

Ghosh, Jayati; Havlik, Peter; Poplawski-Ribeiro, Marcos; Urban, Waltraut

**Research Report**

## Models of BRICs' Economic Development and Challenges for EU Competitiveness

wiiw Research Report, No. 359

**Provided in Cooperation with:**

The Vienna Institute for International Economic Studies (wiiw) - Wiener Institut für Internationale Wirtschaftsvergleiche (wiiw)

*Suggested Citation:* Ghosh, Jayati; Havlik, Peter; Poplawski-Ribeiro, Marcos; Urban, Waltraut (2009) : Models of BRICs' Economic Development and Challenges for EU Competitiveness, wiiw Research Report, No. 359, The Vienna Institute for International Economic Studies (wiiw), Vienna

This Version is available at:

<https://hdl.handle.net/10419/204131>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# Research Reports | 359 |

December  
2009

*Jayati Ghosh, Peter Havlik, Marcos P. Ribeiro and  
Waltraut Urban*

## **Models of BRICs' Economic Development and Challenges for EU Competitiveness**





Jayati Ghosh is Professor at the Centre for Economic Studies and Planning, School of Social Sciences, Jawaharlal Nehru University, New Delhi, India. Peter Havlik is Deputy Director of the Vienna Institute for International Economic Studies (wiiw). Marcos P. Ribeiro was Researcher at the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII) while conducting the study and is now Economist at the International Monetary Fund (IMF). Waltraut Urban is Senior Research Economist at wiiw.

An earlier version of the paper was prepared in the framework of the service contract with the EU Commission B2/ENTR/05/091-FC. (See also website at <http://ec.europa.eu/enterprise>.) The opinions expressed are those of the authors only and do not represent the Commission's official position.

*Jayati Ghosh,  
Peter Havlik,  
Marcos P. Ribeiro and  
Waltraut Urban*

**Models of BRICs'  
Economic Development  
and Challenges for EU  
Competitiveness**



# Contents

<i>Abstract</i> .....	<i>i</i>
1 Introduction .....	1
2 Brazil .....	3
2.1 Political, economic and social structure.....	3
2.2 The Brazilian Development Model at a glance .....	6
2.3 Sectoral analysis .....	9
2.4 Future prospects and challenges .....	12
2.5 EU-Brazil relations.....	15
2.6 Conclusions .....	17
References .....	17
3 Russia.....	19
3.1 Introduction.....	19
3.2 GDP growth and the ambivalent role of energy.....	20
3.3 Future prospects and challenges .....	24
3.4 Challenges for EU-Russia relations.....	29
3.5 Directions of EU-Russia relations.....	31
References .....	32
4 India .....	35
4.1 Background .....	35
4.2 Recent patterns of economic growth.....	37
4.3 Employment and the labour market .....	39
4.4 Education and employability .....	40
4.5 Economic policies.....	41
4.6 External trade and investment.....	42
4.7 Infrastructure.....	44
4.8 Telecom.....	45
4.9 Future prospects .....	46
4.10 EU-India relations.....	47
References .....	48
5 China.....	49
5.1 Background .....	49
5.2 Relative size of the Chinese economy .....	49
5.3 Strong fragmentation of the economy .....	49
5.4 Model of economic development.....	51
5.5 A more detailed picture of the Chinese economy at sectoral level.....	58
5.6 Future prospects and challenges .....	61
5.7 EU-China relations .....	63
References .....	64
6 Future challenges and opportunities for EU competitiveness .....	65
7 Summary results .....	67
Annex .....	70

## List of Tables, Figures and Boxes

Table 4.1	Structural change in the Indian economy.....	38
Table 4.2	Growth rates of employment (per cent change per annum) .....	39
Table 4.3	Infrastructure deficits by sector and Eleventh Plan physical targets .....	44
Table 5.1	Structure of manufacturing industry in China and in the EU27, 2006/2007.....	59
Table A1	List of indicators for BRICs, year 2007 .....	70
Figure 2.1	Population and economic geographical concentration.....	3
Figure 2.2	Brazilian official interest rate and exchange rate .....	7
Figure 3.1	Selected economic achievements of the Putin era.....	21
Figure 3.2	Russia's external sector and oil prices .....	21
Figure 3.3	Russian GDP growth and contributions of main components.....	22
Figure 3.4	Nominal and real rouble exchange rates .....	23
Figure 3.5	Economic growth by sectors, 2002-2008 (2002 = 100).....	25
Figure 3.6	Unit Labour Costs (ULC) in Russia: growth and contributions of key components, annual averages in %, 2000-2008 .....	28
Figure 5.1	GDP, exports and imports of China, 1978 = 100.....	54
Box 5.1	Managing China's foreign exchange reserves.....	56

## **Abstract**

*The term BRICs puts under a common label the four largest fast growing emerging countries: Brazil, Russia, India and China. The BRICs show many common features, such as big land size, large population, fast economic growth etc., but important differences as well, due to their different models of economic development and resources endowments. In this report, we discuss the different models of economic development of the individual BRIC countries, with a special focus on their external relations (trade, FDI) and on likely future developments. Brazil is a domestically oriented service economy; Russia's economic development is heavily dependent on energy and raw material resources; the Indian economy is essentially service-led, supported by exports; and China's economic development is driven by manufacturing exports and investment. Finally, we explore the resulting future challenges and opportunities for EU competitiveness.*

**Keywords:** *economic development, Brazil, Russia, India, China, European Union, competitiveness*

**JEL classification:** *G01, O21, O53, O54, O57*





## **Models of BRICs' economic development and challenges for EU competitiveness**

### **1 Introduction**

The BRICs show many similarities in their interactions with the EU, but significant differences as well. The major reason behind the latter is that they are following different models of economic development. In brief, Brazil is a domestically oriented service economy; Russian economic development is heavily dependent on energy and raw material resources; the Indian economy is essentially service-led, supported by exports; and China's economic development is driven by manufacturing exports and investment. Nevertheless, looking at the more recent policies of the BRICs and their development plans for the future, a certain 'convergence' of strategies across all of them can be observed. The different characteristics of the models of economic development in the individual BRICs lead to different challenges and opportunities for EU competitiveness and respective policy implications.

In this report, we analyse the economic characteristics and major determinants of economic development for each individual BRIC country, with a focus on parameters relevant to external relations, in particular with the EU. These include, for instance, market size, income levels and distribution, age structure, the role of the government, the institutional framework, exports and imports, the foreign direct investment regime, the exchange rate system, the relative importance of private consumption and investment and of different sectors in the economy, labour markets, the education and research system and the quality of infrastructure. Special emphasis is put on future developments, and the impacts of the current global financial and economic crisis are taken into account as well. A special subsection points out the major future challenges and opportunities for EU competitiveness. After summarizing the results, some implications for EU policies are discussed. The Annex provides an extensive list of indicators for the individual BRICs, allowing for cross-country comparisons at a glance.





bodies and institutions, even though some limitations persist having a negative effect on governance, human rights and citizens' security.

The country's President acts simultaneously as Head of State and of the Federal Government.<sup>5</sup> Each State has a State legislature and a directly elected Governor, who heads the State executive and appoints its members. The Constitution provides for an independent judiciary.

In recent years, Brazil has been implementing an increasingly assertive foreign policy, playing an active role in multilateral fora and positioning itself as a representative of emerging countries and as a staunch defender of poorer countries, particularly in Africa. The country is a member of the G-20 group of richest nations, leading the reforms and global responses to the current financial crisis.

Brazil plays further a key political role within Mercosur – and the EU-Mercosur association negotiations – pushing for the negotiation of free trade agreements with third countries and for the extension of Mercosur. The country has been an active promoter of the South American Community of Nations,<sup>6</sup> and has signed trade agreements with Mexico. Further agreements of this type are planned with countries such as Morocco and Egypt.

Brazil has also diversified its bilateral relations, establishing closer links with other regional powers such as India, China, Russia or South Africa but also with Arab or African countries, while maintaining balanced relations with the USA and the European Union.

### *Economic situation*

Brazil is classified as an upper-middle-income country with a GDP of EUR 973 billion and a GDP per capita of approximately EUR 5140 (EUR 7839 measured at PPP) in 2007, being the world's 8<sup>th</sup> largest consumption market in 2007. In that year the Brazilian economy ranked 10th worldwide. Services accounted for about 66% of Brazil's GDP, industry for 28% and agriculture for 6%.

From 2000 to 2007, the average GDP growth rate has been around 3.4%.<sup>7</sup> Although this average rate is low compared to those of other BRICs, for more than two decades the country has not experienced such an extended period of stable and continuous growth (Hausmann, 2008). In 2008, even with the impact of the financial crisis in the last quarter, the Brazilian GDP grew by 5.2%.

---

<sup>5</sup> Brazil's current President is Luiz Inacio 'Lula' da Silva, who was first elected in 2003. He is in his second mandate, ending in 2010.

<sup>6</sup> The South American Community of Nations was established at the 3rd South American Nations Summit in Cuzco in December 2004. This new regional integration system brings together all the countries of the South American continent, i.e. all Mercosur and Andean Community (CAN) member countries plus Chile, Suriname and Guyana.

<sup>7</sup> This rate has been higher more recently. The Brazilian growth rate of real GDP was 5.7% in 2007 and 5.18% in 2008.

In recent years, the country has also recorded significant trade surpluses and exports have contributed positively to Brazil's GDP growth (net exports corresponded to 3% of GDP in 2007). This export expansion has been accompanied by a rising importance of non-traditional export markets such as China, whose market share trebled from the year 2000 to reach more than 6%. Exports have been led mainly by agricultural commodities, meat, transport equipment (including automotive and aircraft),<sup>8</sup> and iron and steel. Significant productivity gains have been made in the agricultural sector turning Brazil into a major agricultural power.<sup>9</sup>

Regional trade, however, is far below its potential with a strong disequilibrium favouring Brazil (MDIC, 2008). After the Brazilian devaluation of 1999 and even more so after the Argentinean abandonment of its currency-board foreign exchange regime, Mercosur's share in Brazilian exports fell to 5.5% in 2002 and increased again to 9.1% in 2004. There exist some projects of industrial cooperation with Venezuela and Cuba, but with most of the countries the production networks are undeveloped and the regional scale potential underutilized. Moreover, infrastructure in the region is deficient, limiting the trade expansion.

Regarding foreign direct investment (FDI), Brazil is the second largest recipient of net FDI among the emerging markets just after China. In 2007 the total amount of FDI inflows reached EUR 24.6 billion and in 2006 EUR 17.8 billion. The US is the country with the highest inward stock (EUR 37.5 billion), but the EU is the largest foreign investor in the country, with a stock of EUR 88 billion. Brazil invested in the EU EUR 1.1 billion in 2006 and has an outward stock of FDI of EUR 43 billion.

Most of the inward FDI at the beginning of the 1990s occurred via M&As due to privatizations, mainly in public services and telecommunications. Thus, they were not focused on industrial production. However, in the second half of the 1990s (from 1996 to 1999) the inflow of FDI to the Brazilian industry jumped from EUR 1.24 billion to EUR 5.11 billion.

Brazil is also Latin America's largest energy consumer, accounting for over 40% of the region's consumption. Its energy mix is one of the cleanest in the world, and the country is expected to continue to rely on hydropower to meet most of its power-generation needs.<sup>10</sup> In 2005, Brazil was the world's 15th largest oil producer, with proven reserves of 11.2

---

<sup>8</sup> EMBRAER is one of the world leaders for the design, manufacturing and sale of aircraft for the commercial and defence markets.

<sup>9</sup> Brazil is the world's No 1 producer and exporter of sugar, coffee and orange juice, a leading exporter of tobacco, bovine meat and poultry, and No 2 soy exporter.

<sup>10</sup> According to FAO (2007) currently more than 45% of all energy consumed in Brazil comes from renewable sources, reflecting the combined use of hydroelectricity (14.5%), and biomass (30.1%). See also Poplawski Ribeiro and Sgard (2008).

billion barrels (IEA, 2006); whereas bioethanol represented 40% of the light fuels consumed. Oil reserves increased nearly eightfold from 1980 to 2005. About 85% of them are located in offshore fields, increasingly from deep- and ultra-deep waters, which have yielded significant recent discoveries (IEA, 2006).<sup>11</sup>

## **2.2 The Brazilian Development Model at a glance**

After a period of economic stability and growth in the 1970s – the period of the so-called ‘Brazilian Miracle’ – the country suffered from hyperinflation and macroeconomic volatility in the ‘Lost Decade’ of the 1980s due to the external debt crisis in 1982.

At the beginning of the 1990s, growth was again erratic and the period was marked again by instability and inflation. In 1994, however, Brazil adopted the ‘Plano Real’ and succeeded in controlling inflation, aligning its currency, the *real*, with the US dollar. However, the combination of the fixed exchange rate with a loose fiscal policy in the second half of the 1990s caused a persistent deterioration of the trade balance, culminating in a major balance of payments crisis in January 1999.

The country was then forced to negotiate an adjustment programme with the IMF and launched a package of structural reforms to restore macroeconomic balances. These included the adoption of a floating exchange system for the real, an inflation-targeting regime, and a tight fiscal policy including a Fiscal Responsibility Law.

The new administration that came to power in 2003 is maintaining the prudent macroeconomic policy that Brazil has been implementing since 1999. The new government committed itself to keeping a firm grip on inflation, and managed to achieve high primary surpluses.

Lower inflation rates have permitted a partial reduction in interest rates (see Figure 2.2)<sup>12</sup>, which, in turn, set in motion a significant credit expansion in the country. This credit boom, allied by successful social programmes implemented by Mr. Lula da Silva, increased the purchasing power of the poorest strata of Brazilian society.

The resulting rise in household consumption together with an increase in investment and public spending explain to a large part the recent steady and positive GDP growth in Brazil. The external demand for Brazilian products, in particular for its commodities, and the increase of their international price have also been main determinants of the GDP growth.

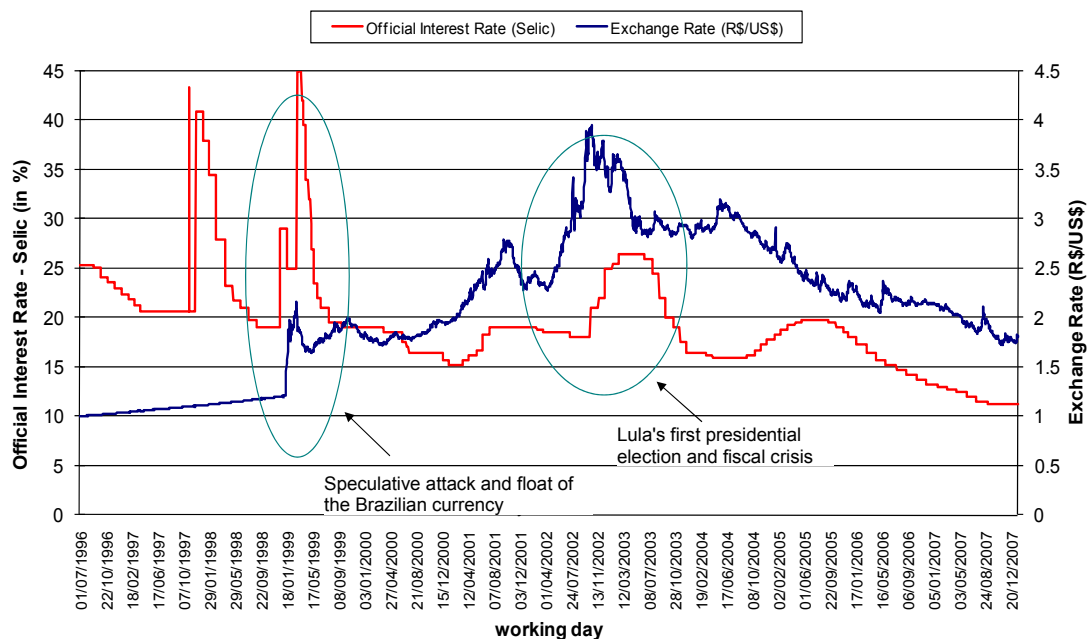
---

<sup>11</sup> Brazil has also the seventh largest uranium reserves in the world, of which 57% are ‘reasonably assured’.

<sup>12</sup> Note, however, that at the end of 2008 the Brazilian real interest rate was at 7.5% – the 13.75% target (nominal) interest lending rate minus the annual inflation of 6.25% – thus still being the second highest of the world. Turkey had the world's highest real interest rate at 7.55%. In March 2009 the nominal interest rate fell to 11.25%.

Figure 2.2

### Brazilian official interest rate and exchange rate



Source: Brazilian Central Bank.

The cautious economic policy also prompted a steep fall in the public debt/GDP ratio (to 35.8% in December 2008), allowing Brazil to repay all its liabilities to the IMF. The structure of its debt has also improved, with a smaller share of total debt now being denominated in foreign currency. However, the government's primary surpluses have been achieved mainly by raising revenues, i.e. increasing the tax burden.<sup>13</sup>

For the country, the success of President Lula's economic policy has meant a very important change. A great problem Brazil had been facing for many years was the ever present spectre of a change of government that could suddenly turn economic policy upside down. This threat has disappeared and wider horizons for long-run economic decision making are being open, as a major political risk has been left behind (Paiva Abreu and Werneck, 2008).

However, several problems still persist. The sustainable rate of growth in Brazil at present is below 5%. For Hausmann (2008) this is surprisingly low, in particular given the nearly 2% increase in the working-age population; the rise in female labour force participation; the advancing urbanization; and the trend towards greater average schooling of the labour force.

<sup>13</sup> Brazil's fiscal revenue ratio was close to 35% of GDP in 2005.



Public investment in infrastructure is also low. It has decreased in relative terms to GDP, particularly for transport. Between 1995 and 2003, it fell from 2.5% of GDP to just over 1%. According to the World Competitiveness Report, Brazil lags behind other Latin American countries in terms of road and port infrastructure (Hausmann, 2008).

### *The social situation*

Key social indicators have improved over the past decades.<sup>14</sup> The current government has assigned high priority to social development programmes. In this context, the government has streamlined the existing social transfer programmes into a unified conditioned social cash-transfer Programme 'Bolsa Familia' for the most disadvantaged families, offering financial subsidies as well as a combined access to basic social rights (e.g. healthcare, food, education and social assistance).

However, much remains to be done to address rural, urban, gender and racial inequalities and to ensure that access to goods and services benefit all social groups. In 2007 Brazil ranked 70<sup>th</sup> out of 177 in the UN Human Development Index, a rather modest position compared with the country's levels of economic development and technological sophistication. Access to education<sup>15</sup> and health indicators<sup>16</sup> have improved over recent years, but there are still regional imbalances between the Northeast and the South and Southeast regions.

