assistance to the subsector under the Small and Medium Enterprise Development Programme (SMEDP).

There has also been debate about the targeting of incentives, the general view being to move away from a narrow focus on hotels and tourist accommodation towards a broader view of the tourism industry and shifting from tax related incentive schemes towards budgetary subsidies and grants. The government has focused on providing incentives to previously neglected sections of the industry with the aim of increasing and refurbishing accommodation facilities, supporting new tourism ventures, assisting small and medium enterprises, and facilitating community based tourism projects. Foreign investment has been recognized as an important source of financing and for meeting the growth and development objectives of this sector. The aim has been to encourage foreign investment which meets the criteria of investing in rural communities, developing ecotourism and heritage tourism, transferring skills and technology, and partnering with local communities and organizations. However, foreign investment has not been encouraged in small, micro enterprises or ancillary services which can be provided by local businesses. Concessions offered to foreign investors under franchise or package tour arrangements must not result in substantial leakages and must meet acceptable social standards.⁷³

73 OECD (2010) and UN OSAA (2010)

The overall thrust of the policies to promote growth and competitiveness in tourism services has been to balance economic efficiency, social, environmental, regional, and equity objectives. A broad based approach has been taken wherein a wide range of issues, from skill and capacity building to entrepreneurship, financing, certification and standards, and long term sustainability have been addressed.

8.1.2 Financial services

South Africa's financial sector has undergone significant shifts in policy, from an inward looking sector designed to protect and benefit a few during the apartheid period to one which is deeper and provides a wide range of financial services to previously disadvantaged South Africans. The main challenge faced by the government post apartheid was how to take a first world banking sector with a well established infrastructure and technology but with limited reach to meet the huge unmet demand for financial services in the country. The financial services sector was seen as a critical tool for bridging the gap between the haves and the have nots.

South Africa's financial services sector compares favourably with that of other developing countries. It is seen as having a sophisticated financial services sector by international standards and ranked above its average performance on other economic dimensions. As per the Global Competitiveness Report, South Africa ranked 44th out of 131 countries overall and 25th in terms of financial market sophistication, in 2005. Moreover, as per a World Bank survey, firms in South Africa did not see access to finance or cost of financing as serious impediments to their operations or growth.⁷⁴

The strength of South Africa's financial services sector stems from its well developed and implemented regulatory and legal framework concerning the establishment and operations of domestic and foreign financial institutions across a range of services, including commercial, retail and merchant banking, mortgage lending, insurance and investment. The banking system is well developed and regulated, consisting of a few large banks and investment institutions and some smaller banks. Foreign banks and electronic banking facilities are extensively present. Amendments have been made to legislation concerning exchange controls and entry into the financial market so as to make the country more attractive for foreign investment. Legal and regulatory changes concerning the provision of services to low income households and developments in the microfinance industry have led to greater access for financial services, including the success of the Small Enterprise Foundation.

One of the main positives of the South African financial sector is the international acceptability of financial institutions and systems. The Banks Act is based on similar legislation in the UK, Canada, and Australia. There has been considerable progress in terms of settlement systems and practices, bringing the country in line with international inter-bank settlement systems and risk management procedures. The financial institutions are of sufficient size and capability to compete internationally. Some have wide and growing presence, with good international credit rating. The financial infrastructure is well developed, including a wide range of financial instruments, well developed technology and communication systems, and sophisticated national networks for many financial institutions. The country also has a dominant position in financial services within the region. Human and institutional capacity, though small in size, is of good quality.

There are, however, some weaknesses in the sector, as pointed out in various reports.⁷⁵ These include

⁷⁴ World Economic Forum (2010)

⁷⁵ Based on a variety of reports on South Africa. See, OECD (2010) and UN OSAA (2010), Cassim (2005) for example.

insufficient availability of capital for entrepreneurial growth, increasing levels of organized fraud, and the high cost of financial services relative to that in advanced countries. There are also human and institutional capacity constraints in terms of poor financial literacy, skill sets and service quality. There has also been some criticism about the regulatory framework in that the financial services sector is seen as being insufficiently and narrowly regulated.

8.2 India's High Performer - The Case of IT-BPO Services

India is known for the success of its IT-ITeS industry. There are four main components to this industry, namely, IT services, business process outsourcing (BPO), engineering services and R&D, and software products. This industry has been the growth driver of India's service sector as well as overall GDP and exports. It has also contributed significantly to the FDI outflows from India and the internationalization of Indian firms.

India's IT and BPO services exports have risen from a mere \$754 million in 1995/96 to \$9.6 billion in 2002-03, to \$47.5 billion in 2009, with the industry's total turnover reaching \$70 billion or 6 percent of GDP in 2009. As a result, the IT sector's share in India's total export basket has increased from less than 4 percent in 1998 to around 26 percent in 2010. Within the industry, IT services alone are expected to account for over half of export earnings (\$27.3 billion) in 2010, BPO services for another 25 percent (\$12.4 billion), and engineering services and software products for another 20 percent of export earnings in this industry.⁷⁶

India's IT-BPO exports cover a variety of verticals, including the banking and financial services industry (BFSI), telecom, manufacturing, retail, healthcare, and travel and tourism. While BFSI remains the most important notwithstanding the financial crisis of 2008, segments such as healthcare and retail have shown rapid growth in recent years. There has also been a gradual movement up the value chain, with a growing number of offshore R&D centres being established in India and a shift towards higher-end services such as business analytics, equity research and market research. Both multinational firms operating in the Indian market through captive subsidiaries and offshore development centres as well as large, small, and medium-sized Indian firms are engaged in IT-BPO services exports. With increased possibilities for IT-enabled services delivery, there has been a gradual shift from a predominantly onsite mode of delivery to a primarily offshore mode of delivery in order to further leverage India's labour cost advantage. According to the AT Kearney Offshore Location Attractiveness Index, India has consistently ranked highest among offshoring destinations, due to the combination of its skill availability, favourable business environment, and low cost.⁷⁷ Today, India accounts for 51 percent of the offshore IT-BPO market and is expected to remain an important part of the global outsourcing market in future, notwithstanding emerging competition from other developing countries and regions.⁷⁸

The IT industry's growth has been driven by efforts on the part of both government and industry. The government's forward looking strategy for the ICT sector, coupled with a liberal regulatory environment, telecom sector liberalization, and government support through fiscal and other incentives, have played an important role. Some important steps taken by the government include the launching of the Software Technology Park from India (STPI) scheme in 1988 and the National Taskforce on Information Technology and Software Development (NTITSD) in 1998 to formulate long term plans and to remove obstacles to

⁷⁶ NASSCOM Strategic Report 2010, pp. 58-59

⁷⁷ <http://www.atkearney.com/index.php/News-media/geography-of-offshoring-is-shifting.html?q=offshoring+india>

⁷⁸ Nasscom Strategic Review 2010, p. 9

the sector's growth followed by the creation of a Ministry of Information Technology in 2000 to promote sector-specific initiatives. Important elements of these schemes include expenditure outlays for improving ICT infrastructure, reduced surcharge for IT companies, and tax exemptions. A Task Force on Human Resource Development was also established to develop long term strategies to increase the supply of professionals for the IT industry. Other important efforts include the lowering of customs duties on IT products and allowing 100 percent foreign investment. Provision of real estate has been another thrust area. The government has taken steps to provide dedicated international quality and reasonably priced real estate in software parks, SEZs and knowledge sector industrial estates to IT-BPO firms. In 2008, a scheme for Information Technology Investment Regions was approved under which each state in India can set up an integrated township for helping the growth of the IT-BPO sector by providing quality infrastructure and investor friendly policies. Flexible labour laws in this sector and the introduction of copyright protection and cyber laws under a comprehensive Information Technology Act introduced in 2000 have further helped it to grow and attract foreign investment.

Government efforts have been influenced and complemented by a pro-active industry association, NASSCOM, which has lobbied the government for business friendly policies. In recent years, NASSCOM has been increasingly focusing on the emerging human resource challenges confronting this industry. It has undertaken initiatives to forge partnerships between the industry and educational institutions to increase the supply of IT professionals, introduced certification programs to improve the quality of the IT taskforce, created a National Skills Registry database for IT-BPO firms, and introduced the Data Security Council of India for monitoring and enforcing privacy and data protection standards in India.⁷⁹

The Indian IT industry's growth experience provides a good example of how pro-active, forward looking and supportive government and industry efforts can capitalize on existing sources of comparative advantage. There are no doubt challenges emerging in India's IT industry, chief among which is the need to improve the supply of quality human capital, followed by the need to improve telecom infrastructure, address regulatory challenges in the telecom sector, promote the domestic market for IT services, foster innovation and movement to higher value added IT services, and spread the benefits and future expansion of this sector to new centres within the country.

8.3 Brazil: Promising Prospects in Software Services⁸⁰

The Brazilian IT industry has expanded rapidly since the 1990s. Till the early 1990s, the IT market was protected for national firms and little priority was given to software production. The development of this industry was till then connected to the growth of its hardware industry and the government's focus was on hardware production. With the abolition of protectionist policies in 1992, software developers received attention from government agencies and subsequently national software companies emerged which began to compete with one another and with foreign companies in the domestic market.

Following liberalization, the software industry was helped by several government programmes. In 1993, the government created a subcommittee of Software Quality and Productivity to introduce international standards and to raise quality and productivity to make the industry globally competitive. The Secretariat of Information Technology was later put in charge of designing and implementing software policy. Training programmes were launched, investment funds were created to support the industry, and guidelines were proposed for government procurement. Software development centres were created in several

⁷⁹ Based on various reports on the Indian IT industry

⁸⁰ This section is mainly based on Burzynski, Graeml and Balbinot (2010)

Brazilian universities under close collaboration between the state, universities and the private sector. Several software research poles developed in the country. The government also introduced programmes to increase exports of knowledge intensive products and services in the 1990s. The Prosoft programme was introduced to support Brazilian software companies selling their products and services overseas. The Brazilian Society for the Promotion of Software Export or SOFTEX was created in 1992, which played an important role in pushing a more outward oriented outlook for the industry and persuading the government to support software exports. The Softex 2000 program was launched to promote, develop and export Brazilian software, though the scale of benefits and the number of companies involved was not large. A trademark “Brazilian Software” was created and attempts were made to build a partnership between the government and industry. The government has also supported local software development and the creation of new software capabilities through e-government initiatives and government procurement policies. E-solutions such as electronic voting and e-filing are cases in point. Local companies such as Vesta have created e-solutions for government which are now being sold overseas. Government programmes like the Society for the Promotion of Excellence in Brazilian Software have enabled the growth of local industry. State sanctioned projects such as the sectoral project for the export of software have helped the internationalization of the industry.

In addition to these government initiatives to develop the industry, domestic market conditions also played an important role. The large domestic market with its sophisticated software demands, especially in banking and telecom, created incentives for innovation and development of unique software solutions. Given the large size of these domestic industries, the software companies benefited from economies of scale in creating products for such clients. Brazilian companies have over time developed distinctive technology and know-how catering to these leading industries. Further, the internationalization of Brazilian companies has led to increased exports of these services as Brazilian firms, which have gone abroad, have contributed to increased demand for maintenance and development of software, support and applications services, back office services, and other miscellaneous services from Brazilian software companies. In particular, Brazilian software companies have emerged competitive in areas of banking, telecom, e-government, business management, data and network security, and large scale customer management systems for the Brazilian private sector and Brazilian government agencies. They have carved a niche in developing software for e-business, ERP and bank automation.

The development of the software industry has also been aided by the entry of foreign investors attracted by the use of IT in retail banks, the country’s efficient and modern system of bank automation, advances in internet banking, and the large domestic market for corporate IT (with most of the largest multinational companies in the world being present). Many foreign companies (including some Indian companies) as well as Brazilian companies specialize in providing support services for the international operations of Brazilian and foreign companies. Many foreign companies see Brazil as a base for regional exports of IT services.

Overall, the sector has benefited from a variety of policy-induced, market environment, and domestic demand related drivers. It has also benefited from a well developed telecom infrastructure and growing internet penetration, the large pool of qualified IT professionals, a strong technical and research base and an entrepreneurial environment.

The outcome of these government and private sector initiatives is reflected in the rapid growth and increased market orientation of Brazil’s software industry since its liberalization in the 1990s, though international presence still remains limited. The country has moved up in the international rankings as

an exporter of software services. In 2005, it had 7,760 companies that were developing, manufacturing, and distributing software and services and this number had risen to over 8,500 in 2009.

However, several problems persist, as highlighted by a perception survey of companies and the government. A perception survey of software exporters in the country revealed that government impediments arising from excessive taxation, lack of adequate financing, and excessive bureaucracy and regulatory delays had constrained their participation in the global market. Slow government processes and lack of information about funding opportunities make it difficult for companies to avail financing which is actually available from government agencies, thus hurting their competitiveness. Although there are projects financed by government which are aimed at supporting exports, entrepreneurs are often not aware of these sources and funds remain unutilized. The survey also reveals that there are no focused strategies to help Brazilian software companies participate in international markets and to change the international perception of Brazil in the software industry despite its success in some niche areas. There is no initiative for the certification of Brazilian software. Many companies still lack CMM and ISO certification which is required for penetrating international markets. Thus, both resources and branding are lacking. Language also imposes barriers due to the low penetration of Portuguese language. Further, the high domestic demand creates an anti-export bias among companies. However, some Brazilian software companies are diversifying outside the region and entering the Asian market, including India and China. Hence, though the Brazilian software industry presents good opportunities, it has not yet been able to emerge as a reliable supplier of quality software products or alter its image globally.⁸¹

8.4 China: Promising and Well Performing Services

Several services show promise and have been increasing their competitiveness in China. One of these is transport and logistics services, a service subsector that is directly tied to the growth in China's manufacturing and export competitiveness. A second sector that is selected for discussion is distribution services, again related to the growing domestic market for consumption and production in China and highlighting the role of liberalization as a growth enabler. A brief overview of the trends and government policies in both these services is provided here.