In 2005, 30.7% of the Brazilian population were poor (approximately 57 million people), while extreme poverty affected 11.4% of the population, i.e. 21 million people.<sup>17</sup> Brazil is also one of the world's most unequal societies: in 2002 the poorest 20% accounted for 4.2% of Brazil's national income or consumption.<sup>18</sup> However, due to the social programmes, in 2007 – for the first time in Brazilian history – the middle class represented more than 50% of Brazilian society (94.7 million people). Since 2002 the Gini index has also marginally decreased to 0.56.

The decrease in the unemployment rate in recent years is another encouraging indicator (a fall from 11.1% in January 2002 to 7.4% in December 2007), but job creation continues to be an important challenge for Brazil. Informality (reaching practically 40% of the labour force in December 2007) is another big issue.

---

<sup>14</sup> Since 1990, life expectancy has increased by five years and the years of schooling of the labour force by four years.

<sup>15</sup> In 2002, 93.8% of children aged 7 to 14 attended elementary school, 40% of children aged 15 to 17 attended secondary school and 9.8% of the youngsters went on studying.

<sup>16</sup> In 2002, Brazil spent 7.9% of its GDP on health, an amount close to the OECD average (8.72%).

<sup>17</sup> The poorest of the poor in Brazil have traditionally been in the Northeast Region (see Figure 2.1). In 2002, 25.2% of its inhabitants were in extreme poverty or indigence. But poverty exists in most of the country, mainly concentrated in metropolitan and depressed agricultural areas.

<sup>18</sup> Inequality in Brazil is also related to race; 65% of the poorest 10% are blacks or mulattos, while 86% of the wealthiest 1% are whites.

### **2.3 Sectoral analysis**

In the course of its recent history, Brazil has adopted industrial policies several times. In the past, those policies were integrated in the strategic plans of development. The most successful plans were the 'Plano de Metas' (Targets Plan) in the second half of the 1950s and the 'Plano Nacional de Desenvolvimento – PND' (National Plan of Development), in particular the Second PND in the 1970s. All of these plans focused on the industrial sector and were decisive to the development and integration of the Brazilian industry.

During that period the targets were related to the balance of payments, concentrating on import substitution, and in the 1970s to the expansion of manufactured exports. This setup of the industrial structure and infrastructure organized economic power in Brazil in the famous triple: State (infrastructure and basic industries), foreign capital (dynamic industries), and national capital (traditional industries and niches of dynamic industries).

In the 1980s and 1990s, the development plans were left aside and replaced by the macroeconomic stabilization plans. In this context, little was done with regard to industrial policy. On the contrary, economic authorities believed that macroeconomic stability would create the necessary and sufficient conditions for the development of the productive sectors (DIEESE, 2005).<sup>19</sup>

The exception was the 'Plano Collor' (1990-1992), which reduced import tariffs, opening the economy and forcing a restructuring in large parts of the Brazilian industry.<sup>20</sup> This plan also initiated the process of privatization, deepened under the subsequent government. In the meantime, sector-specific policies were implemented, such as the Sectorial Chamber of the Automotive Sector, mainly providing tax incentives to boost sectors with ineffective results.

In the mid-1990s privatization proceeded and included public utilities. Sales involved huge companies such as Companhia Vale do Rio Doce, a world leader in iron ore exports, and also public enterprises whose privatization required a major overhaul of the regulatory framework, especially in the telecommunications and electricity supply sectors. New agencies were created to regulate activities in the oil, electricity and telecommunication industries, with much more autonomy than had been the case in the past.<sup>21</sup>

---

<sup>19</sup> Suzigan and Furtado (2006) point to the lack of a clear industrial policy as one of the reasons for the weak performance of industry, and the consequent delay in economic development of Brazil in the past two and a half decades.

<sup>20</sup> Matias-Pereira et al. (2006) claim, however, that this opening did not follow criteria that could be considered as part of a consistent and reasonable industrial policy.

<sup>21</sup> Paiva Abreu and Werneck (2008) argue that the least satisfactory policies in this period involved the energy sector, with the government failing to define a clear regulatory framework able to stimulate new investments.

The Brazilian industry restructured itself in an impressive way during that period. It downsized its operational structures, improved its quality and increased productivity,<sup>22</sup> turning more towards international markets. The share of industry in total GDP and the number of employees in that sector declined (Pichon, 2008). A new power structure emerged: a regulatory state, dominant foreign capital in key technological sectors, and private national groups restructured and with limited financial capital, particularly in new technologies.

### *Industrial structure*

Even though Brazil has diversified industrial activities,<sup>23</sup> the industrial structure is still very concentrated. In 2004 SMEs represented 99% of the number of firms and 65% of all formal employment in the country, but its value added reached only 35%. By comparison, the USA showed a similar ratio of SMEs in the number of firms (98%), but their value added corresponded to 65% (FIESP, 2005).<sup>24</sup>

Productivity and innovation in Brazil is also low. The Brazilian economy is currently less productive than 20 years ago, with this reduction originating mainly from two periods characterized by extreme productivity declines: 1980-1982 and 1988-1989 (Pichon, 2008).

In terms of innovation from 1998 to 2002, only 31% of the firms introduced innovations. Further, only 1.7% of the firms (1199) introduced product innovation and product differentiation (Erber, 2005). R&D expenditures represented 1.1% of GDP in 2005, resulting in 6500 patents (FIESP, 2005). The world share of scientific papers produced in Brazil increased from 0.44% in 1981 to 1.92% in 2006.

Nevertheless, the Brazilian industry is competitive in some high-tech sectors such as aerospace, in which the country holds the third position in the world market of commercial aircrafts. It is also the second biggest exporter of ethanol, being the technological leader in this product. Further, the automotive sector is one of the biggest industries in the country, accounting for about 10% of total revenues and 6% of employment in the industry (De Negri et al., 2008).

### *The new Brazilian industrial policy*

In March 2004, the current federal administration announced its first industrial policy after decades. It was called 'Política Industrial, Tecnológica e de Comércio Exterior – PITCE' (Industrial, Technological and External Trade Policy) and established the Brazilian Agency of Industrial Development, responsible to execute it.

---

<sup>22</sup> Particularly in the privatized enterprises (see Eid Jr. and Poplawski Ribeiro, 2004).

<sup>23</sup> For a detailed description of the main Brazilian economic activities, see MDIC (2008).

<sup>24</sup> For the companies starting in 2005, the survival rate was 78%.

The PITCE guidelines advocated that the state should create a favourable environment for industrial development and facilitate entrepreneurship, while holding firm to its commitment to macroeconomic stability. In the short term, the government should reduce the external restrictions of the country to increase efficiency. In the medium to long term, it should foster the development of key activities and technologies that would allow Brazil to increase its competitiveness in the international markets (DIEESE, 2005), for instance by simplifying trade procedures, seeking new markets, stimulating the creation of distribution centres for Brazilian companies abroad and supporting and consolidating the image of Brazil and Brazilian trademarks overseas. The focus on the international market is one of the differences between this industrial policy and the ones in previous decades.<sup>25</sup>

Suzigan and Furtado (2006) already assess as positive the simple fact of the existence of an industrial policy after so many years but they also argue that this industrial policy fails as an economic development policy tool due to, (i) its incompatibility with the macroeconomic policy; (ii) the inconsistencies of the policy instruments; (iii) the deficiencies in infrastructure and in the R&D and innovation system; and (iv) the lack of coordination and political drive.

More recently, in May 2008, the Brazilian government announced new tax measures and goals for its industrial policy. The policy includes tax incentives for investment, R&D and exports summing up to EUR 7.9 billion until 2011. Further, the National Bank for Economic and Social Development (BNDES) will provide EUR 78 billion in finance for innovation projects in industrial and services sectors.<sup>26</sup> This plan is much more extensive than the previous one from 2004, giving priority to twenty-five subsectors instead of only four and to innovation in SMEs.

Further on, the programme contains four macro targets: (i) to increase the ratio of investment over GDP; (ii) to stimulate innovation via an increase in private R&D; (iii) to increase the share of Brazilian exports in the world exports; and (iv) to increase the number of SME exporters. These targets should be reached via three levels of policies: (a) systemic actions at the horizontal level, focused on sources of positive externalities to the entire industrial structure; (b) sectoral structural programmes for the Brazilian industry, oriented by strategic objectives to increase the competitiveness in main sectors of the national industry; (c) public policies focused on strategic themes, selected according to their importance to the long-term development of the country, such as strengthening SMEs, integration with South and Latin America with emphasis on Mercosur, integration with Africa etc.<sup>27</sup>

---

<sup>25</sup> The main measures announced in the context of the PITCE industrial policy can be found in DIEESE (2005).

<sup>26</sup> In the period 1996 to 2004, the share of BNDES in total investment in the country was on average 11% (FIESP, 2005).

<sup>27</sup> For details of the new industrial policy see MDIC (2008) or IEDI (2008).

In a first assessment, IEDI (2008) observed as positive the focus of this new industrial policy on the coordination of actions. The measures to support investment financing are also seen favourably, in particular the creation of a Sovereign Wealth Fund by the Brazilian government with resources coming from the primary surpluses.

## **2.4 Future prospects and challenges**

### *Short-term challenges: Brazil in the financial crisis<sup>28</sup>*

Brazil has so far been more resilient to the crisis than many developed nations. Nevertheless, it was also strongly affected. After showing the highest gain in value among all world stock markets in 2007, the Brazilian stock market, Bovespa, suffered one of the world's biggest losses from May to November 2008, losing practically half of its value. At the beginning of May 2009 however, the index largely recovered – gaining 37% (+50% in USD terms) compared to the beginning of the year (see *The Economist*, 9<sup>th</sup> May 2009).

In parallel, Brazil, as most of the emerging markets, was facing massive capital outflows in 2008. This has been accompanied by a sudden freeze of all credit lines (including trade credit). Such a hasty run to the exit was mainly triggered by external reasons, but pointed to an increase in the uncertainty of foreign investors about the short-term future of the Brazilian economy as well (Canuto, 2008).

Brazil's currency (the *real*) dropped more than 35% against the US dollar between August 2008 when reaching its highest value in nine years and March 2009. The depreciation of the *real* was the second largest (after the Russian rouble) among seven important currencies. Nevertheless, this depreciation can be seen as positive for the country by increasing the competitiveness of its exports. Exports dwindled as the biggest consumers of Brazilian goods saw their own economies go down the path of recession. In January 2009, the export volume fell by 29% in comparison to December 2008 and by 26% in comparison to January 2008. This was the largest monthly fall in exports since January 1985.

For the agricultural sector, the 2009 projections made by the Ministry of Agriculture in January show that exports may record their first fall in ten years. This contraction is directly related to the fall in the prices of main Brazilian commodities, forecasted at 11% this year. The Brazilian response to the crisis has also been strong.<sup>29</sup> The response on the part of the monetary authorities has been twofold. On the exchange rates side, the Brazilian Central Bank (BCB) engaged in several auctions on the foreign exchange markets, raising

---

<sup>28</sup> This section is mainly based on Poplawski Ribeiro (2008).

<sup>29</sup> See IPEA (2009) for a comprehensive summary of the measures taken until recently by the government to tackle the crisis.

liquidity. On the domestic credit side, besides extending its rediscount policies, the BCB has eased its long-held stiff reserve requirements, in a series of moves that according to estimates ended up liberating an amount of liquidity potentially higher than 5.7% of GDP and 5.6% of total bank assets.

On the part of the government, the main response to the crisis has been the adoption of the provisional measure bill which eases the constraints on public banks to acquire capital of private financial institutions. At the end of March 2009, the government also reduced the tax on industrial products for the construction sector for three months. This will reduce prices for the final consumer of these products by approximately 8%.

Moreover, additional policies should be pursued. The credit expansion is one of the pillars of the upsurge of the Brazilian economy and, therefore, deserves special attention at this moment. The system has to be provided with sufficient sources of liquidity, favouring in particular smaller institutions. The BCB should also further reduce the interest rate, given that inflation forecasts for 2009 are below the target.

If most of these measures are taken, Brazil should be entering 2010 in a recovery mode, implying a soft landing of its economy in the face of the global financial crisis. However, in the medium term, the crisis demands other efforts to reduce the dependency of the Brazilian economy on commodity prices, on external financing and on credit demand stimulus.

IMF forecasts from July 2009 suggested a growth rate of -1.3% for the Brazilian economy in 2009. However, national and some other mid-year forecasts were more optimistic as several indicators suggested that the Brazilian economy, like that of India and China, might be bottoming out earlier than the advanced economies, with government stimulus measures seeming to play a crucial role. In the first quarter of 2009, investment in Brazil was up 19%, sales of durable consumer goods returned to pre-crisis levels, money from abroad began flowing in again and the Brazilian currency started to appreciate in April 2009. Also, a significant rebound of stock prices is observed. On the supply side, construction is doing well and industry is recovering. By October 2009, the IMF has become more optimistic as well and in its October forecast assumes a GDP growth rate of -0.7% for Brazil in 2009. For 2010, the IMF expects a growth rate of 3.5%, similar to the average annual growth during the period 2000-2007 (see Table A1 in the Annex).

#### *Medium- and longer-term challenges*

Giambiagi (2007) enumerates six medium-term challenges to be faced by the Brazilian government in its fiscal policy: (i) increase public investment; (ii) reform the tax system in order to make it fairer, isonomic, and favourable to production; (iii) slow down the expansion of internal debt; (iv) obtain nominal surpluses in the coming years; (v) curb the

enlargement of government expenses; and (vi) improve the fiscal statistical indicators of the country, which date from approximately 25 years ago.<sup>30</sup>

Regarding the tax reform, FIESP (2005) proposes, in particular, an expansion of the tax base by reducing the informal sector in the country, and a simplification of the tax system to facilitate supervision and to avoid tax evasion.

For Giambiagi (2007) the risk of not pursuing those fiscal reforms is not an explosion of the public debt, but a lower potential of public investment, particularly in key areas such as infrastructure, which would affect the potential growth of the Brazilian economy.

Another major challenge identified by Matias-Pereira et al. (2006) is to define correct strategies oriented towards increasing productivity. For Hausmann (2008) augmenting domestic savings seems also a key priority.<sup>31</sup> That would allow a greater level of domestic investment without relying excessively on external savings, which may prove unsustainable and could further appreciate the real exchange rate, bias growth towards non-tradeables, and accentuate the skills constraint.

Regarding the political and social challenges in Brazil, the European Commission (2007) enumerates: (a) the difficulty of putting together stable parliamentary majorities in the framework of the current political system; (b) the relatively fragile links between the three levels of government (Federal, State and municipal), which make it difficult to define and implement policies and reforms nationwide; (c) the frequent cases of corruption and unlawful use of public resources;<sup>32</sup> (d) the legal and regulatory complexity and the need to improve the functioning of the judiciary system; (e) the need to improve effective implementation of the existing legislation in the field of human rights;<sup>33</sup> (f) violence,<sup>34</sup> which is particularly serious in big cities and frequently associated with (illegal) drug trafficking and social exclusion.

Moreover, a law reform and, in particular, a labour reform should be pursued to provide more flexibility in the labour market and reduce informality and unemployment rates.

Nevertheless, even without the implementation of those much needed reforms in the Brazilian economy, Ernst & Young (2008) argue that the country is already in a sustainable

---

<sup>30</sup> Giambiagi (2007) defends a migration to a system similar to those of advanced countries, in which the Central or General Government results are the most important indicators.

<sup>31</sup> Financial credit in Brazil accounted for 25.8% of GDP in 2005, which is still a bit more than a third of the rate (89.1%) in advanced countries (FIESP, 2005).

<sup>32</sup> In 2004 Transparency International ranked Brazil 59th out of 146 countries in its corruption perception index.

<sup>33</sup> Excessive use of force by law enforcement officials, limited access to justice for the poorest and most vulnerable sectors of society, and abuse against indigenous people are other major causes of concern.

<sup>34</sup> In 2007 one homicide occurred about once every 12 minutes in Brazil.

growth path. Prior to the financial crisis, Ernst & Young (2008) – in association with the Fundação Getúlio Vargas – estimated that Brazil would grow by an average 4% per year in the period 2007-2030. In the first ten years the average growth rate would be 4.3%, and from 2017 onwards, that rate would decline to 3.8%. Brazil would then become the world's 8<sup>th</sup> largest economy, reaching a GDP of EUR 1.6 trillion in 2030; and the world's 5<sup>th</sup> largest consumption market. The IEA (2006), in turn, assumes an average annual growth rate of 3% for Brazil between 2007 and 2017 when calculating its scenarios of energy demand for the country.

Therefore, the most accepted scenario is that Brazil will grow between 3% and 4% per year over the next ten years. The implementation of the reforms discussed above would increase that average to levels between 4% and 5%.

## **2.5 EU-Brazil relations**

The EU and Brazil established diplomatic relations in 1960. The present relationship is governed by the *EC-Brazil framework co-operation agreement* (1992),<sup>35</sup> *EU-Mercosur Framework Co-operation Agreement* (1995) and the *Agreement for scientific and technological cooperation* (2004).

The European Commission (2007) underlines that on many major world issues Brazil's views converge with the EU's. Thus, in May 2007 the EU recommended a strategic partnership to further deepen its ties with Brazil. The first ever *Brazil-EU Summit* was held in Lisbon in July 2007. On the *Second Brazil-EU Summit* in December 2008, leaders of both countries agreed to set up a comprehensive strategic partnership by: (i) promoting peace and comprehensive security through an effective multilateral system; (ii) enhancing the economic, social and environmental partnership to promote sustainable development; (iii) promoting regional cooperation; (iv) promoting science, technology and innovation; and (v) promoting people-to-people exchanges.<sup>36</sup>

EU-Brazil bilateral relations are supported via several EU projects and funds. The sector that, historically, has absorbed most financial resources is the environment, mainly through the pilot programme for the protection of the Brazilian rainforests (PPG7). Economic cooperation has also been an important part of EU cooperation with Brazil, mainly in the form of participation by Brazil in horizontal programmes such as AI-Invest29 or the EU Research Framework Programmes.<sup>37</sup>

---

<sup>35</sup> See European Commission, COM (92)209 of 30.6.1992.

<sup>36</sup> For further information see 'Brazil-European Union Strategic Partnership Joint Action Plan', 2<sup>nd</sup> Brazil-European Union Summit, Rio de Janeiro, 22 December 2008.

<sup>37</sup> Under the Fifth Framework Programme, 46 projects with Brazilian participation were approved, making Brazil the leading participant by far in Latin America.



Close to EUR 64 million were allocated by the EU to the bilateral EU-Brazil cooperation for the period 2002-2006 to three priority sectors: 1) economic reform (EUR 30 million or 47% of the indicative budget); 2) social development (EUR 15 million or 23%) and 3) the environment (EUR 6 million or 9%). Further, a total of EUR 61 million is earmarked for Brazil in the *Brazil Country Strategy paper 2007-2013* with the two focal areas: enhance bilateral relations and environment.