8.4.1 Transport and logistics services

China's logistics sector has grown fast due to rapid expansion in industrial activity, growing domestic demand for goods and services, and improvements in transport infrastructure. Between 2004 and 2009, the sector grew annually by around 14 percent, accounting for 6.7 percent of GDP in 2009.⁸² Most of the logistics business has been driven by the movement of industrial goods. However, until recently, there were local barriers to entry and inadequate capital availability which were affecting the growth and efficiency of the logistics services segment in China. Recognizing the significance of transport and logistics services for wider economic growth, in recent years, the Chinese government has introduced measures to promote growth in this sector. These measures have been three-pronged.

The first focus area has been market liberalization in order to promote competition and efficiency. In 2005, as part of its WTO obligations, the government opened up the domestic logistics market to foreign investment in order to promote competition and efficiency. Prior to 2005, there were many restrictions on foreign enterprises in the logistics business. With the liberalization of this sector, a

⁸¹ Gouvea (April 2007)

⁸² KPMG (2010)

number of foreign companies have entered China's domestic logistics sector through acquisitions, joint ventures, subsidiaries and cooperation agreements, attracted by opportunities for market consolidation and efficiency improvements.⁸³

A second focus area has been administrative and institutional reforms as well as incentives. The government created a Ministry of Transport (formed by consolidating a number of government departments covering civil aviation, postal services, communications and urban public transportation) in 2008 so as to improve administrative efficiency and coordination among departments for policy formulation and implementation. A combination of regulatory measures was also laid down in the 11th Five Year Plan (2006-2010). In 2009, under the Plan on Restructuring and Developing the Logistics Industry, the government addressed issues such as high road tolls, high fines, limitations on the number of vehicles from certain cities and regions, and regulations targeted at trucks which were seen as affecting the competitiveness of the sector and raising operating costs.

More recently, the government has offered fiscal and administrative incentives to logistics enterprises. New guidelines were issued in 2011 to address problems relating to the high costs of logistics such as road tolls, uneven business tax rates and repeated taxation issues. These guidelines cover 9 areas including, reducing tax burdens on logistics enterprises; providing favourable land policies; promoting convenient vehicle transport; accelerating reform in logistics management; encouraging integration of logistics resources; boosting innovation and application of logistics technologies; increasing investment in the industry; giving priority to development of agricultural product logistics, and improving coordination among government departments. The government now plans to cut fees and road tolls by eliminating tolls on secondary roads, reduce toll gates, restrict the number of tollways, standardize business tax rates for the different parts of the logistics sector to avoid repeated taxation, develop national logistics parks with preferential policies, use old factory buildings and warehouses for logistics facilities construction, encourage logistics firms to go public and to become bigger through mergers and acquisitions and form alliances with small and medium sized firms, invest in construction of logistics infrastructure and provide capital support to key companies, and promote technology innovation in the industry. Thus, a wide range of regulatory issues have been addressed in this sector in recent years.⁸⁴

The third focus area of government policies has been to increase private (domestic and foreign) and public sector investment in this sector. Following the global financial crisis, the Chinese government in its fiscal stimulus package directed a large part of the funding towards infrastructure development. It introduced the Rejuvenating Programme for the Logistics Industry in February 2009 to support this sector's development over the 2009 to 2011 period. Five specific goals were laid down under this programme, including, supporting some large internationally competitive logistics enterprises; modernising the logistics service system and providing the use of new technologies; increasing the share of 3rd party logistics providers; increasing the scale of the industry and its value added contribution; and improving the operational efficiency and reducing the total logistics cost to GDP ratio for the economy. The government has also invested in building toll roads with provincial government funding and private sector investment. Road transport and logistics are being improved by extending the road network, introducing a highway development programme and improving safety standards. On the civil aviation front, there are projects to develop new airports and fleet expansion. The government has also been looking at the issue of carbon emissions, with the intent of incorporating green technology and

83 <http://www.chinaknowledge.com/Business/CBGdetails.aspx?subchap=4&content=19#Thirdpartylogistics3PLinChina> (accessed on October 17, 2011)

84 <http://www.china-briefing.com/news/2011/08/24/china-offers-new-incentives-to-logistics-industry.html> (accessed on October 17, 2011)

developing clean vehicle manufacturing capabilities through improvements in inland waterways and rail infrastructure so as to limit dependence on road transport and resulting carbon emissions. The railway network has received high priority with developments in the high speed rail network and additional investments in rail projects.

Although the government has liberalized the sector and promoted competition, it has also undertaken measures to safeguard the interests of domestic logistics companies. Under the Corporate Income Tax Law introduced in 2008, the government has levelled the playing field between domestic and foreign companies with a uniform tax rate. Preferential tax policies offered to foreign investors have been removed though industry specific tax incentives remain. In 2009, the government introduced a Law of Post in 2009 which gives China Post exclusive rights to deliver packages weighing less than 50 grams within cities and to deliver items less than 100 grams between cities. This was done to protect the interests of state owned express companies by not allowing foreign rivals from running the postal business in China.⁸⁵

The combination of regulatory measures and increased funding have led to consolidation and improved efficiency in this sector. There is a trend towards horizontal integration across provinces via mergers and acquisitions. Foreign players have expanded their activities. Regional hubs have emerged, operational systems have been upgraded and human resource capabilities have improved with increased training of logistics professionals. Domestic players have upgraded their facilities and improved their services to compete with foreign players, with some becoming dominant players at the regional level. Chinese shipping operators have also become more competitive over time with some companies ranking among the world's top fleets in terms of carrying capacity. Improved infrastructure in terms of expressways, airports, seaports and express transshipment centres, the establishment of regional logistics distribution centres, logistics parks, modern warehouses and improved distribution facilities have further helped the growth of the transport and logistics services sector in China.

However, the sector still remains fragmented and further consolidation is possible. Sources of capital are still limited for this industry and are mainly limited to government funding and bank loans. The role of capital markets and private equity would need to become more important over time. Many manufacturing enterprises still operate their own logistics business and are not willing to outsource to third party companies. Localized regulations continue to prevent the logistics system from covering the country and an integrated nationwide regulatory framework for the logistics industry is required.

8.4.2 Distribution services ⁸⁶

China's distribution services sector has emerged as a flexible and market driven sector ever since it was opened up as part of the country's accession process to the WTO. In 1992, China opened the distribution sector on a trial basis. Till then, foreign investors had been prohibited from establishing joint ventures or wholly owned foreign enterprises for conducting retail or wholesale business in the country. With its entry into the WTO, China committed to gradual liberalization of wholesale and retail services in a phased manner with the removal of almost all regulations by the end of 2004. It eliminated regulations concerning chain franchise systems and commercial trade, as well as limitations on foreign capital investment, zones, and volume to enable a more competitive environment. This led to the entry of new foreign retail and wholesale enterprises and increased FDI and rapid growth in this sector. Most of the 50 top global retailers have entered the Chinese market through commercial presence and many foreign

⁸⁵ KPMG (2010)

⁸⁶ This discussion is based mainly on Ying Fan (2010)

invested enterprises have established their distribution networks in China. The country has emerged among the top 10 internationalized retail market in the world. Foreign retailers have done very well in the hypermarket format.