Science and technology in general is another important dimension of the bilateral relations. In 2004 the project 'Rede de Centros Tecnológicos e Apoio às Pequenas e Médias Empresas Brasileiras' (Technological Centres Network and Support to Brazilian SMEs) was implemented.<sup>38</sup> It aims to contribute to the reinforcement of the international competitiveness of Brazilian SMEs, by promoting bigger and more dynamic technological and commercial interfaces between enterprises and technological centres from Brazil and Europe in the plastic and electro-electronic sectors. This project will last until June 2010.

Moreover, the EU/Brazil S&T Cooperation Agreement, together with the new possibilities for international participation in the EU's Seventh Research Framework Programme (FP7) for 2007-2013, provide a basis for increasing the existing cooperation and improving participation by Brazilian scientists in FP research projects and fellowships on a mutually beneficial basis.<sup>39</sup>

Nevertheless, additional measures should be taken to further strengthen EU-Brazil relations. In political terms, their strategic partnership should be boosted, increasing their joint voice in the international fora in the many issues of common interest, such as peace, sustainable development and climate change.

In economic terms, three main issues should be tackled. First, with the current failure of the Doha round, the EU-Brazil and EU-Mercosur trade agreements should be speeded up and concluded, promoting an increase in bilateral trade and the full exploitation of their comparative advantages. That could also help to alleviate the negative economic effects of the current financial crises in both regions.

Second, investment flows between the EU and Brazil could be further augmented. Brazil is in urgent need of investments in sectors in which Europe has an international comparative advantage, such as infrastructure (in particular transport), energy, and green technologies.

---

<sup>38</sup> For more information see the website of the Brazilian Ministry of Development, Industry and External Trade: [www.mdic.gov.br](http://www.mdic.gov.br)

<sup>39</sup> Brazil was, for example, invited to participate in Galileo, the European satellite navigation system. Last December, Summit leaders also highlighted the launching of negotiations for a cooperation agreement in the field of research on fusion energy between Brazil and the European Atomic Energy Community (EURATOM) which would, among others, facilitate supporting the interest of access by Brazil to the International Thermonuclear Experimental Reactor (ITER) project.

Thus, given the growth prospects of the country, returns in those fields could be high for both sides.

Finally, cooperation between the EU and Brazil in the field of biofuels could be deepened. That would clarify European concerns about Brazilian biofuels, and help both sides to achieve a more clean and sustainable energy mix.

## **2.6 Conclusions**

Brazil is in a unique situation in Latin America. While most countries are in search of products through which they can integrate with the global economy, Brazil is innovative in a number of high-tech activities in agriculture, energy, aircraft, mining products, design, machinery and automobiles, among many others. The country has many possibilities through which it can sustain growth for many years to come. In addition, Brazil benefits from close and strong economic and political relations with Europe, with the two sides having several complementarities.

Therefore, this section suggests that Brazil could be seen as a sustentative **brick** in the European search for further competitiveness in international markets and vice versa.

## **References**

- Canêdo-Pinheiro, M., P. C. Ferreira, S. A. Pessoa and L. G. Schymura (2007), 'Does Brazil Need an Industrial Policy?', *Ensaios Econômicos da EPGE*, No. 644, March.
- Canuto, O. (2008), 'Emerging Markets and the Systemic Sudden Stop', *Boletim de Informações da FIPE*, November.
- De Negri, F., L. Bahia, L. Turchi and J. A. De Negri (2008), 'Determinantes da acumulação de conhecimento para inovação tecnológica nos setores industriais do Brasil: setor automotivo', *Estudos Setoriais de Inovação*, ABDI, Brasília, December.
- DIEESE – Departamento Intersindical de Estatística e Estudos (2005), 'Política Industrial no Brasil: o que é a nova política industrial?', *Nota Técnica*, No. 11, December.
- Eid Jr., W. and M. Poplawski Ribeiro (2004), 'Fatos e Lendas da Privatização', in T. Wood (ed.), *Gestão Empresarial: Finanças – volume 1*, Chapter 6, Editora Vivali, São Paulo.
- Erber, F. (2005), 'The Brazilian Industrial Policy', Paper presented at the 2<sup>nd</sup> Annual Meeting of the Latin American Economics and Business Association (LAEBA), Institute for the Integration of Latin America and the Caribbean (INTAL), IADB, 28-29 November.
- Ernst & Young (2008), 'Sustainable Brazil: Economic Growth and Consumption Potential', *Análises & Perspectivas – Brasil*.
- European Commission (2007), 'Brazil: Country Strategy Paper (2007-2013)', Document E/2007/889, Brussels, 14 May.

- FAO – Food and Agriculture Organization of the United Nations (2007), 'A review of the current state of Bioenergy development in G8+5 countries', *Global Bioenergy Partnership (GBEP) Report*, GBEP Secretariat, Rome.
- FIESP – Federação das Indústrias do Estado de São Paulo (2005), 'A Competitividade e o Desenvolvimento Econômico: algumas sugestões para reflexão', *DECOMTEC Report*, October.
- Giambiagi, F. (2007), 'Dezessete anos de política fiscal no Brasil: 1991-2007', *IPEA Texto para Discussão*, No. 1309, November.
- Hausmann, R. (2008), 'In search of the chains that hold Brazil back', *Center for International Development Working Paper*, No. 180, Harvard University, August.
- IEA – International Energy Agency (2006), *World Energy Outlook 2006*, Paris, France.
- IEDI – Instituto de Estudos para o Desenvolvimento Industrial (2008), 'A Política de Desenvolvimento Productivo', *IEDI Report*, May.
- IPEA – Instituto de Pesquisa Econômica Aplicada (2009), 'Crise internacional: reações na América Latina e canais de transmissão no Brasil', *Report of the Brazilian President Cabinet*, No. 17, February.
- Matias-Pereira, J., G. Fernandes-Marcelino and I. Kuglianskas (2006), 'Brazilian new patterns of an industrial, technological and foreign trade policy', *Journal of Technology Management & Innovation*, Vol. 1, Issue 3, pp. 17-28.
- MDIC – Ministry of Development, Industry and Foreign Trade (2008), 'Inovar e Investir para Sustentar o Crescimento', *Presentation of the Brazilian Industrial Policy*, Brasília, retrieved from: <http://www.desenvolvimento.gov.br/pdp/index.php/sito/inicial>.
- Paiva Abreu, M. and R. L. F. Werneck (2008), 'The Brazilian economy from Cardoso to Lula: An interim view', in L. Bethell (ed.), *The Cambridge History of Latin America*, Cambridge University Press, Cambridge, V.IX.
- Pichon, A. M. (2008), 'Les liens entre gains de productivité et ouverture au Brésil', *CEPII Report*, September.
- Poplawski Ribeiro, M. (2008), 'Brazil in the financial crisis: decoupling or hard landing?', *Banque Stratégie*, No. 265, pp. 20-24, December.
- Poplawski Ribeiro, M. and J. Sgard (2008), 'Quelques réflexions sur l'économie brésilienne', *Compte Rendu of the Réunion: 'Le Brésil, grande économie émergente dans la globalisation après a stabilisation?'*, Club du CEPPII, Paris, 26 February.
- Suzigan, W. and J. Furtado (2006), 'Política Industrial e Desenvolvimento', *Revista de Economia Política*, Vol. 26, No. 2 (102), pp. 163-185.

### 3 Russia<sup>40</sup>

#### 3.1 Introduction

Nearly 20 years after the collapse of the Soviet Union and despite the considerable structural changes that have occurred during the transition to a market economy, Russia is still very much affected by the heritage of the former one-party political and centrally planned economic system. The effects (we mention here only the most important and EU-relevant ones) range from the disintegration of the Soviet Union and the CMEA with the related disruptions of traditional economic linkages (including *inter alia* oil and gas pipeline networks), the loss of the superpower status perceived by Russia (including the loss of both former allies in Central and Eastern Europe and the former Soviet republics which are now either members of the EU, such as the Baltic states, or which aspire for EU membership, such as Ukraine, Georgia and Moldova). The heavy reliance on energy and raw materials resources, particularly in exports, and – despite severe setbacks suffered during the early transition period – the fairly advanced defence- and space industry-related high-tech sectors represent another structural feature of the Russian economy that is associated with the Soviet heritage.

In designing EU policies towards Russia it is therefore important to understand the diverging views on many issues related to the political and economic transition in Central and Eastern Europe and to Russian perceptions of the European integration. The reality is that many (if not most) Russians agree with V. Putin, who views the collapse of the Soviet Union as the ‘greatest tragedy of the 20<sup>th</sup> century’ (the contrast to prevailing views in the Baltics on this event can hardly be bigger). The prevailing Russian view also sees the outcome of the transition-related industrial restructuring very much connected with the ‘primitivization’ of the Russian economy, whereas in the new EU member states economic restructuring – despite the current setback – is viewed as a success (Grinberg et al., 2008). Last but not least, there is the Russian perception of EU enlargement and EU Neighbourhood (Eastern) Policy as a ‘Western’ (i.e. EU, NATO, USA) intrusion into traditional spheres of Russian influence (former CMEA allies, ‘near abroad’, etc.). Notwithstanding possible disagreements, these perceptions have to be taken seriously, especially when Russia feels itself in a position of gaining economic and political strength and behaves accordingly.

Regarding the evolution of Russia’s ‘economic development model’, even in the broadly defined terms of transition from the centrally planned to a market economy the model has undergone marked changes in the past two decades. It moved from prevalently liberal approaches (the initial focus was on the liberalization of prices and external trade, mass privatization, delayed institutional developments and devolution of powers from the centre to regions, with the threat of the country’s disintegration) which had been applied roughly

---

<sup>40</sup> This section was written by Peter Havlik.

between early 1992 and the crisis of August 1998, to the subsequent backtracking towards re-centralization and a strengthening role of the state, associated mainly with Putin's presidency after 2000. Taming the oligarchs and stressing the rule of law needed for regulating the invisible (some say chaotic) hand of the markets represented the first steps correcting the initial liberal model. The application of Industrial Policy (IP) principles over free market approaches, the use of public-private ownership investment schemes, etc. were the economic development model guidelines designed at the end of Putin's presidency – to be implemented by his chosen successor Dmitry Medvedev. The global financial crisis and its outbreak in Russia since late 2008 will require further adjustments of the model; these are most likely to go in the direction of more centralization and state interventionism while some of the ambitious investment and modernization programmes will have to be scaled down due to the lack of finance. An important element of the model's correction was a changed approach to European economic integration: any considerations of potential EU membership, perhaps even the blueprints of Russian-EU 'Common Spaces' considered at the turn of the century, were scrapped. EU relations with Russia became frosty – especially after the EU's eastern enlargement, the EU's support of the 'colour' revolutions in Ukraine and Georgia, the expiry of the PCA agreements, the war in Kosovo and in Georgia, and the recent energy disputes with Ukraine and Belarus.

### **3.2 GDP growth and the ambivalent role of energy**

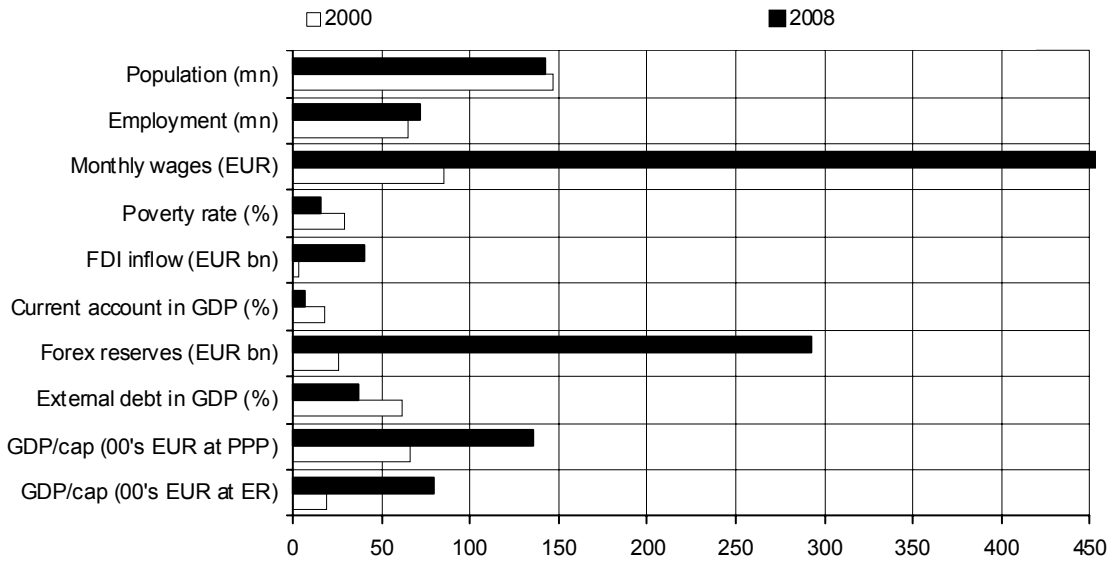
The Russian economy has been booming during the past decade and most analysts have been busy repeatedly revising GDP growth forecasts upwards, largely owing to surging energy prices. Russian GDP growth exceeded 8% in 2007, driven by a double-digit expansion of household consumption and even faster growth of investments. Even in 2008, when the global financial turmoil started to bite, GDP growth still reached 5.6%. During the past five years, real GDP increased by more than 40%. At purchasing power parity (PPP), Russia's GDP amounted to EUR 1900 billion in 2008 – about 15% of the aggregate EU27 GDP. In per capita terms, the Russian PPP-based GDP reached EUR 13,500 in 2008 – about 54% of the EU average – and the speed of catching up to the average per capita GDP level in the EU has been impressive: about 15 percentage points since the year 2000 (this was more than the NMS achieved during the same period).

There have been a lot of other economic achievements of the Putin era which help to explain his extraordinary domestic popularity: surging incomes and average wages and decreasing poverty levels, rising employment (and declining unemployment), nearly full repayment of the government's external debt, ballooning foreign exchange reserves, etc. Figure 3.1 provides some graphical illustration of the relevant indicators in the years 2000 and 2008. At the same time, the Russian population has been declining due to a combination of high mortality rates and declining birth rates. Indeed, the adverse demographic developments and latent labour shortages are among the major challenges

that Russia will be facing in the near future. And whereas the number of Russians with incomes below the official poverty threshold nearly halved between 2000 and 2006 (to 21.6 million, that is 15.3% of the population in 2006), the income differentiation increased substantially.

Figure 3.1

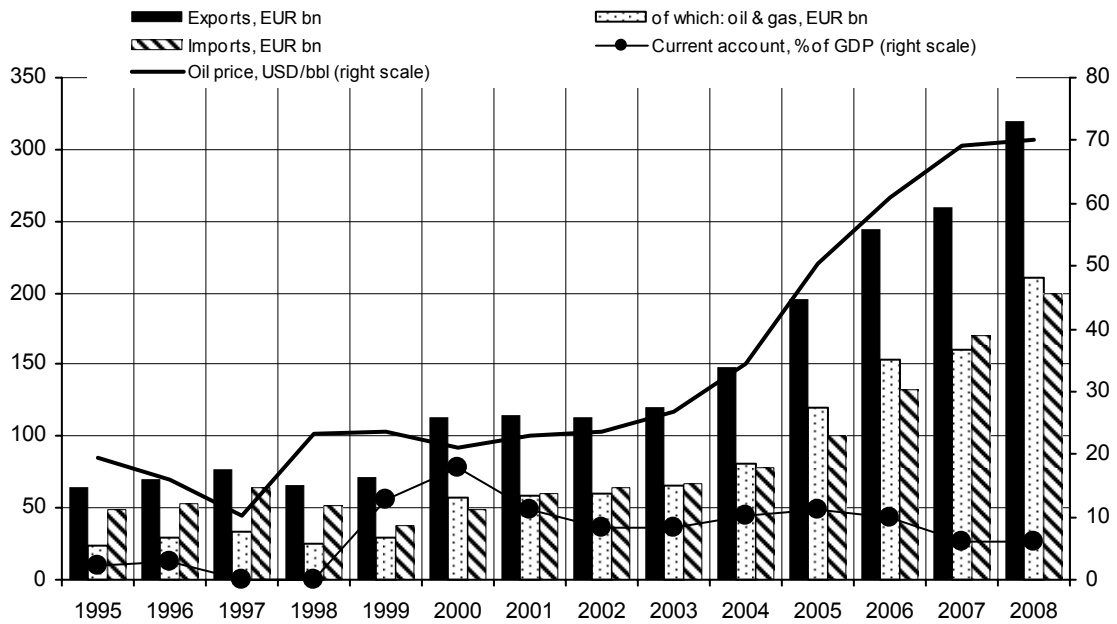
**Selected economic achievements of the Putin era**



Source: Rosstat, CBR, own calculations.

Figure 3.2

**Russia's external sector and oil prices**



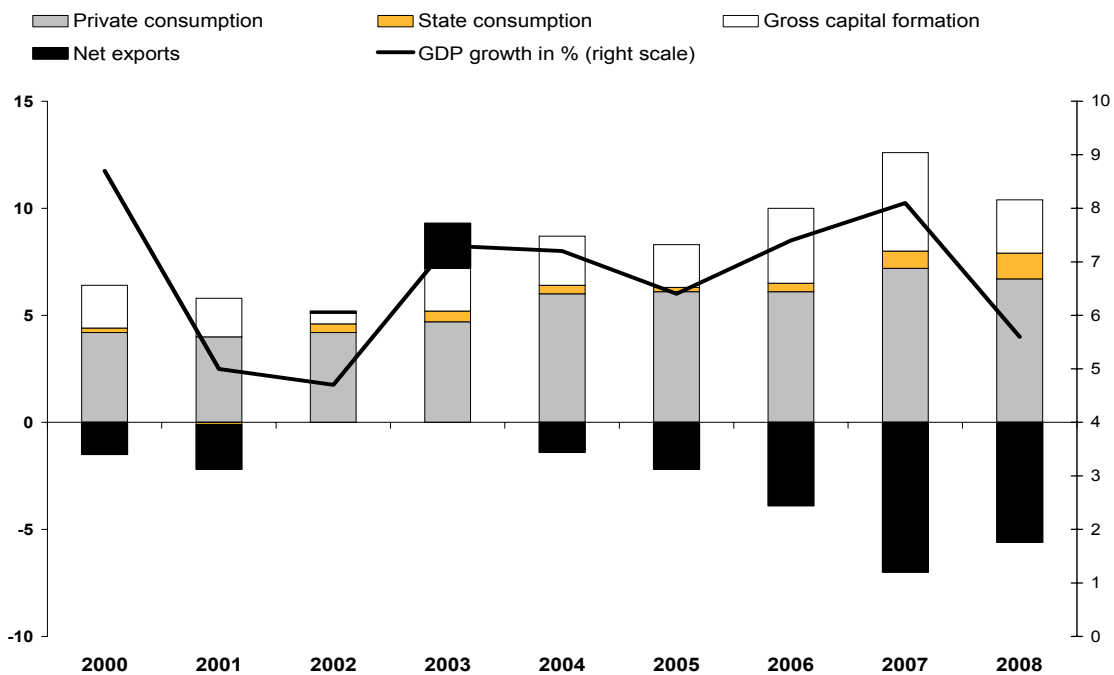
Source: Rosstat, CBR, own calculations.