This evolution of the sector from its earlier centrally planned and rigid nature has been aided not only by the opening up of the sector but an evolution of its regulatory framework and administrative reforms. Prior to 2003, the regulatory agency for this sector was the State Economic and Trade Commission under the State Council which was in charge of domestic trade. In 2003, this agency was combined with the Foreign Trade and Economic Cooperation Ministry into a single Ministry, the Ministry of Commerce to combine the responsibility for domestic and foreign trade under one government agency. Additional areas of regulation such as competition policy and WTO implementation were also brought under this single agency. Hence, this supervisory body was established to oversee all distribution services in China, while government departments at the local and provincial levels would monitor distribution services within their jurisdictions.

The earlier approval system was also changed. Prior to entry into the WTO in 2001, all applications were to be approved by the central government. However, many foreign retailers had entered the market by getting preferences from local governments, bypassing the central government's approval. As the central government had difficulty in monitoring the local governments and the activities of the retailers, this approval procedure was simplified and streamlined post WTO entry. The central government has since then delegated authority to the local governments wherein foreign retailers are required to get approval from the provincial government departments handling commercial affairs. The approval process requires the foreign retailers to meet certain conditions on size, number of stores, products distributed, and various regional and local restrictions. This delegation of the approval process to the provincial level was aimed at preventing the circumvention of approval procedures.

The government has also introduced certain laws and regulations to allow for a balanced development of the sector and has aimed at providing a level playing field between local and foreign firms. The whole approach has been gradual and phased, starting with a trial period and pilot schemes prior to entry and moving towards regulations covering a wider range of operations. These regulations have included administrative measures on foreign investment in commercial areas, retailers' promotion activities, rules on transactions, commercial franchise management, information disclosure, food safety, anti-monopoly, etc. Restrictions have been maintained on foreign equity participation limits, scope of operations, and form of participation and associated terms and conditions, such as requiring joint ventures to transfer management and technical expertise to local firms. Thus, the measures have clearly aimed at promoting more orderly and controlled growth without stifling competition so as to accelerate reforms in this sector and facilitate the introduction of modern practices to domestic retailers. This phasing in is also evident in China's WTO commitments in this sector wherein the scope, FDI limits and geographic and quantitative restrictions were to be liberalized gradually over the medium term. Since 2004, the restrictions on geographic location, ownership structure, and the number of stores imposed on foreign retailers have been removed. The focus of regulation has now shifted to aligning the establishment of new stores with the commercial development plans of cities and towards encouraging chain operators and expanding scale through mergers and acquisitions, asset restructuring, and franchising and other retail investments. Thus the measures have sought to promote consolidation and scale economies.

The sector has seen more rapid growth, increased efficiency, employment creation, upgrading of skills and improvements in management systems and practices as a result of liberalization. However, problems such

as fragmentation of the distribution market across different jurisdictions and disparity across regions, localized regulations and local protectionism continue to hurt the sector.

8.5 Russia: Potential High Growth Services

A review of service sector performance and policies for Russia indicates that there are no really successful services at present. However, there are areas where the country has potential given either its natural or human resource endowments. One such service is discussed here, namely, ICT services, in particular IT services, where Russia can benefit from its pool of highly skilled and qualified scientific and technical manpower (albeit small) and recent improvements in telecom infrastructure.

8.5.1 ICT services

The ICT sector is one of the most rapidly growing sectors in Russia, driven by growing domestic demand. Between 2010 and 2011, the ICT sector grew by 8.4 percent. The sector's growth is expected to exceed that of the overall GDP, thus contributing to a higher share of ICT services in the economy over time.

Within the ICT sector, although telecommunications constitute the largest segment in value terms, IT services have been the fastest growing and the most dynamic. The country exports a variety of IT services including applications development, applications outsourcing (maintenance and management), enterprise applications, research and development services, BPO, call centre services, infrastructure outsourcing services (data centre, desktop, storage, etc.), and embedded development and engineering services. Several leading captive centres of foreign enterprises are located in Russia. It has emerged among the top 10 in high skilled offshore IT services, voice integration, image recognition, virtualization, and mobile communication related software services.

Growth in IT services has been enabled by the establishment of Free Economic Zones which have provided investor friendly conditions for setting up IT businesses in Russia. The industry association, RUSSOFT, has also played an important role by lobbying the government for setting up IT parks, free economic zones, and an export promotion agency, as well as the introduction of better tax laws and a reduction in administrative barriers. The government has also focused on increasing the supply of IT specialists and aligning the professional education system with the needs of this industry to sustain its growth.

In addition to policies and incentives specifically oriented towards the development IT services, the government's overarching strategy for the development of an information society in Russia under its National ICT Policy has also facilitated the growth of the IT industry. The main objectives of this policy include establishment of up to date information and telecommunications infrastructure, using ICT for provision of healthcare and education, developing the training of skilled specialists in this area, and provision of high quality services. Public funding and support have constituted an important part of the National ICT Policy. Through its Federal Target Programme (FTP), the government has focused on improving and spreading the use of ICT with a budget of over 2 billion Euros.⁸⁷ Research and development has been a priority area under this programme. Several projects have been supported with significant amounts of public funding for advanced technologies in areas such as information processing, storage, transmission, software development, distributed computing and system technologies. Other large projects that have received federal funding support for R&D have been in areas such as service and software architecture, infrastructure and engineering, embedded systems design, and experimental facilities. The

⁸⁷ Markova (2009)

government had also introduced the Electronic Russia, 2002-2010 program with funding support for ICT development in areas of e-governance, e-learning and e-skills.⁸⁸

Growth in telecom services and the government's efforts to develop telecom infrastructure, increase internet and PC penetration, and open public internet access points have been an important contributor to the growth of the IT industry. The telecommunications sector has shown strong growth in the post 2000 period, with mobile telephony showing the most rapid growth. Telecom has been one of the thrust areas under a series of large Public Infrastructure Programmes launched by the government to improve infrastructure. The government has taken steps to modernize the telecom sector by expanding high speed internet access and telephony.⁸⁹ Under the WTO's Information Technology Agreement, it has agreed to allow imports of telecom equipment to enter the country duty free and will also allow foreign telecom companies to operate as 100 percent foreign owned enterprises.⁹⁰ As part of its accession, Russia has made a commitment to eliminate anticompetitive practices and cross subsidization between long distance and local calls, which implies de-monopolization of the incumbent operator, Rostelecom and to liberalize the market for long distance calls. (The long distance and international calls markets were liberalized in 2006). Russia has also permitted 49 percent foreign equity participation in the telecom sector (and in several other infrastructure services sectors). It has also begun to introduce supporting regulations and guidelines addressing interconnection issues, transparency and publicity of the licensing process, spectrum allocation procedures, and universal service obligation. Institutional reforms have also been initiated to enable a more efficient and transparent regulatory system in this sector.