The recent economic boom has been explained to a large degree by surging world market commodity prices, in particular those of energy. Figure 3.2 shows how the development of Russian exports has been closely linked to rising oil prices. Indeed, the surging revenues from energy exports have accounted for a major (and growing) share of total export revenues. During 1995-1998, energy export revenues fluctuated around EUR 25 billion per year (around 40% of total export revenues), compared to more than EUR 200 billion (and 66% of total export revenues) in 2008.

Russia was awash in money until late 2008: both foreign exchange reserves and capital inflows were at record levels (the inflow of FDI in 2008 amounted to some EUR 40 billion; foreign exchange reserves reached EUR 290 billion as of end-2008), the government budget was still in a large surplus (4.9% of GDP) and public foreign debt has largely been repaid. The shadow side of the recent economic boom was – apart from growing assertiveness, nationalism and a revival of some ugly remnants of Soviet stereotypes – the return of double-digit inflation and strong rouble appreciation in real terms (the latter trend was reversed in November 2008 after the collapse of oil prices).

Figure 3.3

**Russian GDP growth and contributions of main components**



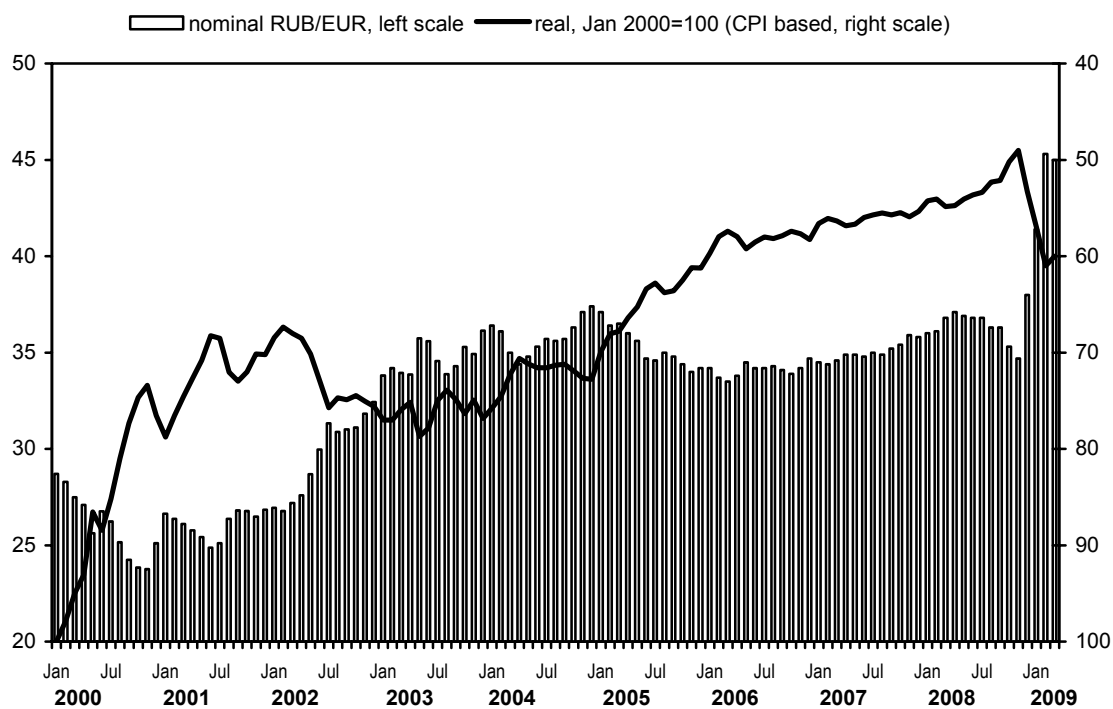
Source: Rosstat, own calculations.

The appreciation pressure remained strong until late 2008 given the huge inflows of foreign exchange and despite some relief provided by the Reserve and National Welfare Funds (formerly Stabilization Fund) which accumulate part of energy-related windfall export revenues. The managed peg exchange rate regime (the rouble is pegged to a basket of

US dollar and euro, with the share of the latter gradually increasing) and the full liberalization of capital account transactions (since June 2006) require massive currency interventions. The rapid growth of the money supply makes meeting the CBR inflation target extremely difficult. Besides, consumer price inflation was fuelled by rising prices for food, energy and housing as well as by administered tariff adjustments.

Figure 3.4

### Nominal and real rouble exchange rates



Note: Ascending line indicates real appreciation.

Source: wiw Monthly Database, Rosstat, CBR, own calculations.

These factors translated into double-digit annual inflation (14.1% in 2008) and to a sizeable appreciation of the rouble against the euro in real terms. From the beginning of 2000, the rouble appreciated by about 50% against the euro until October 2008 (Figure 3.4; appreciation against the US dollar was even more pronounced). The appreciation pressure was reversed only after November 2008: with sharply declining oil prices and export revenues, the rouble started to depreciate – despite massive interventions by the CBR which spent around USD 200 billion of its reserves to support the rouble within the three subsequent months.

Thanks to large windfall gains from high world market energy prices, the Russian government was able not only to repay nearly all outstanding public external debts (although private foreign debts increased), but to raise salaries in the public sector and pensions as well. Besides, several national development projects (targeting infrastructure,



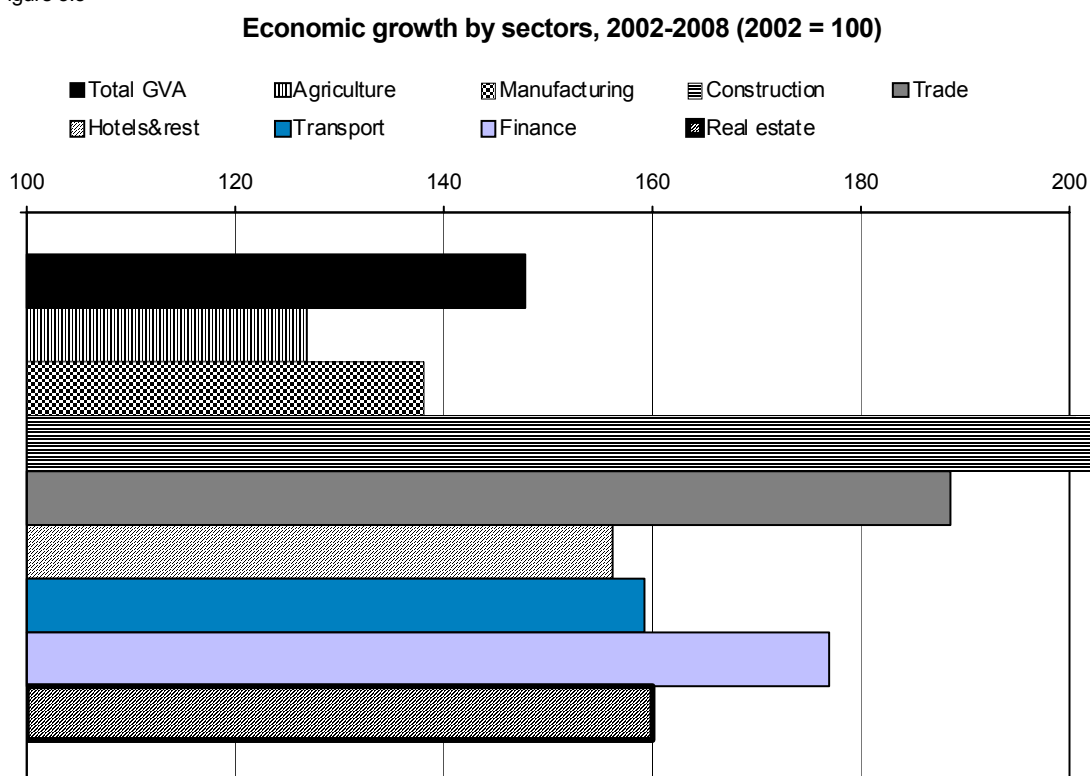
housing, the health sector, education and agriculture) were initiated. The three-year budget plan for the period 2008-2010, adopted in May 2007, reflected some important changes in economic policies. First, future budget revenues were to depend less on energy proceeds (apart from the Stabilization Fund, which was renamed Reserve Fund to be maintained at 10% of GDP; another part of windfall proceeds from oil and gas exports had been accumulated in the newly established National Welfare Fund – see Astrov, 2007). As a result, the share of budget revenues in GDP was to decline by about 5 percentage points between 2007 and 2010. Second, government expenditures should increase (even as a share of GDP) with state-sponsored priority programmes to benefit most. The long-discussed controversial idea of an Industrial Policy (IP) thus apparently gained official blessing. The government-sponsored IP should offer targeted support to various public-private partnership projects (PPP) in the automotive, aviation, shipbuilding and selected high-tech industries (such as nano, nuclear and space technologies). Some of these initiatives were mentioned afterwards as the key priorities in the economic programme of the new Russian President Dmitry Medvedev in early 2008. The efficiency of implementing various IP and PPP raises serious doubts – not least due to widespread corruption and other institutional bottlenecks. Needless to say, the global financial crisis and related revisions of the federal budget in March 2009 will most likely result in reduced financing of a number of previously planned projects.

### **3.3 Future prospects and challenges**

The main challenge for the Russian economy in the medium and long run is whether it will succeed in replacing energy exports as the key growth driver by the development of other sectors (diversification towards manufacturing, high-tech branches, services, etc.), and how it will cope with the acute demographic crisis (the population is projected to decline by nearly 10 million in the coming decade). The officially endorsed long-term development programme, prepared by the Ministry of Economic Development and Trade in 2007, envisaged in its ‘innovation scenario’ an ambitious *economic diversification* away from the current heavy reliance on energy. A gradual switch to innovation-based development, supported by the above-mentioned IP instruments, as well as the completion of reforms which aim at an improved climate for investments and entrepreneurship was planned. Growing investments in transport infrastructure, education, health and R&D should help to generate an average annual GDP growth rate above 6% over the next decade. In this scenario, the Russian economy should restructure, become more efficient, modern and competitive. Alternative scenarios, based on continued heavy reliance on energy resources, lower oil prices and less investments would generate GDP growth rates around 4-5% whereas the Urals oil price at last year’s level (USD 70 per bbl) would help to keep GDP growth at 7% in 2008 – see Dashkeyev (2008).

The range of GDP growth forecasts for the year 2009 fluctuates between -8% and +2%, largely depending on assumptions regarding the level of energy prices (Development Centre, 2009). As shown in Figure 3.3 above, since 2004 the Russian GDP growth has been driven mainly by booming private consumption and, increasingly, also by expanding investments. The contributions of real net exports to GDP growth has become negative as the volume of exports was growing only at a modest pace (less than 10% per year) whereas import volumes were surging by more than 20% per year. On the supply side, the major part of the overall GDP growth resulted from booming trade, financial services, telecoms and construction activities whereas manufacturing industry and agriculture expanded less than the overall gross value added (Figure 3.5).

Figure 3.5



Source: Rosstat, own calculations.

In 2008, the Russian economic growth still reached nearly 6%; fixed investments grew by 13% and real money incomes by 8%. Export revenues grew by 24% (imports by 22%, both in euro terms) and the current account surplus increased as well. However, GDP growth virtually collapsed in the fourth quarter of 2008 and the first quarter of 2009 while inflation remains high and may even accelerate as a consequence of the recent government rescue measures and the depreciation of the rouble.

Despite strong economic fundamentals, Russia has been seriously hit by the global crisis, especially after September 2008. The stock market dropped by more than 70% between

May 2008 and January 2009 – one of the largest declines among the emerging markets – yet it recovered thereafter. Market capitalization declined by about USD 1000 billion over the same period. For the whole of 2008, net capital outflows reached nearly USD 140 billion (net capital inflows exceeded USD 80 billion during 2007). The stocks of a number of Russian blue chip companies (such as Gazprom, Rosneft, Lukoil, Sberbank, Norilsk Nickel) were hit particularly hard, reflecting partly investors' overreaction, although fundamental factors played a role given the recent decline in the world prices for oil and metals and high exposure to short-term foreign debts. The adverse external shocks that triggered these events may have been compounded by domestic political factors, such as the Mechel and TNK-BP affairs of early summer 2008, the war in Georgia and the gas conflict with Ukraine at the beginning of 2009. However, the shallow depth and relative immaturity of the domestic stock market should keep repercussions on the real economy in check. The current stock market developments probably reflect more of a temporary overreaction on the part of the market participants rather than a lasting deterioration of the domestic investment climate.<sup>41</sup> Medium- and long-term prospects for economic growth are not bad.

Indeed, potentially more serious than the dismal and volatile performance of the stock market – especially as far as repercussions on the real economy are concerned – is the tightening of credit conditions. There is no doubt that several large Russian companies (such as Mr Deripaska's Basic Element) and especially smaller Russian banks have been facing difficulties servicing and refinancing their outstanding foreign debts. The lack and/or dearth of domestic, especially long-term credit financing – a by-product of past restrictive monetary policies in Russia and easy credits abroad – have motivated Russian companies, even the state-owned or state-controlled ones such as Gazprom or Rosneft, to seek external financing. Private foreign debt reached some USD 400 billion as of end-2008 with short-term obligations declining (to 16% of the total at the beginning of 2009).

Similar to the USA and the EU, the Russian government has adopted various rescue and stimulation packages in order to improve the liquidity of the banking sector and restore confidence. The Central Bank released more than USD 100 billion out of its reserves in order to provide additional liquidity and to support the rouble exchange rate. New loans to the banking sector with a maturity of up to six months will be provided via the state-owned Vneshekonombank (VEB) with no collateral required. In addition, the VEB will provide credit for refinancing short-term foreign loans, while acquiring shares in those companies as collateral. The bank guarantee on private deposits was raised to RUB 700,000 (EUR 20,000). Altogether, more than USD 200 billion of state assistance in various forms were earmarked in an endeavour to ease liquidity in the financial sector. Critics point to the usual dangers of misappropriation and corruption; they also expect that in the main the large (or well-connected) banks stand to gain disproportionately from this facility. They

---

<sup>41</sup> The stock market increased by +50% between January and end-April 2009 – see *The Economist*, 9 May 2009, p. 94.

wonder in fact whether the money will reach the companies facing the liquidity squeeze. It is to be expected that a number of small and medium-sized banks will eventually collapse, the banking sector will be streamlined and the state will exert greater influence on companies seeking financial help.

With lower export revenues and reduced investments, GDP growth will be negative in 2009; the trade and especially current account surpluses will diminish. A number of ambitious future spending and investment plans will have to be scaled down and government revenue will drop markedly following lower export duties on oil. If the level of federal expenditures is maintained, the federal budget will turn from a surplus in 2008 to a large deficit in 2009. Taken together, a substantial slowdown of GDP growth will now definitely materialize. The outcome, however, may be much worse: until late 2008, the range of GDP growth forecasts for the year 2009 fluctuated around 4-6% – largely depending on assumptions regarding the level of energy prices. Most current forecasts of Russian GDP reckon with a sharply negative growth for 2009 (up to -7.5% according to the IMF), with a return to modestly positive growth possible in 2010 (Development Centre, 2009). Owing to the limited role of credits in financing both consumption and investments (the latter are still largely financed from own resources or by the government), any effect of the financial crisis should be relatively modest and short-lived. The domestic financial market may stabilize and even recover fairly soon, yet the investment climate (including financing and the climate for investments in general) will remain difficult. Nominal exports will contract substantially; the volume of exports and imports will also decline in 2009.

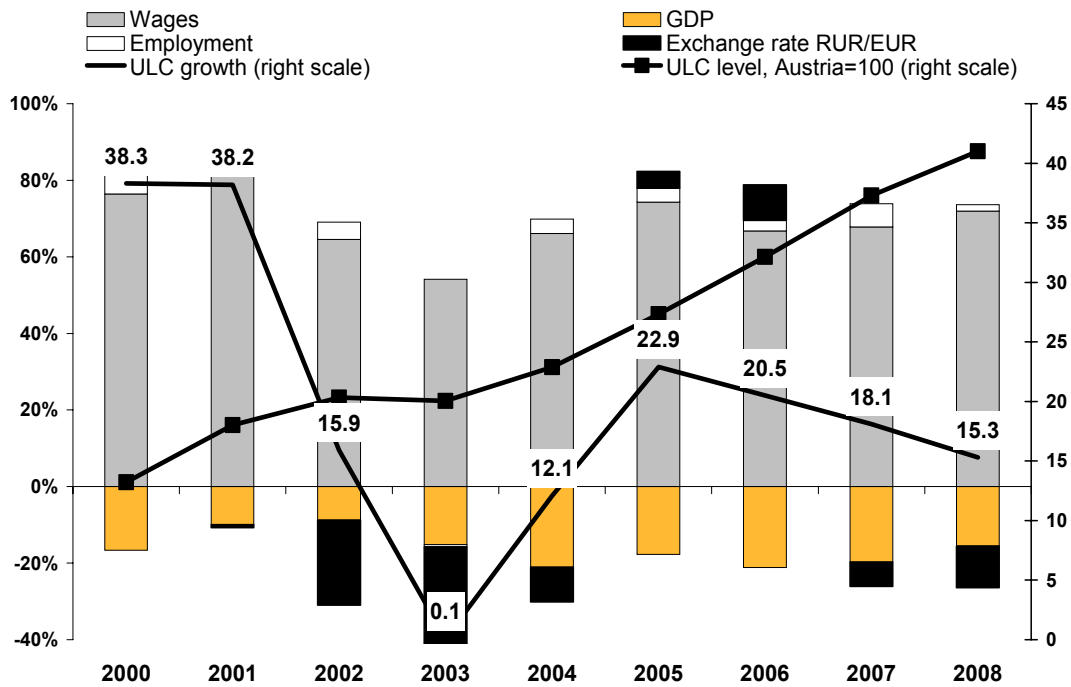
The expected GDP growth slowdown appears inevitable also in the medium term, at least until the end of the decade, before any (uncertain) modernization efforts start to bear fruit. GDP growth in 2010 will rebound (+3.8%). Our forecast for 2010 is based on a modest recovery of oil prices (Urals costing not more than USD 70 per barrel) and limited impact of the current financial market turmoil. Both private consumption and investments are expected to grow faster than GDP; real exports will continue to be sluggish since the volumes of exported oil and gas will hardly increase, while imports will expand more rapidly – roughly in line with private consumption and investments. This implies an ongoing negative (albeit diminishing) contribution of real net exports to GDP and, in nominal terms, a gradual reduction of trade and current account surpluses. In fact, the current account surplus, which leapt to EUR 70 billion in 2008 (about 6% of GDP), will almost disappear. Inflation will remain above 10% in 2009 and stubbornly close to 10% thereafter.

More than the direct effects of the global financial crisis, the oil price in particular constitutes a crucial variable for Russia in the short, medium and possibly even long term. The current global turmoil notwithstanding, the main challenge for the Russian economy is whether it will succeed in replacing energy exports as the key growth driver by developing other sectors (diversifying towards manufacturing, high-tech branches, services, etc.) and

the manner in which it will cope with the acute demographic crisis. The major challenges for the Russian economy – institutional developments, economic diversification and modernization – thus remain unchanged.

Figure 3.6

**Unit Labour Costs (ULC) in Russia: growth and contributions of key components, annual averages in %, 2000-2008**



Source: Rosstat, CBR, Eurostat and own calculations.

A potentially even more serious barrier to future sustainable economic growth and successful diversification is related to the danger of Dutch Disease and the gradual erosion of cost competitiveness. This results from a combination of factors such as the real currency appreciation, rapid growth of wages and only sluggish improvements in labour productivity (Figure 3.6). Average gross wages exceeded EUR 470 per month in 2008 which represents a nominal increase by 21% year on year. During 2004-2008, Russian unit labour costs were rising by nearly 20% per year and their level is now already higher than in some Central European new EU member states (e.g. Bulgaria – see Gligorov, Hunya, Pöschl et al., 2009 for detailed comparisons). Given the competition from Central and Eastern Europe (including Ukraine) and especially from China, Russia may soon become a location too expensive (and thus non-competitive) for export-oriented manufacturing. Rising local production costs may distract even such investments, in particular FDI, which are oriented at the (rapidly expanding) domestic market since the respective imports are cheaper. The expected (and repeatedly delayed) accession to WTO

and the related reduction of import tariffs may even aggravate these problems (see also Chapter 7 in OECD, 2008). It is not clear either whether the above-mentioned envisaged IP tools may not be conflicting with the accession to WTO.

Russia's greatest untapped potential lies in efficiency-seeking FDI. With its technological capabilities and human skills, Russia could become a major international engineering hub. But the success may prove inadequate under a scenario of intense global competition for FDI projects, in which case the country would also need to upgrade its investment promotion efforts, including the liberalization of FDI and the provision of targeted incentives. If that happens, Russia could multiply its inward FDI stock within a relatively short period of time – despite the restrictions on FDI in strategic sectors that were adopted in 2008 (Vinhas de Souza, 2008). One important caveat is that, before this happens, Russia could become a location too expensive for export-oriented FDI projects. Besides, the size of the Russian economy, national security concerns and the abundance of natural resources will doubtlessly shape FDI flows differently from the patterns observed in the NMS. Furthermore, the role, patterns and effects of outward Russian FDI – especially in the CIS countries – is becoming an increasingly hot topic which requires additional research.<sup>42</sup> The above aspects have again important implications for the potential relocation of production to Russia, the attempted economic diversification, adequate business strategies of foreign companies and for EU-Russia economic relations.

### **3.4 Challenges for EU-Russia relations**

Several key problem areas will affect the evolution of future EU-Russia relations in the context of broader European economic integration. In this section, only two aspects are briefly addressed: EU-Russia trade (including energy and FDI) and the contest between the EU and Russia for the influence on the post-Soviet space.<sup>43</sup>

Apart from energy issues, it is probably the EU (and NATO) Eastern enlargement as well as the EU's Neighbourhood (Eastern) Policy (ENP) vis-à-vis the CIS countries (in particular Ukraine and Georgia) which are creating tensions between Russia and the EU. The ENP is perceived by Russia as an unwelcome foreign inroad into Russia's traditional spheres of influence – the 'near abroad' in Russian terminology. The ENP aims to create a 'ring of friends' in the EU neighbourhood by providing various incentives such as reform support, economic assistance, technical advice, trade concessions – without offering to these countries the potentially biggest incentive, namely EU membership. At the same time, Ukraine and Georgia aspire for full EU membership, and other former Soviet republics

---

<sup>42</sup> See Libman and Kheyfets (2006) on Russian investments in the CIS and Kuznetsov (2007) on Russian FDI in the EU.

<sup>43</sup> Other areas of EU concern such as migration, the fight against organized crime, environmental issues, human rights and 'common values', etc. – all likely to be dealt with in the future EU-Russia partnership or strategic agreement – are beyond the scope of the present paper.

(Moldova, potentially even Belarus) may voice similar aspirations in the future. However, the Western support of the 'colour' revolutions in several CIS countries is perceived by Russia as a deliberate attempt at regime change, ultimately aiming at the reduction of Russian influence in the CIS.

Simultaneously, there is a number of integration projects on the post-Soviet space such as the Commonwealth of Independent States (CIS), involving all former Soviet republics except the three Baltic states (which became EU members in 2004), the Common Economic Space (CES) involving Russia, Belarus, Ukraine and Kazakhstan with the aim to establish at least a Customs Union (the latter is opposed by Ukraine and was recently used by Russia as a pretext to delay WTO accession), the Central-Asian Cooperation, the Union State of Russia and Belarus, etc. – all involving Russia as a dominant partner.<sup>44</sup> So far these integration efforts have not been very effective. However, Russia is considering its 'near neighbourhood' as its traditional sphere of influence; the new President Dmitry Medvedev has declared relations with the CIS as top priority.

Intra-CIS trade declined dramatically during the 1990s after the dissolution of the USSR (Havlik, 2007). Yet in contrast to the relatively small role of the CIS in the foreign trade of Russia (in 2007 only 15% of Russian exports and imports were traded within the CIS), the share of the CIS (and of Russia in particular) remains still high in the foreign trade of smaller CIS republics, including both Ukraine and Belarus – especially as far as imports of energy are concerned.<sup>45</sup> Belarus' and Ukraine's dependence on Russian energy deliveries is a well-known fact (reiterated by the recent gas price disputes). However, not less important is the CIS (and here again Russia in particular) for these countries as a market for their exports, especially of manufactured products which otherwise would not be competitive elsewhere.<sup>46</sup>

Owing to its rising economic strength, Russia is again becoming a more important trading partner for the CIS republics – and this tendency is being reinforced by increasing Russian investment flows, particularly in the energy, metals and telecom sectors (see Libman and Kheyfets, 2006; Zashv et al., 2007 for details). Under 'normal' conditions, also economic theory (gravity models) provides some evidence that Russia would remain the key trading partner for neighbouring smaller CIS economies, albeit below the shares which existed previously under the autarky Soviet system (see Vavilov and Viugin, 1993).

---

<sup>44</sup> The only integration project on the post-Soviet space without Russia is GUAM, which comprises Georgia, Ukraine, Azerbaijan and Moldova. For more details on the various integration projects on the post-Soviet space see, for example, Pankov (2007).

<sup>45</sup> In 2007, 46% of Belarus' exports (and 66% of imports) were traded with the CIS. The corresponding figures for Ukraine were 38% (exports) and 43% (imports) – see CIS in 2007, CISSTAT, Moscow, 2008, pp. 146-147. For more details see Havlik (2007) and Pindyuk (2007).

<sup>46</sup> There is a wide dichotomy between the commodity composition of exports to the CIS and the EU, in particular regarding Belarus – see Havlik and Astrov (2007).

### **3.5 Directions of EU-Russia relations**

European integration is at a crossroads. After the recent EU enlargements by the former socialist countries of Central and Eastern Europe, as well as the stalemate following the rejection of a draft EU Constitutional Treaty by referenda in France and the Netherlands in 2005, the EU has been preoccupied with internal debates. Future EU enlargements are moving forward slowly while the EU Neighbourhood Policy (ENP) is in disarray and remains largely toothless. The design, scope and conduct of the ENP has become more controversial as several NMS (in particular Poland and the Baltic states) are bringing new accents.<sup>47</sup> The ENP's implementation has been complicated also by disappointments in the actual developments of the 'Orange' revolution in Ukraine, the crisis in EU relations with Belarus and – last but not least – by a marked deterioration of EU-Russia relations. The evolution of the EU-Russia Strategic Partnership is unclear after the Partnership and Cooperation Agreement (PCA) expired in November 2007 (the PCA has been automatically prolonged). For all these policy directions new initiatives and sustained efforts of both the EU and Russia are badly needed (Emerson et al., 2009).

Meanwhile, the trade integration of the European economy continues to increase: not only is intra-EU trade of key importance especially for the NMS, but the EU (especially so after the recent enlargements) has become the leading trading partner in particular for Russia (55% of Russian exports go to the EU), and also for Ukraine (28%) and even Belarus (45% of exports). The European economic integration is thus progressing 'from the bottom', driven by both the accession process (in the NMS and less clearly also in the Western Balkans) and by growing business interests in rapidly expanding lucrative markets further East (especially in Russia). EU trade and investments in these dynamic markets are growing despite the difficult and unclear contractual environment. The institutional framework for doing business in the wider Europe is in a clear mismatch with economic reality, challenging not only future European integration but also its competitiveness in a global economy. The next integration steps are complicated not only by internal EU disputes, but also by Russia's growing assertiveness linked to its growing economic strength and attempts to restore influence on the post-Soviet space where it views EU inroads as an unwelcome intrusion in its traditional sphere of influence. This, in turn, is viewed with suspicion by several NMS (in particular Poland and the Baltic states) where the distrust in Russian intentions is especially strong. However, some recent Russian actions vis-à-vis its 'near abroad' (the energy price disputes with Ukraine and Belarus leading to the interruption of supplies, trade sanctions against Georgia and Moldova, restrictions on migrant workers) have been at least in part apparently politically motivated, they are not instrumental to the promotion of economic cooperation within the region either.

---

<sup>47</sup> For recent assessment see, for example, Emerson (2007), Emerson et al. (2009) and Barisch (2007).



Closer economic integration between the enlarged EU, the CIS and Russia in particular requires a stronger political commitment of all parties involved as well as further mutual trade liberalization and encouragement of cooperation in various fields such as industry, transport infrastructure and research. The EU – the stronger side – should be expected to lead the process.<sup>48</sup> A contrasting view, increasingly popular in Russia, is that Russia is different from both the NMS and other CIS: it is big and does not wish, or need, to integrate with the EU. According to this view, Russia should develop its own integration space encompassing the bulk of the post-Soviet area (the Common Economic Space). Integration within that space should create an economy that would be multi-country, multi-sector but basically inward-oriented. However, before that were to happen, Russia would have to change its sturdy behaviour towards its potential integration partners, offering incentives for such an integration project instead of threats when the potential partners are hesitant.

Despite considerable differences among the individual EU member states regarding policy approaches towards Russia (which go beyond the divisions between ‘old’ and ‘new’ member states – see Leonard and Popescu, 2008) more engagement of the EU is definitely needed. There is a broad agreement among economists that the relationship between the enlarged EU and the CIS requires a more intensive search for constructive approaches to the interaction within the triangle of Russia – EU – CIS countries. Turning the space of the common ‘near abroad’ of both Russia and the EU into a conflict area would be deplorable. Both Russia and the EU should develop coordinated ‘neighbourhood’ policies which should recognize the futility of ‘competing integrations’ in relation to the CIS with Russia trying hard to involve its major partners in the Customs Union of the ‘Four’ (Belarus, Russia, Kazakhstan and Ukraine) and the EU hindering this process while offering those countries no clear prospect of deeper EU economic integration. The Single Economic Space integration should be an ‘interface’ project between the enlarged EU and the CIS, as part of the gradually evolving Common European Economic Space.<sup>49</sup> These (and many other) issues should be addressed in a new (Partnership or Strategic) Agreement between Russia and the EU, which is currently under negotiation.

## References

Astrov, V. (2007), ‘The Russian Oil Fund as a tool of stabilization and sterilization’, *wiiw Monthly Report*, No. 7, pp. 1-8.

Astrov, V. and P. Havlik (2005), ‘The Enlarged European Union and Its Eastern Neighbourhood’, in: K. Liuhto and Z. Vincze (eds), *Wider Europe*, Esa Print Oy 2005, pp. 169-195 (published also in *Journal of East-West Business*, Vol. 11, No. 1/2, pp. 13-44).

---

<sup>48</sup> This argument was emphasised also by Tsoukalis (2007).

<sup>49</sup> See Glinkina, S., Kulikova, N. (2007); Havlik and Astrov (2005), Yurgens, I. (2008).

- Astrov, V. and P. Havlik (2007), 'Ukraine, Belarus and Moldova: Economic Developments and Integration Prospects', in: D. Hamilton and G. Mangott (eds), *The New Eastern Europe: Ukraine, Belarus & Moldova*, Center for Transatlantic Relations, Johns Hopkins University, Washington DC, pp. 127-147.
- Barisch, K. (2007), 'Russia, realism and EU unity', Policy Brief, Centre for European Reform, London, July.
- Cheng Jian (2008), 'Relations between Russia and Europe from the Perspective of Energy Strategy', IFSH Hamburg, Heft 150, February.
- Dashkeyev, V. V. (2008), 'Scenarios of macroeconomic development in 2008' (in Russian), Institute of the Economy in Transition, Moscow, January.
- Development Centre (2009), "Macroeconomic Forecasts for Russia", Moscow, April.
- Dollar, D., M. Hallward-Driemeier and T. Mengistae (2006), 'Investment Climate and International Integration', *World Development*, Vol. 34, No. 9, pp. 1498–1516.
- Emerson, M. (2007), 'The wider neighbourhood is in not such good shape', *European Neighbourhood Watch*, No. 29, CEPS, Brussels, July.
- Emerson, M. et al., (2009), 'Synergies vs. Spheres of Influence in the Pan-European Space', CEPS, Brussels, April.
- Gligorov, V., G. Hunya, J. Pöschl et al., (2009), 'Differentiated Impact of the Global Crisis', *wiiw Current Analyses and Forecasts*, No. 3, February, Vienna.
- Glinkina, S. and N. Kulikova (2007), 'The Impact of EU Enlargement on Economic Restructuring in Russia and Future Relations between Russia and the European Union', *wiiw Research Reports*, No. 338, Vienna, March.
- Goldthau, A. (2008), 'Russia's energy weapon is a fiction', in: *Europe's World*, Brussels, Spring, pp. 36-41.
- Grinberg, R., P. Havlik and O. Havrylyshyn (eds) (2008), *Economic Restructuring and Integration in Eastern Europe. Experiences and Policy Implications*, Nomos, Baden-Baden.
- Hamilton, C. B. (2005), 'Russia's European economic integration. Escapism and realities', *Economic Systems*, Vol. 29, pp. 294-306.
- Havlik, P. (2003), 'Russia and the European Union', *Contemporary Europe. Social and Political Research Journal* (in Russian), No. 1, institute of Europe, Moscow, pp. 32-38.
- Havlik, P. (2004), 'Russia, European Union and EU Eastward Enlargement', in: G. Hinteregger and H.G. Heinrich (eds), *Russia – Continuity and Change*, Springer, Vienna – New York, pp. 363-378.
- Havlik, P. (2007), 'Structural Change and Trade Integration on EU-NIS Borders', *wiiw Research Reports*, No. 340, Vienna, May.
- Jensen, C. (2006), 'Foreign Direct Investment and Economic Transition: Panacea or Pain Killer?', *Europe-Asia Studies*, Vol. 58, No. 6, September, pp. 881-902.
- Kaufmann, D., A. Kraay and M. Mastruzzi (2006), 'Governance Matters V: Aggregate and Individual Governance Indicators for 1996–2005', WPS 4012, The World Bank, Washington DC.
- Kuznetsov, A. V. (2007), 'Russian direct investments in EU countries' (in Russian), *Contemporary Europe*, No. 1, IE RAN, Moscow, pp. 37-50.
- Leonard, M. and N. Popescu (2008), 'A five-point strategy for EU-Russian relations', *Europe's World*, Brussels, Spring, pp. 20-30.
- Libman, A. M. and B. A. Kheyfets (2006), *Expansion of Russian Capital in the CIS Countries* (in Russian), Ekonomika, Moscow.

Maincent, E. and L. Navarro (2006), 'A Policy for Industrial Champions: from picking winners to fostering excellence and the growth of firms', *Industrial Policy and Economic Reforms Papers*, No. 2, EU DG Enterprise and Industry, Brussels, April.

OECD (2008), *Globalisation and Emerging Economies. Brazil, Russia, India, Indonesia, China and South Africa*, Paris.

Pankov, V., (2007), 'Integration and Disintegration on the Post-Soviet Area' (in Russian), *Mir Peremen*, No. 3, Moscow, pp. 128-132.

Sakwa, R. (2008), 'New Cold War or twenty years' crisis? Russia and international politics', *International Affairs*, No. 2, pp. 241-267.

Shleifer, A. and D. Treisman (2000), *Without a Map. Political Tactics and Economic Reform in Russia*, MIT Press, Cambridge, Massachusetts.

Tsoukalis, L. (2007), 'Global, Social & Political Europe', ELIAMEP, Athens, July.

Vinhas de Souza, L., (2008), 'A Different Country. Russia's Economic Resurgence'. Centre for European Policy Studies, Brussels.

Vavilov, A. and O. Viugin (1993), 'Trade Patterns After Integration Into the World Economy', in: J. Williamson (ed.), *Economic Consequences of Soviet Disintegration*, Institute for International Finance, Washington DC, pp. 99-174.

Yurgens, I. (2008), 'Forget politics; What Russia and the EU need is a shared economic space', *Europe's World*, Brussels, Spring, pp. 43-47.

Zashev, P., P. Vahtra and K. Luihto (2007), 'Outward FDI of Russian enterprises: lessons and policy recommendations', in: V. Kaartemo (ed.), *New role of Russian enterprises in international business*, PEI, Turku (see also <http://www.wiwi.ac.at/indeunis>).

Zhuravskaya, E. (2007), 'Whither Russia? A Review of Andrei Shleifer's A Normal Country', *Journal of Economic Literature*, Vol. XLV, March, pp. 127-146.