However, many institutional, regulatory and infrastructural challenges still remain. At present, the Ministry for Information Technologies and Communications serves as a policymaker cum regulator and there is no independent regulator.⁹¹ The institutional framework has imperfections and suffers from a weak regulatory environment. The creation of an independent regulator, with defined duties and obligations based on telecom laws, is required. Although the quality of infrastructure is improving, it is lower in quality than in other advanced transition countries. Although there is growing competition in the telecom sector and many new entrants, in revenue terms, the main players in the fixed telecom market are still incumbent companies and thus the scope exists for increased competition. In the mobile telephony segment, light regulation has promoted growth. However, there are issues of anticompetitive behaviour from the larger players and fragmentation of the market due to a large number of regional and local operators.

8.6 Lessons from country experiences in the service sector

The preceding overview of the evolution of certain well performing or potentially promising services in the BRICS countries highlight the importance of policy orientation, modalities, targeting, comprehensiveness, balancing, recognizing synergies, and vision. Some of the common elements that emerge from these experiences are listed below.

⁸⁸ *ICT in Russia: R&D priorities, current situation, trends and forecast. Project Full title: Information Society Technologies to Open Knowledge Russia in Information Society Technologies to open Knowledge. Russia (2008)*

⁸⁹ *Ibid 87*

⁹⁰ *Report on The Russian Market: Opportunities for the U.S. Telecommunications Sector; Coalition for U.S. – Russia Trade. September 2010*

⁹¹ *The earlier Ministry for Communications was merged with the Ministry of Transport though in 2004, the government returned to two separate ministries for telecom and another for post and information technologies.*

- In all cases, government initiative and prioritization of the sector in the national development strategy has been important. This prioritization has usually taken the form of increased financing and subsidies to the sector, introduction of new export and investment schemes, setting up special zones, setting up or reform of regulatory and administrative frameworks to promote competition and efficiency and streamline processes, subsidies for R&D, development of supporting infrastructure, government procurement policies, and in some cases committing to liberalization and reforms under international agreements (GATS for example).
- There has been a conscious attempt to balance public policy objectives and commercial interests in the course of developing these services. Considerations of universal access, pricing, market segmentation, technology transfer, protection of nascent domestic players and creation of a level playing field between domestic and foreign firms have been important in the adoption of policies and legislative frameworks and thus shaping the growth of these services.
- Another important aspect that emerges is the role of supportive industry associations. The presence of influential, forward looking industry bodies, such as in the IT industry, has been important for the growth process.
- A combination of focused and comprehensive strategies has been successful. While particular segments or activities in a service industry have been targeted under government schemes, these have had to be supported by a comprehensive understanding of the synergies with other parts of the economy, such as the role of telecom infrastructure in developing the IT industry. Outcomes have been better where the approach has been comprehensive in terms of addressing related regulatory, infrastructural, financial, human resource and administrative issues in other supporting areas.
- Alignment of national and local/provincial goals and strategies as well as a mutually supportive relationship between the two levels of government also emerges as an important issue where much of the policy implementation and supervision is at primarily at the sub-federal level.
- Market structure and conditions of competition have also been an important factor in shaping success. Often, the presence of a fragmented industry combined with concentrated ownership has prevented competitiveness and realization of economies of scale. Regulatory measures to encourage consolidation and efficiency, while also ensuring competition from domestic and foreign players through FDI liberalization and competition policy, have been important. In this context, a step by step, phased strategy of promoting competition, such as by gradually lifting operating restrictions on geography or scope, seem to be successful in both signalling intent to liberalize and giving time for local players to improve their competitiveness and for authorities to bring in required supporting legislation and regulatory frameworks.

9. Policy conclusions and a roadmap for cooperation

The BRICS are an increasingly important group in the world economy, in terms of their contribution to global trade, investment, market size and labour force. The preceding discussion has examined to what extent this significance also holds in terms of their contribution to the global services economy and further to what extent there is unrealized potential for engagement among the BRICS, both commercially and through collaborative ventures, in the service sector. The analysis of trends in services output, employment,

exports and imports, FDI, and regulatory reforms and liberalization measures clearly indicates that there is potential for deeper commercial and cooperative engagement among these countries in the service sector. The following section summarizes the main findings of this paper and then highlights the specific sectors where there is scope for future engagement and also outlines the possible modalities for this engagement.

9.1 Summary of findings

The review of trends in services output and employment highlights the fact that there is considerable heterogeneity among the BRICS. Although they have all experienced a growing contribution of services to their economies and there is a general upward trend in their service growth trajectories, it is mainly India and China which have experienced rapid growth in services while the performance of the other BRICS has been moderate and less consistent. In terms of their trade performance, there is little evidence of improved competitiveness in services except in the case of India, whose service sector has become more export-oriented and competitive over the past decade, though this improvement is not broad based and is mainly on account of the growth in IT and IT-enabled services exports. For all the BRICS, excepting India, export competitiveness in merchandise exceeds that of services.

An examination of the sub-sectoral composition of services indicates that although services are not a key driver for exports for the BRICS, excepting India, there are complementarities among them in terms of their services export baskets. Some such services include travel and tourism services, construction services, and “other commercial services” such as computer and information services, consultancy services and various professional and technical services. Although the contribution of these miscellaneous business support services to overall services exports is small at present, these exports have been rising rapidly and their shares have increased considerably, while their significance in imports has also been growing, indicating potential complementarities and scope for trade among the BRICS in these services. Thus, there are prospects for greater engagement in both traditional services such as travel, transport, tourism and in emerging services such as ICT, business, and construction services. Moreover, as there is little overlap in their respective areas of strength, the complementarities appear to outweigh the likelihood of competition. However, there is convergent trend in the competitiveness indicators for subsectors such as IT and other business services which means that in future one can expect greater competition in such segments while in the traditional services, there is a divergent trend in their competitiveness indicators indicating that complementarities are likely to be stronger in such segments.

However, what emerges perhaps as the most important area for consideration is FDI, in light of liberalization and regulatory reform measures undertaken across a wide range of services (albeit to different degrees) in all the BRICS. Given the growing importance of the BRICS as both recipients and sources of FDI flows and the emergence of transnationals from BRICS countries, FDI can play an important role in fostering greater engagement among the BRICS. At present, intra-BRICS FDI is very limited, primarily focusing on extractive and natural resource based industries and IT services. However, the data on the nature of outward FDI from some of the BRICS suggests that although there is some degree of competition among them in attracting FDI into areas such as energy, transport and financial services, there is also complementarity among them in some of these same areas as well as other emerging areas such as business services. The emergence of Chinese transnationals in various infrastructure services, Indian multinationals in IT services, South Africa in financial services and the focus on diversification of export markets and increasing South-South cooperation creates opportunities for intra BRICS trade through commercial presence or mode 3, in the form of joint ventures, greenfield investments, and mergers and acquisitions as the transnational data for these countries confirms. The experience of some

of the BRICS also indicates that there are potential spillover effects from increased outward FDI in terms of generating demand for supporting business services from their firms and thus also cross border and other modes of exports of related services. Thus, greater engagement among the BRICS through the presence of their transnationals in each other's markets could also foster trade in supporting services through the other modes of supply.