## 4 India<sup>50</sup>

### 4.1 Background

India has a large, highly diverse and extremely complex economy. Although it remains essentially a poor country, in recent years it has experienced relatively rapid economic growth and become one of the more attractive destinations for foreign investment in the developing world. It has a huge population of nearly 1.2 billion people and is projected to overtake China as the most populous nation in the world in the foreseeable future. 73% of the population lives in rural areas, and the rate of urbanization over the 1990s actually declined in the 1990s compared to the 1980s.

GDP was EUR 2339 billion in PPP terms, making India the fourth largest economy in the world, while in terms of nominal exchange rates, the GDP amounted to EUR 759 billion in 2007.<sup>51</sup> Per capita GDP in 2007 was EUR 2108 at PPPs, or EUR 684 in nominal exchange rates.

The diversity of India encompasses many different features. The economy includes various different production and distribution systems: from traditional village farming by peasant households, shifting cultivation and pastoralism in some areas to modern mechanized agriculture; from labour-intensive handicraft production to a wide range of modern industries at different levels of technological development; from low-productivity informal service activities to highly skilled and capital-intensive 'new' services. Geographically the sub-continent covers a huge range from mountainous and cold or temperate regions to sub-tropical monsoon-fed (most of peninsular India) to arid desert conditions. Linguistically India has the most diverse population in the world, with 14 official languages other than English (which is widely used in government, the organized sector and for inter-state communication) as well as 250 minor languages and several thousand dialects. In terms of religion, all the major religions of the world are represented in the population. The Census of India (2001) indicated that 80.2% of the population is officially described as Hindu, 13.4% as Muslims, 2.3% Christians, 1.9% Sikh, and the remaining 1.9% consists of Buddhists, Jains, Zoroastrians and various other religions. Within each of these, of course, there are further divisions by sect.

Social divisions extend beyond religious and ethnic groups to caste divisions, which in India are not confined to Hindus but are also implicitly recognized and practised in other communities. The caste structure is extremely complex, much more so than can be expressed by the four category 'varna' system that is well known abroad: there are several thousand castes, many of which exist only in certain regions of the country. While

---

<sup>50</sup> This section was written by Jayati Ghosh.

<sup>51</sup> Data for Indian typically relate to the financial year 1 April to 31 March. Therefore all annual data presented here refer to the period from April of the year mentioned to March of the following year.

endogamy is the defining feature, there are many other social practices relating to caste that unfortunately persist even in supposedly 'modern' spaces. There were hopes and expectations that such divisions would reduce or disappear in the course of economic development, this has not really happened to the anticipated extent, even in more advanced urban areas. Instead, caste awareness is increasingly reflected in identity politics that has led the political process to force some policy changes as well. Scheduled Castes (SC: 16.2% of the population) and Scheduled Tribes (ST: 8.2%) were explicitly recognized in the Constitution as being particularly deprived and were given reservation in official employment and higher education (15% for SCs and 7.5% for STs). Nevertheless the actual share of both remains low, well below their mandated levels, largely because reservations have not been effectively enforced and affirmative action has not taken any other forms such as asset redistribution or ensuring good quality school education that would more than proportionately benefit such groups. More recently, Other Backward Castes (OBCs) have been awarded reservation in both government employment and higher education, although this policy remains hotly contested. There are proposals to extend such reservation to the private sector, although that has not yet been legislated. Private employers are being encouraged to take affirmative action for such social groups on their own initiative. In addition, it has been noted that Muslims are also significantly deprived educationally and marginalized occupationally, and there may be attempts to rectify this through official policy in the future – indeed some states already have some measures in place.

Diversity extends to economic inequality as well. The Gini coefficient according to National Sample Survey data relating to 2004 was 0.38, but this is generally accepted to be an underestimate because the data cover consumption expenditure rather than income and because the survey is known to underestimate the tails of the distribution (Ghosh, 2009). The lowest decile of the population accounts for only 3.6% of estimated aggregate consumption, while the top decile accounts for 31.1% (NSSO, 2006). Rural-urban income differentials are large: urban per capita consumption is more than twice that in rural areas (NSSO, 2006) and per capita GDP gaps are even larger, with urban per capita income estimated to be around three times rural per capita income in 2004 (Sen and Himanshu, 2005). Regional differences are also significant and have increased recently: the ratio of the per capita State Domestic Product of the richest major state (Punjab) to that of the poorest major state (Bihar) increased from 2.2 in 1980 to 4.8 in 2004 (Pal and Ghosh, 2007).

The Constitution created a federal system of government, with states that were originally organized on the basis of language but have since evolved and been divided to result in 30 States and 5 Union Territories (which are under the control of the Central Government). Economic powers are shared between central and state governments, with the Centre controlling all monetary policy and significant elements of fiscal policy. All direct taxes and

taxes on international trade, as well as taxes on services are collected by the Centre. States are allowed to collect their own Value Added Tax (which is in the process of being unified under an agreement between the Centre and different state governments) and property taxes. The Reserve Bank of India (the central bank) can determine and constrain the borrowing limits of the state governments, thereby constraining their fiscal policies. State governments that borrow from international organizations such as the World Bank and the Asian Development Bank require the prior permission of the central government. The central government as well as many states have passed fiscal responsibility legislation that puts limits of 2% of GDP on the fiscal deficit. However, these have been explicitly relaxed during the recent crisis, and even in the past they have generally been honoured more in the breach, through the internationally familiar method of moving several items of expenditure off-budget.

India has a dominantly young population, which has led many to argue in favour of the potential of the demographic dividend it can reap in the near future. India is and for some time will remain one of the youngest countries in the world. It is still in that phase of the demographic transition in which the death rate is falling more sharply than the birth rate, although both are declining. A third of India's population was below 15 years of age in 2000 and close to 20% were young people in the 15-24 years age group. The population in the 15-24 years age group grew from around 175 million in 1995 to 190 million in 2000 and 210 million in 2005, increasing by an average of 3.1 million a year between 1995 and 2000 and 5 million between 2000 and 2005. In 2020, the average Indian will be only 29 years old, compared with 37 years in China and the US, 45 years in Western Europe and 48 years in Japan.

The essential source of this demographic dividend is seen to be the decline in dependency ratios and the increase in worker-population ratios which, even in the extreme (and unlikely) case of little or no increase in labour productivity, would lead to improved output performance and growth potential. However, India's ability to take advantage of this demographic dividend will depend crucially on its ability to educate and find productive employment for this bulge of young people.

#### ***4.2 Recent patterns of economic growth***

The country has sustained a high and accelerating rate of growth over the past 25 years. According to official figures, real GDP growth has accelerated from its 'Hindu rate' origins of around 3.5% per year in the 1960s and 1970s to average annual rates of 5.4% in the 1980s, 6.3% during the decade starting 1992-1993 and around 9% since 2003. The government had targeted a further rise to even 10% over the 'Eleventh Plan' period, but that appears unlikely now that the effects of the global economic and financial crisis are becoming apparent.

Table 4.1

**Structural change in the Indian economy**

Period (average of years)	Investment growth in %	Per cent of GDP		
		Primary	Secondary	Tertiary
1950-52	15.5	59	13.4	27.6
1960-62	19.4	53.1	17.3	29.6
1970-72	23.8	46.6	20.4	33.0
1980-82	22.0	41.3	21.8	36.9
1990-92	26.0	34.4	24	41.6
2000-02	26.2	26.1	24.7	49.2
2004-06	29.3	22.0	24.0	54.0
2006-08	35.9	17.8	26.4	55.8

Source: CSO, National Accounts Statistics, various issues.

The phase of higher growth which began in the 1980s has been associated with some amount of structural change, although perhaps not as much as might be expected. Investment rates have increased over time, and have moved up especially rapidly in the current decade; they are now around 36%. Meanwhile, the share of agriculture in GDP has fallen along predictable lines in the course of development, but there has been little increase in the share of the secondary sector, which has hardly changed since the early 1990s. Rather, the share of the tertiary sector has increased dramatically, to the point where it now accounts for more than half of national income (see Table 4.1).

Thus recent Indian economic growth has essentially been service-led, as the rate of growth of services GDP has been much higher than the rate of growth of overall GDP. More than 60% of the increment in GDP during the period 1993 to 2007 was due to an increase in GDP from services, which have contributed significantly to the recent acceleration of the growth rate as well. This boom in services was not on account of the public sector, where the share of services has remained stable at around 60%. It is in private activity that the share of services has gone up, from around 29% at the start of the 1980s to more than 55% by 2007. This sharp increase in the share of services in GDP in India has occurred at a much lower level of per capita income than characterized the developed countries when they experienced a similar expansion.

This has been at least partly due to the increase in the exports rather than domestic supply (and consumption) of services, in particular software and IT-enabled services. Exports of software and IT-enabled services amounted to around 15% of GDP in services and 66% of all services exports in 2006. However, despite the rapid growth, the absolute size of the sector in India remains small (less than 6% of GDP). The vast mass of differentiated but largely low productivity unorganized services still accounts for half the GDP and most of the employment in the services sector.

Further, the sector's contribution to employment does not compare with its role in the generation of income and foreign exchange. The total IT industry, including both hardware and software elements, as well as IT-enabled services, still employs only around 2 million workers, out of an estimated total workforce in India of more than 450 million, and urban workforce of around 120 million. Total employment in this sector is far short of even the annual increment in the youth workforce. This mismatch between the sector's contribution to GDP and its contribution to employment suggests that despite its high growth, this sector can make only a marginal difference to employment even of the more educated groups in urban areas.

### 4.3 Employment and the labour market

Aggregate employment growth (as measured by the large official labour force surveys) accelerated in the early part of this decade after the preceding period in which it had slowed considerably, as evident from Table 4.2. This reflected an increase in labour force participation rates for both men and women, incorporating declining rates of labour force participation among the youth, that is the age group 15-29 years, and a rise for the older age cohorts. Therefore, despite the growth of employment, unemployment rates have also been increasing, and are now the highest ever recorded. Unemployment measured by current daily status, which describes the pattern on a typical day of the previous week, accounted for 8% of the male labour force in both urban and rural India, and for 9-12% of the female labour force. This is unprecedented, given that there is really nothing resembling unemployment benefit or insurance (Ghosh, 2009).

Table 4.2

#### Growth rates of employment

(per cent change per annum)

	Rural	Urban
1983 to 1987	1.36	2.77
1987 to 1993	2.03	3.39
1993 to 1999	0.66	2.27
1999 to 2004	1.97	3.22

Source: Ghosh (2008), based on NSSO and Census of India.

The same data sources indicate that there has been a significant decline in wage employment in general, which includes both regular contracts and casual work. The sharpest decline was in agriculture, where wage employment fell at a rate of more than 3% per year between 1999 and 2004. But even for urban male workers, total wage employment is now the lowest that it has been in at least two decades, driven by declines in both regular and casual paid work. For women, in both rural and urban areas, the share



of regular work has increased but that of casual employment has fallen so sharply that the aggregate share of wage employment has fallen as well.

The lack of adequate opportunities for wage employment is probably why there has been a very significant increase in self-employment among all categories of workers in India. The increase was sharpest among rural women, where self-employment now accounts for nearly two-thirds of all jobs. But it was also very high for urban workers, both men and women, among whom the self-employed currently constitute 45% and 48% respectively, of all usual status workers.

Only a tiny minority (around 5-6% according to recent estimates) of India's workforce operates according to formal work contracts in the organized sector, and it is only this small group that gets the benefit of any workers protection, including minimum wages and protection from easy dismissal. In general there is a high degree of informalization even among the workforce in the organized sector, and it has been estimated that around half of the workers in the organized sector operate on the basis of informal or casual contracts without job security. Both public and private employers, even in the corporate sector, increasingly engage in outsourcing of specific functions as well as hiring of contract labour and periodic removal and re-employment of casual workers. These practices effectively allow them to circumvent the labour laws that are relatively strict with respect to hire and fire rules for workers who have been employed for more than 190 days continuously.

#### ***4.4 Education and employability***

Education is one area in which the government's interventions have been clearly insufficient and inadequate. The spread of literacy has been slow during the years of globalization and even in 2004 the country was far short of achieving total literacy even in the more developed urban areas, with national average literacy rates of 75% for males and 54% for females. Further, a significant proportion of nearly one-third of the population aged 15-29 years are still functionally illiterate. This age group is likely to remain in the labour force for another two decades at least, which raises serious concerns about the skill level of the workforce in the future as well as its employability.

In 2004, only 21.1% of rural males and 10.2% of rural females of 15 years and above had a minimum education of secondary school and above. In urban areas, the education level was slightly better with 48.3% of urban males and 35.6% of urban females with at least that much education. However, only around 1.5% of persons aged 15 years or more in urban areas and less than 5% in rural areas had technical qualifications of even the most rudimentary kind.

There is the further problem that even those who have been educated find it hard to get jobs, whether these jobs are appropriate to their skills or otherwise. Between 2000 and 2005, educated employment declined slightly for men, but was still around 6% for those with secondary school degrees and 7% for graduates. Unemployment among educated women was much higher and also increased, reaching rates of 34% for rural female graduates, and 20% for urban women with high school and above.

Vocational training appears to be doing little to resolve this problem. To begin with, even in 2004 only a very small proportion of youth, less than 4%, had received any sort of vocational training. But also most such training apparently does not increase employability: the proportion that has received some sort of vocational training is significantly higher among the unemployed than the employed youth.

Therefore, India cannot currently be characterized as a knowledge economy in any meaningful sense. However, the government is aware of this problem and has recently significantly increased the public resources for both school and higher education. It has also created a Skills Development Mission with the specific mandate of making vocational training and technical training more relevant, applicable and useful for changing employment possibilities. The positive results of these initiatives are likely to be felt within five to ten years.

Despite these fundamental problems, India's population is sufficiently large as to make even a small minority of the educated workforce appear to be significant by international standards. There are at least a hundred million actual or potential young workers in urban and semi-urban areas with some skills or qualifications who can be tapped for productive work, and this must constitute a huge advantage for the economy in the future. In particular, because so much higher education is conducted in English, there is a significant body of educated workers who have both verbal and written English proficiency. This has been a major advantage in the IT-enabled Business Process Outsourcing sector. It has also been found that even other foreign language skills are prevalent among some trained youth, who are currently in demand both nationally and internationally for translation and interpretation from English to other foreign languages such as Spanish, French, German, Japanese, which they can accomplish at much lower cost.

#### **4.5 Economic policies**

Over the 1990s and the early part of this decade, the Indian government undertook a number of policies designed to liberalize the economy both internally and externally. These included:

- reduction in direct state control in terms of administered prices and regulation of economic activity;

- privatization of some state assets, but leaving a substantial proportion still under state control;
- rationalization and reduction of direct and indirect tax rates, and move to VAT rather than state-specific sales taxes;
- attempts to reduce fiscal deficits which usually involved cutting back on public productive investment as well as certain types of social expenditure, reducing subsidies to farmers and increasing user charges for public services and utilities;
- trade liberalization, involving shifts from quantitative restrictions to tariffs and typically sharp reductions in the average rate of tariff protection, as well as withdrawal of export subsidies;
- financial liberalization involving reductions in directed credit, freeing of interest rate ceilings and other measures which raised the real cost of borrowing, including for the government;
- shift to market determined exchange rates and liberalization of current account transactions;
- some capital account liberalization, including easing of rules for foreign direct investment (FDI), permissions for non-residents to hold domestic financial assets, easier access to foreign commercial borrowing by domestic firms, and later even freedom for domestic residents to hold limited foreign assets.

#### **4.6 External trade and investment**

India's integration with the world economy increased rapidly in the 1990s, associated with the various economic reform measures outlined above. Trade to GDP ratios in India increased from 11% in 1995 to 24% in 2007. However, unlike China where much of the export expansion was on account of manufactures, export growth in India has been principally due to services. In the merchandise trade area, India's recent export success has been restricted to a few sectors, in particular chemicals and pharmaceuticals and engineering goods. The most dramatic increase in manufacturing exports has been to China, as India became a (relatively small) player in the relocative capital based export expansion of the Asian region, supplying metals and other intermediates to China for further processing for the US and European markets. However, India's merchandise trade balance with China remained negative, and indeed the overall trade balance has also been negative. Furthermore, it has deteriorated very sharply as the global economic crisis has been spreading, with exports declining by 16% in the period October-November 2008 compared to the same months in the previous year. To some extent the implications of the widening trade deficit have been mitigated by the neutralizing effects of exports of services and remittance inflows.

In services exports, India has been much more successful, becoming the topmost exporter of computer and information services in the international economy since 2005, with its share in world exports of computer and information services placed at 17% in 2006 (WTO, quoted in Reserve Bank of India, 2009). However, there is a high degree of concentration of such exports to a few countries, with the US accounting for 61% and the UK for 18% of India's IT-BOP export revenues in 2006-2007 (NASSCOM<sup>52</sup> figures quoted in Reserve Bank of India, 2009). While the effects of these are yet to be felt in the Indian balance of payments because of the weight of legacy contracts, these are also likely to slow down in 2009. Meanwhile remittances from Indian workers abroad, which amounted to more than USD 45 billion (EUR 30 billion) in 2008, are also likely to decline in 2009.

With respect to FDI, there has been a significant amount of liberalization, with the government moving from fairly strict controls on the extent and proportion of shares held, sectors, need for permission and constraints on profit repatriation and foreign exchange balancing, to a much more liberal regime based on relatively easy permissions and a small negative list. FDI policy in India is reckoned to be among the most liberal in emerging economies. Higher limits on foreign direct investment were permitted in a few key sectors, such as telecommunications. FDI up to 100% is now allowed under the automatic route, without prior approval, in most sectors and activities. There is a small negative list of industrial sectors in which FDI is not permitted: arms and ammunition, atomic energy, railway transport, coal and lignite, and the mining of iron, manganese, chrome, gypsum, sulphur, gold, diamonds, copper, zinc.

Portfolio flows have dominated in India's foreign investment inflows. FDI has been low at around EUR 2.7 to 4 billion annually, and only in the past two years it increased to any significant level, crossing EUR 10 billion in the year ending March 2008. However, much of that was not greenfield investment, but rather acquisition by private equity firms, so it was essentially portfolio investment. Meanwhile portfolio investment proper soared especially in the period April 2006 to June 2008 but fell dramatically from June 2008 onwards as investors booked their profits in India and moved back to the US and other locations to cover their losses in markets there. What has made things worse in the last quarter of 2008 is a related decline in FDI and banking capital inflows, such that the entire capital account turned to deficit in October – December 2008.

As a result of these movements, the Indian rupee depreciated sharply, especially with respect to the US dollar, with the rupee (INR) falling by more than 30% within just 15 months, from INR 39 to the US dollar in January 2008 to INR 51.50 to the US dollar in March 2009. The exchange rate regime can be broadly defined as a managed (or dirty) float, with the floating more evident than the management in recent months. While India had built up a reasonable level of foreign exchange reserves in the course of the previous

---

<sup>52</sup> NASSCOM: National Association of Software Services Companies.

boom, it was a fragile hoard since it was based largely on the inflow of hot and easily reversible capital inflows like portfolio capital and external commercial borrowing. Foreign exchange reserves fell from EUR 202 billion in early June 2008 to EUR 199 in March 2009.