But the analysis also indicates that although FDI promises to be one of the main modalities for fostering cooperation in services among the BRICS, the extent to which this can be realized would be shaped by their regulatory frameworks and the extent of market access granted as well as the post entry operating environment in the service sector of these countries. An overview of their regulatory regimes and liberalization trends indicates that there is considerable variation across the countries and across different services in terms of their market access and national treatment regulations, notwithstanding a general trend towards opening up more services, removing government monopoly and promoting domestic and foreign competition, and institution of independent regulators. Hence, greater cooperation through commercial presence in each other's markets would necessarily require further investment liberalization in many services, possibly enabled by preferential arrangements and bilateral investment treaties which cover services, and other complementary liberalization such as for movement of professionals and cross border services exports that are needed to support transnational activities.

An examination of the current level of participation by the BRICS through preferential trade arrangements covering services, however, indicates that barring India and China, services are not a focus area in their bilateral or regional agreements. Moreover, except India and China, the other three BRICS are more regionally focused. The existing bilateral or plurilateral arrangements involving two or more of the BRICS either do not cover services or are rather loose, informal arrangements more motivated by geopolitical strategic interests rather than specific areas of economic interest. Therefore, an appreciation of the possibilities for mutual benefit arising from integration through services appears to be lacking given the absence of broader service and investment inclusive agreements or bilateral investment treaties among the countries. The pattern of FTAs also shows that there is an asymmetry in interest among the BRICS in terms of pushing for such agreements. An examination of the commitments made by some of the BRICS in services under their RTAs with third countries also raises questions about whether any preferential arrangements among the BRICS would significantly enhance market access and remove other regulatory barriers in their service sectors. Typically, the BRICS have committed less in their RTAs than they have done unilaterally. Thus, ultimately the scope for cross-border FDI among the BRICS would hinge on their unilateral liberalization with any broad-based preferential agreements only providing some stability and predictability in the market conditions but probably not offering greater market access.

Apart from commercial engagement, the experience with reforms and development of the service sector in the different BRICS suggests that there is also potential for cross-country learning from each other's experiences. Successful services in these countries have involved proactive government policies, including support through financing and subsidies, export promotion schemes, R&D, supporting infrastructure, capacity building, human resources, government procurement, streamlining of administrative and regulatory frameworks, liberalization of FDI, and a cross-cutting approach to the development of the sector in terms of recognizing synergies with other parts of the economy, including other services. A supportive relationship with industry bodies also characterizes successful services.

9.2 Looking ahead

Much of what would be needed to foster greater cooperation among the BRICS in the service sector would result from the general process of further liberalization and regulatory reforms in these countries, their growing integration with world services markets, and increased thrust on the part of their governments to promote the service sector and its competitiveness in international markets. However, in order to accelerate the pace of engagement among them, specific steps can be taken proactively.

There are three broad elements that should be part of such a proactive strategy to enhance greater cooperation among the BRICS. These elements relate to establishing or expanding trade agreements to include services, enhancing investment flows in services by addressing investment barriers and through bilateral investment agreements, and cooperating in skill and human resource development to make the service sector competitive. The thrust of the strategy in each of these areas is outlined here. A detailed and comprehensive strategy is, however, not provided as the latter would need to be conditioned by political feasibility and geo-strategic factors.

TRADE AGREEMENTS

The starting point for increasing cooperation could be to widen the provisions of existing trade or other agreements among some of the BRICS to cover the service sector. Hence, arrangements such as the India-Mercosur FTA, the India-SACU FTA and other prospective FTAs involving one or more BRICS could be widened to include services. In addition, the possibility of extending the ambit of initiatives such as IBSA to cover services or related cross-cutting issues can also provide an impetus to service sector cooperation among these countries. A further step in this regard would be to ensure that services of interest are committed and enhanced market access opportunities are realized under these agreements. It would also be important to recognize the synergies between goods trade and services and to explore the scope for using the provisions covering goods under these agreements to create opportunities for trade in related services.

INVESTMENT PROMOTION

A second step would be to encourage cross-border FDI in services through bilateral investment treaties, preferential access under agreements, and through information dissemination about market opportunities in other BRICS. Both industry and government can play an important role by organizing visits of delegations to each other's countries, conducting feasibility studies regarding each other's markets and business opportunities, identifying specific sectors/niche areas for engagement, and through administrative cooperation in terms of creating points of contact and enquiry and streamlining approval and clearance processes. To some extent, the limited level of intra-BRICS engagement today is a reflection of the lack of information and understanding about each other's services markets and both industry and government have to participate to address this problem. The involvement of both industry associations (overarching bodies representing industry interests) as well as service industry specific associations (such as for the IT industry) in the different BRICS countries would be required. It is important to note, however, that cooperation through investment flows would require cooperation on a variety of other cross-cutting issues, in particular, those of taxation, movement of persons, and possibly also subsidies and government procurement policies.

SKILL AND CAPACITY BUILDING

Given the importance of skill and capacity building for developing competitiveness in services, another useful and less contentious area for cooperation would be through training and skill development

programmes and even joint research and development activities. In areas such as IT services, project management, engineering, and various professional and technical services, there is scope among the countries to conduct joint studies and training programmes, to foster tie-ups between industry and educational institutions across the countries and to develop pilot programmes in niche areas. Such initiatives would need the financial and administrative support of concerned government ministries and logistical, financial and other supports from concerned industry bodies for developing such partnership schemes and pilot initiatives.

9.3 Concluding thoughts

None of these three elements outlined above are independent of the other. They need to be undertaken in consonance. But more importantly, none of these initiatives can succeed unless governments see the service sector as a sector of strategic importance and unless the governments see the BRICS group as an economic entity worth engaging with.

On this last point there can be some debate. Given the asymmetries in size, especially the growing structural disparity between China and the other BRICS, the differences in their geographic orientation, the inability of the BRICS thus far to come together and take a common stand on important global issues and most importantly, given the growing concerns over China's dominance as reflected in Brazil's fears over the influx of Chinese investment and cheap Chinese imports or Russia's fears over China's growing presence in its neighborhood, is a cooperative future likely? The heterogeneity that is evident in the performance and structure of these economies also raises another important point. One needs to step back and ask, is the concept of the BRICS as an economic entity actually meaningful and relevant?

APPENDIX

Outward Investment by the BRICS

TABLE A1: CHINA: MAIN M&A DEALS, BY OUTWARD INVESTING FIRM, 2007-2009 (US \$MN)

Year	Acquiring company	Target company	Target industry	Target economy	Shares acquired (%)	Transaction value
2009	China Investment Corp (CIC)	Nobel Oil Group	Oil and gas	Russia	45	300
2009	Fullbloom Investment Corp	KazMunaiGas Expl & Prodn JSC	Oil and gas	Kazakhstan	11	939
2009	China Investment Corp (CIC)	Noble Group Ltd	Investment	Hong Kong, China	15	854
2009	Investor Group	Cathay Pacific Airways Ltd	Transportation	Hong Kong, China	14.5	948
2009	China Investment Corp (CIC)	Goodman Group	Property development	Australia	8	396
2009	China CITIC Bank Corp Ltd	CITIC Intl Finl Hldg Ltd	Investment	Hong Kong, China	70.3	403
2009	Investor Group	OAQ Mangistau Mun-aiGaz	Oil and gas	Kazakhstan	100	2,604
2009	ICBC	Seng Heng Bank	Finance and insurance	Macau, China	20.1	149
2008	CITIC Group Ltd	CITIC Pacific Ltd	Conglomerate	Hong Kong, China	39.9	1,500
2008	Sinopec	Tanganyika Oil Co Ltd	Oil and gas	Canada	100	2,029
2008	CITIC Group Ltd	CITIC Intl Finl Hldg Ltd	Investment	Hong Kong, China	15.2	855
2008	China Merchants Bank Co Ltd	Wing Lung Bank Ltd	Finance	Hong Kong, China	53.1	2,474
2008	China Merchants Bank Co Ltd	Wing Lung Bank Ltd	Finance	Hong Kong, China	44.7	2,082
2008	China Life Insurance Co Ltd	Visa Inc	Financial services	United States	n.a.	300
2008	Sinopec Intl	AED Oil-Expl Permits (3)	Oil and gas	Australia	60	556
2008	SINOCHEN Petro Expl & Prodn	SOCO Yemen Pty Ltd	Oil and gas	Australia	100	465
2008	ICBC	Standard Bank Group Ltd	Banking	South Africa	20	5,617
2008	ICBC	Seng Heng Bank	Finance and insurance	Macau, China	19.9	593
2007	Ping An Ins (Grp) Co of China	Fortis SA/NV	Financial services	Belgium	4.2	2,672
2007	China Investment Corp (CIC)	Morgan Stanley	Financial services	United States	9.9	5,000

2007	CDB	Barclays PLC	Banking	United Kingdom	3.1	2,980
2007	Xinjiang Zhongxin Resources	Mortuk Oilfield	Oil and gas	Pakistan	100	250
2007	China Investment Corp (CIC)	Blackstone Group LP	Investment advice	United States	9.9	3,000
2007	Sinochem Petro Expl & Prodn	New XCL-China LLC	Oil and gas	United States	100	228
2007	China Mobile Commun Corp	Paktel Ltd	Telecommunications	Pakistan	88.9	284
2007	CapitaRetail China Dvlp Fund	Capita Retail China	Real estate investment trusts	Singapore	100	260
2007	Absolut Invest AG	Absolut Europe AG	Investment advice	Switzerland	87.1	288
2007	Air China Ltd	CNAC	Transportation	Hong Kong, China	31.6	378

Source: Davies (2010), Annex Table 6, p.p. 12-13 http://www.vcc.columbia.edu/files/vale/documents/China_OFDI_final_Oct_18.pdf.

TABLE A2: CHINA: MAIN GREENFIELD PROJECTS, BY OUTWARD INVESTING FIRM, 2008-2009 (US \$MN)

Year	Investing company	Industry	Host economy	Investment value
2009	State Grid Corporation	Alternative/renewable energy	Malaysia	271
2009	China Petroleum and Chemical (Sinopec)	Coal, oil and natural gas	Russia	220
2009	China North Industries Group (NORINCO)	Building and construction materials	Russia	616
2009	China National Petroleum (CNPC)	Coal, oil and natural gas	Sudan	1,701
2009	China National Petroleum (CNPC)	Transportation	Myanmar	165.8
2009	China Huaneng	Alternative/renewable energy	Singapore	1,431
2009	China National Petroleum (CNPC)	Coal, oil and natural gas	Costa Rica	1,000
2009	China Shenhua Energy Company	Coal, oil and natural gas	Indonesia	331
2009	China National Petroleum (CNPC)	Coal, oil and natural gas	Chad	472
2009	Beijing Vantone Real Estate	Real estate	United States	189
2009	China Southern Power Grid	Alternative/renewable energy	Cambodia	300
2009	China National Petroleum (CNPC)	Coal, oil and natural gas	Oman	1,656.80
2009	China National Petroleum (CNPC)	Coal, oil and natural gas	Iran	1,760.00
2008	Shenzhen Energy Group	Coal, oil and natural gas	Nigeria	2,400
2008	China National Petroleum (CNPC)	Coal, oil and natural gas	Chad	1,587
2008	Sinohydro	Alternative/renewable energy	Zambia	400
2008	China Petroleum and Chemical (Sinopec)	Coal, oil and natural gas	Iran	1,206
2008	Khai De International Group	Real estate	Vietnam	300
2008	Citic Group	Real estate	Angola	3,535
2008	Sunshine 100 Groupo	Real estate	Philippines	362

2008	Fujian Longlin Group	Building and construction materials	Philippines	300
2008	Zhonghao Overseas Construction Engineering Limited	Building and construction materials	Nigeria	362
2008	China Petroleum and Chemical (Sinopec)	Coal, oil and natural gas	Vietnam	4,500
2008	China National Petroleum (CNPC)	Coal, oil and natural gas	Turkmenistan	414
2008	China Telecommunications	Communications	United States	500
2008	China National Petroleum (CNPC)	Coal, oil and natural gas	Niger	1,587
2008	China Petroleum and Chemical (Sinopec)	Coal, oil and natural gas	Saudi Arabia	1,657
2008	China National Petroleum (CNPC)	Coal, oil and natural gas	Venezuela	502
2008	Datang International Power Generation	Alternative/renewable energy	Kazakhstan	860
2008	China National Petroleum (CNPC)	Coal, oil and natural gas	Syria	1,500
2008	China Power Investment	Coal, oil and natural gas	Myanmar	670
2008	China National Petroleum (CNPC)	Coal, oil and natural gas	Turkmenistan	2,200

Source: Davies (2010), Annex Table 7, pp. 14-16 http://www.vcc.columbia.edu/files/vale/documents/China_OFDI_final_Oct_18.pdf.