India was a signatory to the GATT agreements of 1994 and therefore a founding member of the WTO. It is also involved in some regional arrangements: it is a member of the South Asian Free Trade Agreement (which has not done much real trade integration yet) and has signed bilateral free trade agreements (FTAs) with Thailand and Sri Lanka. It is negotiating a trade agreement with the EU and is attempting to find a place at the table at the ASEAN Free Trade Area.

Table 4.3

**Infrastructure deficits by sector and Eleventh Plan physical targets**

Sector	Deficit	Eleventh Plan Targets (2007-2011)
Roads/Highways	65590 km of national highways comprise only 2% of network; carry 40% of traffic; 12% 4-laned; 50% 2-laned; and 38% single-laned	6-lane 6500 km in Golden Quadrilateral (linking the 4 major metros Mumbai-Chennai-Kolkata-Delhi); 4-lane 6736 km North South – East West; 4-lane 20000 km; 2-lane 20000 km; 1000 km expressway
Ports	Inadequate berths and rail/road connectivity	New capacity: 485 mn metric tons in major ports; 345 mn metric tons in minor ports
Airports	Inadequate runways, aircraft handling capacity, parking space and terminal buildings	Modernize 4 metro and 35 non-metro airports; 3 greenfield in North East Region; 7 other greenfield airports
Railways	Old technology; saturated routes; slow speeds	8132 km new rail; 7148 km gauge conversion; (freight: 22 kmph; passengers: 50 kmph); low modernize 22 stations; dedicated freight corridors; payload to tare ratio (2.5)
Power	13.8% peaking deficit; 9.6% energy shortage; 40% transmission and distribution losses; absence of competition	Add 78577 MW; access to all rural households
Irrigation	1123 bn cubic metres utilizable water resources; yet near crisis in per capita availability and storage; only 43% of net sown area irrigated	Develop 16 mn hectares major and minor works; 10.25 mn hectares Command Area Development (area served under major irrigation project), 2.18 mn hectartes flood control
Telecom/IT	Only 18% of market accessed; obsolete hardware; acute human resources' shortages	Reach 600 mn subscribers—200 mn in rural areas; 20 mn broadband; 40 mn Internet

Source: Planning Commission (2008:255)

#### 4.7 Infrastructure

The recent rapid growth of the economy placed increasing stress on physical infrastructure such as electricity, railways, roads, ports, airports, irrigation, and urban and rural water supply and sanitation. Since all of these already suffered from substantial shortages and lack of capacity in the past, this had made the physical infrastructure deficit even more evident. Total infrastructure investment amounted to around 5% of GDP in 2007 according

to the Planning Commission (2008), which also estimated that this ratio would need to rise to 9% to get at least somewhat closer to meeting the required infrastructure needs of the economy and society. The estimated needs for the next few years are briefly described in Table 4.3.

#### **4.8 Telecom**

India's telecom sector has been possibly the biggest success story of the market-oriented reforms. Deregulation and liberalization of telecommunications laws and policies have prompted rapid growth in this sector. With more than 270 million connections, India's telecommunication network is currently the third largest in the world, and the second largest among the emerging economies of Asia. The total number of telephones has increased from 76.53 million on March 31, 2004 to 272.88 million on December 31, 2007. At present more than 8 million telephone connections are being added every month, and the frenetic pace of expansion continues despite the economic slowdown.

Local and long distance service provided throughout all regions of the country, with services primarily concentrated in the urban areas. Teledensity has increased from 12.7% in March 2006 to an estimated 30% by December 2008, but the ratio is much lower for rural areas. Further, the share of wireless phones has also increased from 24.3% in March 2003 to 85.6% in December 2007. In fact there has been extremely rapid growth of cellular services combined with modest declines in fixed lines. Clearly there is scope for much more and rapid expansion in this sector, despite the already high growth rates.

The domestic mobile cellular service was introduced in 1994 and organized nationwide into four metropolitan areas and 19 telecom circles, each with around three private service providers and one state-owned service provider. Recently significant trunk capacity has been added in the form of fibre-optic cable and one of the world's largest domestic satellite systems, the Indian National Satellite system (INSAT), with 6 satellites supporting 33,000 very small aperture terminals (VSAT). International services have been encouraged by a number of major international submarine cable systems, including Sea-Me-We-3 with landing sites at Cochin and Mumbai (Bombay), Sea-Me-We-4 with a landing site at Chennai, Fibre-Optic Link Around the Globe (FLAG) with a landing site at Mumbai (Bombay), South Africa – Far East (SAFE) with a landing site at Cochin, the i2i cable network linking to Singapore with landing sites at Mumbai (Bombay) and Chennai (Madras), and Tata Indicom linking Singapore and Chennai (Madras). All of these provide a significant increase in the bandwidth available for both voice and data traffic. In addition there are satellite earth stations – 8 Intelsat (Indian Ocean) and 1 Inmarsat (Indian Ocean region) as well as 9 gateway exchanges operating from Mumbai (Bombay), New Delhi, Kolkata (Calcutta), Chennai (Madras), Jalandhar, Kanpur, Gandhinagar, Hyderabad, and Ernakulam (2008).

## **4.9 Future prospects**

### *Short-term challenges: India and the global economic crisis*

Just like many other developing countries, India has been adversely – and quite sharply – affected by the global economic crisis. The mechanisms of transmission have been rapidly declining exports, reversal of private capital flows and worsening fiscal balances of both the central and state governments. This obviously constrains the immediate prospects for growth, although the impact thus far has been one of slowing down the growth process rather than recession or negative output growth. However, it should be noted that in the previous boom, the Indian economy was substantially dependent on the rapid expansion of private credit to sustain growth. The earlier emphasis on public spending as the principal stimulus for growth was in the 1990s substituted with debt-financed housing investment and private consumption of the elite and burgeoning middle classes. This required a relaxation of the terms on which, and the volumes in which debt was available to households and the private sector, and therefore made the country's financial system more vulnerable to default at various levels. Yet the Indian government's attempts at recovery have not tried to substitute for this unsustainable pattern of demand expansion through more direct spending, but instead have focussed on coaxing, cajoling and forcing banks into lending even more, in the hope that there would be enough borrowers who would use that credit to revive flagging domestic demand and make up for sluggish exports. In addition, the strategy pushes infrastructural investment financed not only with domestic debt, but also with external commercial borrowing. While this may have some immediate effects in terms of creating some growth revival, especially in an international context in which other sources of economic growth globally are rather limited, it does involve some potential problems for the future. Thus, it adds to the debt spiral, and may involve a currency mismatch inasmuch as infrastructural projects are unlikely to yield foreign exchange revenues that can be used to meet interest and amortization commitments payable in foreign exchange.

IMF forecasts from October 2009 suggest a growth rate of 5.4% for the Indian economy in 2009 (see Table A1 in the Annex). However, some national forecasts are even more optimistic as several indicators suggest that the Indian economy, like that of Brazil and China, might be bottoming out earlier than the advanced economies, with government stimulus measures seeming to play a crucial role. In the second quarter of 2009, Indian industry was already showing some signs of revival, while the government is continuing with tax cuts and other incentives introduced earlier during the peak of the crisis and has announced several more incentives for corporates in its 2009/2010 budget. As in the other BRICs, a significant rebound of stock prices was observed. Moreover, expectations were boosted by pronouncements in the Annual Economic Survey released just before the budget, that the government will undertake some privatization of public sector enterprises, opening up insurance and defence (!) industries to more foreign investment, and

deregulation/privatization of the public pension system. However, the weak monsoon in 2009 adversely affected agricultural output and thus incomes from agriculture in several regions of India declined to a significant degree.

In 2010, the IMF expects growth of the Indian economy to accelerate further and GDP growth to reach 6.4%, which is nevertheless below pre-crisis levels.

#### *Medium- and long-term outlook*

There are several reasons to be optimistic about the medium-term outlook for the Indian economy. Firstly, there are basic strengths defined by the potentially huge domestic mass market, which is just beginning to expand. Also, several new government programmes will act as cushions for the income of the poor and as demand stimulus especially for the rural economy. The National Rural Employment Guarantee Act, which has now been extended to cover all districts of India, promises 100 days of employment to every rural household. Despite various teething problems and regional variations, it has already shown its enormous potential and the possibility of very large positive multiplier effects in several parts of India. The Bharat Nirman programme is devoted to expanding rural infrastructure, which also has strong and direct linkages with private consumption and investment. There are already calls for extending the Employment Guarantee to the urban areas, which may create a demand stimulus for mass consumption items there. And the significant increase in funding for education at all levels will also have a positive effect. Thus, while the global crisis is definitely taking its toll on India, there are other forces within the economy that suggest that faster recovery and more positive future growth patterns are possible. To a large extent, this is a tribute to the vibrancy of Indian democracy, which will be evident once again during the general elections in the coming month.

#### **4.10 EU-India relations**

India has a longstanding relation with the EU, going back to the early 1960s. In 1994, the current legislative framework for cooperation, the 'Cooperation Agreement between the European Community and the Republic of India on partnership and development' was signed which took bilateral relations beyond merely trade and economic cooperation and paved the way for annual EU-India Summits and regular ministerial and expert level meetings. In 2004, the EU-India relationship was 'upgraded' to the level of a 'Strategic Partnership' and in 2005 an 'EU-India Action Plan' (revised in 2008) was jointly elaborated to further extend bilateral relations to non-economic areas (e.g. security policy, education and academic exchanges, cultural cooperation), but to promote economic relations as well, by initiating a broader dialogue on various economic issues of common interest (e.g. cooperation in science and technology, environmental issues, transport) and by tackling important issues, such as the protection of intellectual property rights and non-tariff barriers



to trade. Finally, a High Level Trade Group was established to explore ways and means to deepen and widen the bilateral trade and investment relationship, including the possible launch of bilateral negotiations on a broad-based trade and investment agreement.

In June 2007, negotiations for a broad EU-India Free Trade Agreement (FTA) started. From the EU side, the move towards a FTA has to be seen in the light of her new 'Global Europe' trade policy, launched in 2006. The new generation FTAs go far beyond traditional trade policy. With the broad aim to improve the market access for European companies abroad, they also address tariff and non-tariff barriers to trade, issues related to foreign direct investment, restrictions on the access of resources (e.g. energy), subsidies, intellectual property rights, trade in services and procurement. From the side of India, there exist a lot of reservations with regard to the new FTA with the EU, officially but from non-governmental organizations (NGOs) as well, which are drawing out the negotiations. Representatives of trade unions, people's movements and civil society organizations complained in particular about the lack of transparency, public debate and democratic process of the ongoing negotiations with the EU<sup>53</sup>. Nevertheless, at the last EU-India Summit in September 2008, Indian Prime Minister Manmohan Singh informed the press that the two parties agreed to work towards the conclusion of the new FTA by the end of 2009<sup>54</sup>.

## References

Ghosh, Jayati (2008), 'Growth and employment dynamics in India', *Working Paper* No. 92, Policy Integration and Statistics Department, ILO, Geneva.

Ghosh, Jayati (2009), *Poverty reduction in China and India: The policy implications of recent trends*, UN-DESA, New York.

National Sample Survey Organ (NSSO) (2006), *Employment and Unemployment Situation in India*, CSO, New Delhi.

NCEUS (2008), 'Report on Conditions in the informal sector in India', National Commission for Enterprises in the Unorganized Sector, Government of India, New Delhi.

Pal, Parthapratim and Jayati Ghosh (2007), 'Inequality in India: A survey of recent trends', in K. S. Jomo and Jacques Baudot (eds), *Flat World, Big Gaps: Economic liberalization, globalization, poverty and inequality*, Zed Books, London.

Planning Commission (2008), *Eleventh Five Year Plan*, Government of India, New Delhi.

Reserve Bank of India (2009), 'India's Foreign Trade: 2008-09 (April to December)', *Reserve Bank of India Bulletin*, March, pp. 495-507.

Sen, Abhijit and Himanshu (2005), 'Poverty and inequality in India: getting closer to the truth', in Angus Deatin and Valerie Kozel (eds), *Data and Dogma: The great Indian poverty debate*, Macmillan, New Delhi.

---

<sup>53</sup> [http://www.bilaterals.org/article.php3?id\\_article=133317](http://www.bilaterals.org/article.php3?id_article=133317).

<sup>54</sup> New Europe, The European Weekly, 2 November 2008, <http://www.neurope.eu/articles/90214.php> as of 2 November 2008.

## **5 China<sup>55</sup>**

### **5.1 Background**

In brief, the Chinese economy can be characterized as a hybrid economy, combining elements of a developing country, a transition country and a 'newly industrializing country' within the institutional and political framework of a 'Socialist Market Economy', which gives the state significant influence on the basically market-driven system.

### **5.2 Relative size of the Chinese economy**

China's major attraction for European companies is its large and fast growing market. Being the most populous country of the world, China's population stands now at 1312 million people (see Table A1 in the Annex). Economic growth over the past 30 years has been unprecedentedly high, reaching an average annual rate of 9.8%. But starting from a very low level, China's GDP per capita is still relatively small and amounted to only EUR 1867 (8% of the EU27 average) in 2007, which classifies China as a 'lower middle income country' according to the World Bank's definition. However, converted at purchasing power parities (PPP), GDP per capita is significantly higher, reaching EUR 4464 (18% of the EU27 average). When looking at China as a market for European exports, conversion at exchange rates seems more appropriate, but when planning direct investments to target the Chinese market from within the country, conversion at PPP probably gives the better picture. In 2007, the Chinese GDP converted at exchange rates amounted to EUR 2467 billion, reaching approximately the size of the German economy and one fifth of the total EU27 GDP; but measured at PPP, the Chinese GDP was equivalent to nearly one half of the EU27 GDP.

Because of the one-child policy proclaimed by the Chinese government at the beginning of the 1980s, population growth in China is much lower than in other countries at a similar stage of economic development (2007: 0.6%), and only slightly higher than in the EU27. Similar to the EU, China faces the problem of a rapidly ageing population and rising dependency ratios which will have an important influence on consumption as well as production in the future. It is estimated that the Chinese population at working age will reach a maximum in 2015 (European Commission, 2004, p. 236).

### **5.3 Strong fragmentation of the economy**

The Chinese economy is highly fragmented as is typical of large, fast growing developing countries. There exist huge regional disparities, a large gap between urban and rural

---

<sup>55</sup> This section was written by Waltraut Urban.

incomes and wide disparities of personal incomes in general, having important consequences for European companies selling or operating in China.

### *Regional disparities*

The Chinese mainland is divided into 31 major administrative regions (provinces, autonomous regions and municipalities).<sup>56</sup> Except for Beijing, the richest and most advanced regions are situated in the east of China, bordering the Pacific Ocean. The least developed and poorest regions can be found among the central and western regions. In 2007, the top ten coastal provinces including Beijing hosted about 40% of China's population, but produced more than 60% of its GDP, accounted for more than 90% of China's foreign trade and attracted about 80% of foreign direct investment. Also, these provinces rank top when judged by different location factors such as human resources, foreign language skills, availability of inputs, quality of infrastructure, logistics etc. (Urban, 2008). There are topographical and historical reasons for this phenomenon, but most decisive was the early establishment of so-called 'Special Economic Zones' (SEZs) and the advantage of nearby seaports. These two factors together attracted export-oriented foreign direct investment which became the nucleus of modern industrial development in China. For historical and geographical reasons, Hong Kong and Taiwanese investors are concentrated in the south, Japanese and Korean companies take an over-proportionate share in the northern coastal provinces and European companies cluster around Shanghai and the Yangtze river. But recently 'agglomeration disadvantages' such as relatively high wages and rents, lack of professionals, problems with power supply, etc. are driving investors further inland.

### *Incomplete urbanization*

Within each province, autonomous region and municipality, there is a big gap between the urban and the rural population. On average, urban per capita income is three times that of the rural population. The rural population in China is still very large, which is considered one of the reasons for the relatively small share of consumption in GDP (< 50%). Urbanization is delayed because of the 'hukou' (residence permit) system, which was used as an instrument for migration control from rural to urban areas under Mao Zedong. Although 'softened' after 1980, the system still constrains the free movement of people in China.<sup>57</sup> In 2007, according to official statistics, the rural population stood at 727 million

---

<sup>56</sup> Hong Kong and Macao, which returned to China in 1997 and 1999 respectively, both remained a customs area of their own, according to the model of 'one country, two systems'. However, by concluding the 'Closer Economic Partnership Agreement' (CEPA) which became effective on 1 January 2004, a kind of free trade area was established between China – Hong Kong and China – Macao, facilitating not only the trade in goods, but in particular the trade in services with mainland China.

<sup>57</sup> Each Chinese citizen has a 'hukou' (permanent residence permit), basically for the place he/she is born. Persons staying at a place for which they have no hukou cannot send their children to school and do not receive free medical treatment nor other government benefits. To obtain another hukou is very difficult, except after marriage or graduation from university. For some time now there has been the option of obtaining a temporary residence permit which, however, is expensive.

(55% of the total population). However, this includes a significant number of the more than 200 million migrant workers who have no valid residence permit for the city they work in. Judging by the share of people depending on incomes from agriculture, the ‘factory of the world’ is still an agricultural country.

#### *Affluent middle class*

Given the relatively low average income level in China, the upper income classes are the main target for European suppliers of final consumer goods, which – because of the very unequal income distribution in China – take an overproportionate share of incomes. In 2004 (latest data available), the top 10% of households earned 35% of all incomes and the top 20% disposed of more than 50% of all incomes earned (see Table A1). These data are consistent with studies which estimate that the affluent middle class in China comprises about 300 million people.

#### **5.4 Model of economic development**

Officially, the Chinese economic model is termed ‘Building socialism with Chinese characteristics’ or a ‘socialist market economy’, where markets take the pivotal role for the functioning of the economy, but public ownership, direct government interference and state-led industrial policies remain an integral part of the system. China further adopted an export-led development strategy, following the model of other successful ‘Newly Industrializing Economies’ in Asia.

#### *Building socialism with Chinese characteristics*

The market-oriented reform of the Chinese command economy began after Mao Zedong’s death, under the leadership of Deng Xiaoping in 1978. It was a gradual process – as opposed to the ‘shock therapy’ taken by the Central and East European countries ten years later – which left the state with substantial power. The reform started in the agricultural sector, proceeded to the industrial sector after 1985, and took hold of the services sector only after China’s entry into the World Trade Organization in 2001.<sup>58</sup> But a number of reform steps are still not completed, such as the rules for the acquisition and transfer of ‘land use rights’ (all land in China is owned by the state), the price reform (prices of important agricultural products such as grain are still regulated and prices of energy and other utilities are also set by the state authorities), and establishing a new social security and health system and an adequate legal system. A particular weakness in China is the enforcement of laws and the procedural law.