TABLE A3: INDIA: MAIN M&A DEALS, BY OUTWARD INVESTING FIRM, 2007-2009

Year	Acquiring company	Target company	Target industry	Target economy	Shares acquired (%)	Value (US\$ billion)
2008	Oil and Natural Gas Commission	Imperial Energy	Energy and power	United Kingdom	100%	2.8
2007	Suzlon Energy	REpower Systems	Energy and power	Germany	66%	1.7
2008	GMR Infrastructure	Intergen	Energy and power	Netherlands	50%	1.1
2008	HCL-EAS	Axon Group	IT & ITES	United Kingdom	100%	0.8
2007	Wipro Technologies	Infocrossing	IT & ITES	United States	100%	0.6
2007	Rain Calcining	CII Carbon	Energy and power	United States	100%	0.6
2007	DS Constructions	Globeleq (Latin America business)	Energy, power, and infrastructure	Bermuda	100%	0.6
2008	Tata Consultancy Services	Citigroup Global Services	IT & ITES	United States	100%	0.5
2007	Videocon/Bharat Petro Resources	Encana Brasil Petroleo	Energy and power	Brazil	50%	0.4
2007	Firstsource Solutions	MedAssist Inc	IT & ITES	United States	100%	0.3
2007	Reliance Communications	Yipes Holding Inc	Telecommunications	United States	100%	0.3

2009	Essar Group	Warid Telecom (Uganda/Congo ops)	Telecommunications	Uganda/Congo	51%	0.2
2009	Inox India	Cryogenic Vessel Initiatives	Logistics	United States	51%	0.1
2009	S. Kumar's	Hartmarx Corporation	Textiles and apparels	United States	100%	0.1

Source: Premila Nazareth Satyanand and Pramila Raghavendran (2010), http://www.vcc.columbia.edu/files/vale/documents/Profiles_India_OFDI_September_22_Final_0.pdf Annex Table 6, p.15

TABLE A4: RUSSIA: MAIN GREENFIELD PROJECTS, BY OUTWARD INVESTING FIRM, 2007–2010

Years	Company	Destination	Industry & project	Value realized by the end of 2010 (US\$ million) a
Since 2008	Sistema	India	Telecommunications — SSSL – 73.7% of shares (Pan-India CDMA mobile telephone communications)	~ 2,000 b
Since 2007	Magnitogorsk Iron & Steel Works (MMK)	Turkey	Construction of two steel works and infrastructure by joint company MMK Ataka (MMK controls 50%)	~ 1,000 c
Since 2010	National Oil Consortium (five equal partners: Rosneft, LUKOIL, Gazpromneft, TNK-BP, and Surgutneftegas)	Venezuela	PetroMiranda – 40% of shares (oil exploration in the field Junin-6)	600
Since 2008	Russian Railways	Libya	Infrastructure connected with the construction of railways	~ 350 d
Since 2010	LUKOIL	Iraq	West Qurna 2 oil field (56.3% of shares in this project)	300
2008–2009	VimpelCom	Vietnam	GTEL-Mobile – 40% of shares (start of GSM 1800 mobile telephone communications)	267
Since 2008	Gazprom	Austria	Construction of the second bloc of gas-holder Heidach (first one was ready in 2007)	~ 250 e
2007–2010	Gazprom	Armenia	Construction of the fifth bloc of Razdan power station	194
2007–2009	Zarubezhneft	Bosnia and Herzegovina	Development of petroleum subsidiary (reconstruction and modernization of refinery and petrochemical destroyed during a civil war, as well as development of petroleum retail network)	171
2007–2010	Metalloinvest	United Arab Emirates	Construction of steel plant Hamriyah Steel (Metalloinvest controls 80% of shares)	150

Sources: Alexey Kuznetsov (2011), Annex Table 7, p. 20 <http://www.imemo.ru/en/comments/Kuznetsov020811.pdf>

a The symbol '~' indicates that the amount is an author's estimate.

b On the eve of the global crisis, Sistema planned to invest between US\$ 4 billion and US\$ 7 billion, or even US\$10 billion, up to 2017–2020 in Indian telecommunications. In 2009, Sistema scaled down its plans.

c The project was announced in May 2007. Construction took place between July 2007 and March 2011. The total joint investment of the Russian and Turkish partners was US\$ 2.1 billion.

d Russian Railways established a subsidiary and signed a contract in spring 2008 for the construction of railways in Libya. The price of the contract was € 2.2 billion (i.e. about US\$ 3 billion). By the time the civil war broke out

- in 2011, about 10–15% of the investment had been made. At the end of 2010, the largest completed object was a rail-welding plant in Ra's Lanuf.
- e Gazprom, its German subsidiary Wingaz and the independent German partner RAG built the second block of the gas-holder between the end of 2008 and the beginning of 2011. The total investment was € 300 million, i.e. about US\$ 400 million.

TABLE A5 PRESENCE OF REGULATIONS ON FOREIGN ENTRY AND/OR OWNERSHIP LIMITS¹

Sectors	Countries where regulations are reported
Agriculture and fisheries	Brazil, Canada, Chile, China, Czech Republic, Denmark, France, Iceland, India, Ireland, Japan, Korea, Mexico, New Zealand, Norway, Poland, Russia, Sweden, US
Broadcasting and/or print media	Australia, Brazil, Chile, China, Canada, France, Germany, Greece, India, Italy, Korea, Mexico, Norway, Poland, Russia, Spain, Switzerland, Turkey, UK, US
Defence and/or aerospace	Australia, Austria, Brazil, Chile, Denmark, Finland, France, Germany, India, Korea, Russia, Spain
Energy	Austria, China, Iceland, Korea, Switzerland, US
Financial services	Australia, Brazil, Canada, China, Czech Republic, France, Germany, Greece, Hungary, Iceland, India, Ireland, Italy, Korea, Mexico, New Zealand, Norway, Poland, Portugal, Russia
Natural resources	Brazil, China, Greece, Iceland, India, Japan, Mexico, Norway, Russia, Spain, Switzerland, Turkey, US
Nuclear energy and materials	Australia, Brazil, Canada, Finland, India, Korea, Russia, Switzerland, US
Accountancy and/or legal services	Austria, Belgium, China, Denmark, Finland, France, Greece, Mexico, Norway, Spain, Sweden, Turkey
Real estate	Australia, Austria, Brazil, Chile, China, Denmark, Finland, Greece, Hungary, Iceland, India, Mexico, New Zealand, Norway, Poland, Switzerland, Turkey
Telecommunications	Australia, Brazil, Canada, Chile, China, Iceland, India, Italy, Japan, Korea, Mexico, New Zealand, Russia, Sweden
Air transport and/or shipping	Australia, Austria, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, India, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Russia, Slovak Republic, Spain, Sweden, Switzerland, UK, US
FDI by state-owned entities	Australia, Iceland, Mexico, Spain, Turkey
General "screening and/or ownership cap" mechanisms	Australia, Canada, China, Iceland, India (substantially reformed), Mexico, New Zealand
National security or public order screening measures	France, Japan, Korea, Mexico, US

Source: *Modifications of OECD Countries' Positions under the Codes of Liberalisation of Capital Movements and Current Invisible Operations*, OECD Investment Division, July 2009; *National Treatment of Foreign-Controlled Enterprises*, OECD, July 2009; *Freedom of Investment, National Security and "Strategic" Industries*, OECD, 2007; *OECD Investment Policy Reviews*, and national sources

Note: ¹ The table provides examples of countries where regulations have been identified from various sources. It is not intended to be a complete assessment of international practice.

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