---

<sup>58</sup> For a concise description of the process of economic reform in China see, for instance, Wang and Fan (2009).

### *Role of the state in the economy*

The state has a dual function as the owner of large public enterprises and as a powerful regulator of the economy.

The public enterprise sector in China is very heterogeneous: public enterprises may be controlled either by the central government or by local governments or they are collectively owned. Some are fully state-owned and in others the state has a controlling stake. Because of the difficulty to determine which enterprises are state-controlled, considerable uncertainty surrounds any estimate of the size of the Chinese public sector<sup>59</sup>, but most estimates indicate that 30% to 40% of the GDP are currently produced by public enterprises.

Remarkably, there has never been a proper process of 'privatization' in China. In the beginning, private enterprises simply 'outgrew' the inefficient public sector. Only after 1997, a comprehensive 'state-owned enterprise reform' (SOE reform) was launched and rather quietly large numbers of small enterprises were sold off by various methods (including auctions), sent bankrupt or merged with bigger ones. Only the important big SOEs were retained and restructured. Many were turned into joint stock companies and accepted private partners. Some became listed on the stock exchange. No enterprises were sold to foreigners as was the case in the Central and Eastern European countries. But in most Sino-foreign joint ventures, the Chinese partner is a state-owned enterprise (a prominent example is the automotive industry). Informally, SOEs enjoy certain advantages such as better access to capital (loans, stock exchange) and probably to public procurement as well. On the other hand, they may be prompted to actively support government policies, e.g. by keeping employment high to rein in unemployment, by supplying products despite loss making prices, by investing abroad to secure strategic raw materials etc.<sup>60</sup> In return, they may receive subsidies. The 'Guidelines for state-owned enterprise reform' from December 2006 give a list of sectors in which the state should be the sole owner or have a majority share. These include power generation and distribution, oil, petrochemicals and natural gas, telecommunications and armaments. The state must have a controlling stake in the coal, aviation and shipping industries.

To regulate the economy, the government applies market-conform measures such as interest rate adjustments, tax policy etc., but also uses more direct measures, for example credit controls, export restrictions and licensing. Apart from the long-term development plans and the 'five-year plans', which provide a broad framework for government policy, sectoral policies such as energy plans, plans for industrial development and for important individual industries, e.g. the automotive sector, play an important role.

---

<sup>59</sup> See OECD (2005), pp. 80 and 81.

<sup>60</sup> This was the case, for instance, in 2007/2008 when the price for crude oil shot up but the government-controlled petrol and diesel prices were kept constant to contain inflation.

Drawing on the presumed privileges of SOEs and the relatively high degree of government influence, China is still classified as a 'non-market economy' (NME) by the EU (and by the US as well), which has certain disadvantages for China when its companies become subject to anti-dumping investigations. Therefore, in the current negotiations with the EU for a new 'Partnership and Cooperation Agreement' (PCA), it is an important aim for China to reach 'market economy status' as soon as possible.

### *Centralism versus federalism*

Under constitutional law China is a centralist state, but during the economic reforms it has become more decentralized, albeit on an informal basis, in that provinces have reached wider discretion to implement policy goals set by the central government. However, the Communist Party of China has remained the all-embracing power. Of the government expenditures, which are relatively low by international standards (20% of GDP), about half is spent by the central government and the other half by local governments. The (general) government deficit and the public debt are relatively low, reaching -0.6% and 20% of GDP respectively in 2007.

### *Export-led development strategy*

In parallel to the market-oriented reforms starting in 1978, China was gradually opening up its almost entirely closed, self-supporting economy. In doing so, the Chinese government followed the model of the Asian 'Newly Industrializing Economies' in the 1970s<sup>61</sup>, which by attracting labour-intensive, export-oriented FDI from more advanced economies (Japan, USA), mainly in the field of textiles & clothing and electrical machinery & apparatus, had successfully speeded up their industrial development process.

In a first step, so-called 'Special Economic Zones' (SEZs) were established in the south of China to attract export-oriented foreign direct investment (FDI) from nearby Hong Kong and Taiwan, not only with low wage costs, but also by supplying modern infrastructure, and granting tax privileges and tariff exemptions. Because of their success, more and more 'special zones' were established in other coastal provinces as well. In 1990, the 'Pudong New Area' was established as a 'super SEZ' in Shanghai. Further on, by means of a 'joint venture law', the Chinese authorities followed a 'market for technology' strategy: In exchange for the access to the highly protected Chinese market, foreign producers were expected to transfer advanced technology to their Chinese partners. In many sectors (e.g. automobiles) no controlling stakes or wholly foreign-owned companies were allowed.

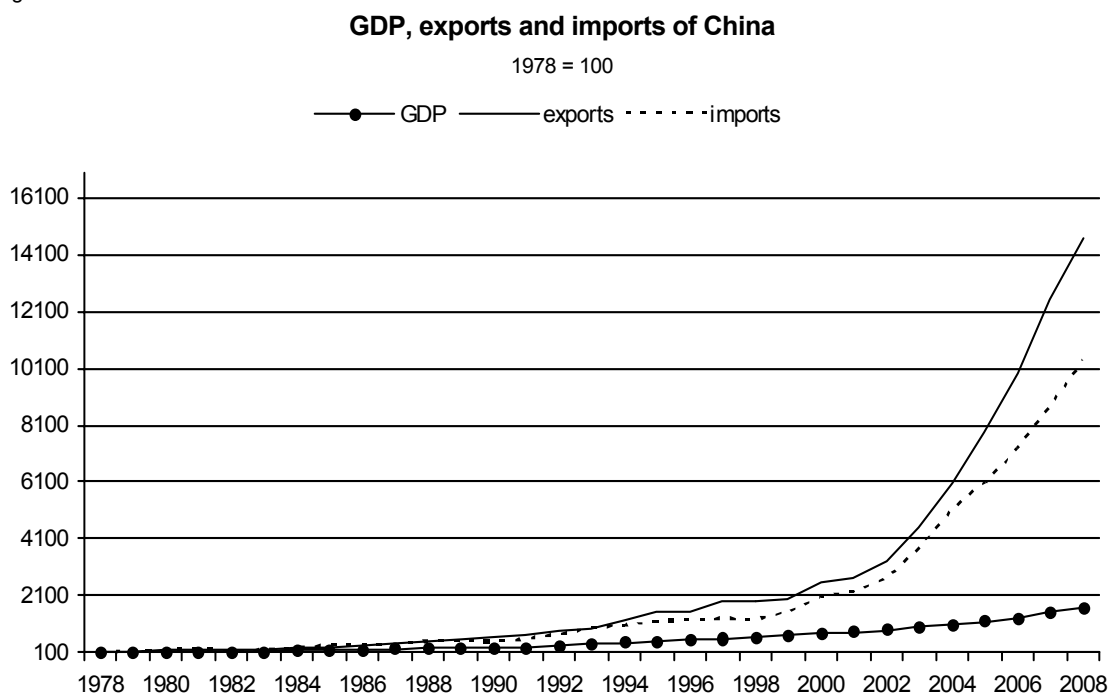
In a second step, after 1992, the system of SEZs was extended to the inland provinces and more and more Chinese enterprises were allowed to engage in foreign trade as well.

---

<sup>61</sup> Including the 'Four Tigers' (Hong Kong, Singapore, Taiwan and the Republic of Korea), Indonesia, Malaysia and Thailand; see Urban (1992).

Tariff rates for intermediate inputs and investment goods were reduced, but remained high for final products. As a consequence FDI, also from outside Asia, was surging. China became the second most important recipient of FDI after the USA and trade started to expand faster than GDP (see Figure 5.1). To support exports, the Chinese currency was significantly devalued and made convertible on the current account, but capital controls stayed in place and FDI remains subject to government approval until now.

Figure 5.1



Source: China Statistical Yearbook 2008, China Monthly Statistics 2009/1.

Along with the proceeding reforms, regional disparities in China increased dramatically. To narrow the gap and to accelerate growth in the backward western provinces, the so-called 'Go-West Policy' was launched (2000). By stepping up infrastructure investment and providing tax breaks and incentives for certain industries, the government tried to lure investors to these regions<sup>62</sup>.

The Asian financial and economic crisis unfolding in 1997/1998 became a milestone for China's outward relations. The Chinese monetary authorities decided not to follow the massive devaluations of other countries in the region, but to peg the yuan to the US dollar instead, which strengthened China's role as a 'growth pole' in the region and also its position at the global level and had a positive impact on EU-China relations as well.<sup>63</sup>

<sup>62</sup> The targeted regions are: Xinjiang, Qinghai, Tibet, Gansu, Ningxia, Shaanxi, Sichuan, the Autonomous City of Chongqing, Yunnan, Guangxi and Guizhou. Ningxia, Qinghai and Gansu.

<sup>63</sup> In April 1998, on the occasion of the Second Asia-Europe Meeting (ASEM) in London, the first EU-China Summit between China's President Jiang Zemin and European Commission President Jacques Santer took place. In June, the

The third and most decisive step in China's opening-up policy is the country's entry into the World Trade Organization (WTO) in December 2001. Hundreds of Chinese regulations were adjusted to comply with WTO rules; tariffs which stood still high for certain products (e.g. cars) were significantly reduced, many restrictions for foreign invested enterprises including local content requirements were lifted to conform with the 'national treatment' principle, the protection of intellectual property was improved, and the services sector was opened up to trade and FDI step by step. But on the other hand, existing advantages for foreign enterprises, such as a lower corporate income tax and certain privileges granted in the SEZs, were phased out. Also, with lower tariffs, non-tariff barriers to trade gained importance. Notably, China has not yet joined the 'Agreement on Government Procurement' (GPA) in the framework of WTO.

After WTO entry, both Chinese exports and imports expanded strongly, but exports rose much faster, leading to massive trade surpluses (and corresponding bilateral trade deficits of the USA and the EU with China)<sup>64</sup> and to a huge accumulation of exchange reserves. As a consequence, in July 2005 the Chinese monetary agency abandoned the dollar peg and shifted to a system of managed float, with reference to a basket of currencies, allowing daily fluctuations of +/- 0.3% against the central parity defined in USD and +/- 1.5% against other important currencies such as the euro, yen etc.<sup>65</sup> The loosening of the dollar peg led to a moderate revaluation of the yuan in terms of USD in the following years, but because of the strengthening of the euro against the US dollar in the second half of 2006, the Chinese currency significantly depreciated versus the euro, making Chinese imports cheaper and European exports to China more expensive, thereby aggravating the existing imbalances.

### *'Go abroad policy'*

In 2002, a new dimension was added to the Chinese development model by allowing and actively promoting outward direct investment of Chinese enterprises. The so-called 'go-abroad' policy aimed at various targets: to make efficient use of foreign exchange reserves, to secure resources, to acquire technology, to gain access to established distribution networks, and to reduce the risk for Chinese enterprises of getting caught by

---

Foreign Ministers Council of the EU approved a New China Policy, outlined in a document by the Commission, 'Building a comprehensive partnership with China' (Communication from the Commission, 25 March 1998). At a regional level, the ASEAN plus 3 (China, Japan, Korea) and ASEAN plus 1 (China) consultation process was started, which has to be seen as a cornerstone in regional economic integration and as a first step towards the Free Trade Zone between China and ASEAN to be completed in 2010. The China-ASEAN free trade area, which will comprise China, Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam, is expected to be one of the biggest free trade areas in the world. Already on 1 January 2009 a Free Trade Agreement between China and Singapore became effective.

<sup>64</sup> It has to be mentioned, however, that Chinese exports to the EU were especially pushed up by the phasing-out of the Textile & Clothing Agreement at the end of 2004, leading to the abolishment of all existing quantitative trade restrictions between WTO members in this field, and the end of the bilateral quota agreement on trade with shoes between the EU and China, also in 2004.

<sup>65</sup> This band was further extended to +/- 3% in September 2005. In May 2007, the band towards the USD was extended as well, to +/- 0.5%.



non-tariff barriers to trade. In a longer-term perspective, the goal of the Chinese government is to generate a group of 30 to 50 big transnational companies. So far, the most spectacular Chinese investments have been made outside Europe, mainly to acquire raw material sources, but there are examples for acquisitions of European companies as well<sup>66</sup>. Probably, the low asset prices due to the current global financial and economic crisis will make European companies more attractive for Chinese investors.

Box 5.1

### **Managing China's foreign exchange reserves**

Persistent large trade surpluses and strong foreign direct investment inflows have led to an enormous accumulation of foreign exchange reserves in China. In February 2006, China surpassed Japan as the world's largest holder of forex reserves; at the end of 2008, they reached EUR 1384 billion (USD 1946 billion). Reportedly, 70% of these reserves are held in dollar-denominated assets, out of which USD 744.2 billion are US Treasury bonds, making China the biggest creditor of the US government. However, early in March 2009, China's Premier Wen Jiabao voiced his concerns that the US government's massive stimulus package was increasing the risk of inflation, which may lead to a depreciation of the US dollar and thus a lower value of China's reserves. As a consequence, China may reduce its holdings of US Treasuries gradually. Later, China's Central Bank Governor Zhou Xiaochuan expressed the idea of replacing the US dollar with a super-sovereign reserve currency, suggesting that the IMF's Special Drawing Rights (SDRs) could be used. This idea is supported by the other BRICs and, for instance, the Republic of Korea and South Africa as well, although it is considered a long-term solution rather.

Also, with the aim to invest its forex reserves more effectively, the Chinese government set up a so-called 'sovereign wealth fund' in September 2007, following the examples of various oil-exporting countries, but e.g. Hong Kong and Singapore as well. The 'China Investment Corporation' (CIC) is endowed with a capital of USD 200 billion, two thirds of which should be invested in China and one third abroad. As in the case of similar sovereign wealth funds, this has roused a certain fear in other countries that investment policies will favour the wider strategic goals of the Chinese government rather than commercial business interests. However, the most prominent acquisitions of CIC known so far are substantial investments in Morgan Stanley and in the private-equity company Blackstone.

Alternative attempts to make an efficient use of forex reserves include the promotion of outward private investment and the investment of state-owned enterprises abroad, respectively (see 'go-abroad' policy) and the stocking of gold or other raw materials (in particular oil). According to the World Gold Council, the gold reserves of China stood at 1054t at the end of 2008, ranking 5<sup>th</sup> in the world. Hoarding of other raw materials is limited by adequate storage capacities.

Accelerated revaluation of the Chinese currency to reduce trade imbalances is not considered a viable option for the moment, as export industries are suffering from the global crisis anyway. However, certain measures have been taken recently to make the yuan fully convertible step by step, by allowing major export hubs (e.g. Shanghai, Guangzhou) to use the yuan in overseas trade settlements.

---

<sup>66</sup> TCL Group (consumer electronics) bought the TV business from Thomson and the mobile handset from Alcatel; Nanjing Automotive took over MG Rover; Dalian Machine Tool took 70% of Zimmermann AG (Germany).

### *Domestic investment as a major driver of growth*

Investment in fixed assets is unusually high in China, reaching 50% of GDP in 2007, and investment has been the most important driver of growth over the past couple of years. About half of the investment is private, the other half is public. Private consumption, on the other hand, is relatively low by international standards, due to the still low incomes of a large part of the population and a high saving rate of the rest. For this reason, China has so far been a larger and more dynamic market for investment goods than for consumer goods.

### *A new model of qualitative growth?*

During the Ninth Five-Year Plan (1996-2000) already, the question of qualitative instead of quantitative growth was raised. Nevertheless, in 2001, the long-term development goal for China was still formulated in quantitative terms, namely 'to quadruple the per capita value of the 2000 GDP by 2020', implying an average growth rate of 8%. It was only the next generation of Chinese leaders under Hu Jintao coming into power in 2003, who proclaimed a sustainable growth path and clearly emphasized qualitative instead of quantitative growth. To secure sustainability, more emphasis should be put on tackling social problems, the reduction of regional disparities, environmental protection and energy efficiency. Finally, the export-led development model should be phased out and transformed into a more domestic-market oriented growth model. In line with these goals, the Chinese economy should become more balanced between agricultural and industrial development and the industry should be restructured away from low value added export-intensive industries towards high value added, technology-intensive industries.

To support this policy, a revised 'Industrial Restructuring Catalogue' was drafted and a revised 'Foreign Investment Catalogue', indicating the sectors where foreign direct investment is welcome and where not, came into force in December 2007. The new sectoral policies and revised regulations concerning FDI will be presented in more detail below. The new 'Labour Contract Law', which took effect on 1 January 2008, strengthening the rights of workers on the one hand and increasing the cost of labour on the other, will also support restructuring towards higher value added industries.

### *Changing FDI policy*

The new development model is putting strong emphasis on the quality of FDI that China should absorb, which may, *ceteris paribus*, reduce the overall size of FDI inflows in the future. In 2006, new restrictive rules on mergers and acquisitions (M&A) became effective, the new rules on foreign investment in the banking sector from December 2006 are also fairly restrictive, and the new 'Investment catalogue for foreign enterprises' from December 2007 is 'encouraging' technology-intensive investment mainly. Finally, in January 2009, a new 'Monopoly Law' entered into force, which may also be used to control sino-foreign mergers & acquisitions. On the other hand, for a better protection of intellectual property

rights, a major amendment to the Patent Law was adopted in December 2008, which will take effect on 1 October 2009. In view of the desired upgrading of FDI, China is now also looking for more investment from the EU and from the US than from neighbouring Asia, because the former are home to the high-tech companies China wishes to attract.

### **5.5 A more detailed picture of the Chinese economy at sectoral level**

The secondary sector, which comprises mining, manufacturing, the supply of utilities and construction, is the biggest sector in China, generating nearly 50% of GDP in 2007, followed by services (40%) and agriculture (11%) (see Table A1). Within the secondary sector, manufacturing takes the lion's share with 34% of GDP, which is very high by international standards. That is partly a 'socialist' legacy but a consequence of China's export-oriented growth strategy as well. For the same reasons, the services sector is relatively undersized. Agricultural value added is also relatively small when taking into account the still large rural population and the fact that 40% of the persons employed still work in agriculture (314 million) – which points to very low productivity in this field. Mining generates about 6% of total GDP, but reaches a share of more than 30% in certain provinces (Xinjiang, Heilongjiang). It comprises mainly coal mining and the extraction of oil & natural gas. Although of minor importance, the exploration and mining of ores is considered of national interest and belongs to the industries where foreign direct investment is either prohibited (e.g. tungsten, molybdenum, tin) or restricted (e.g. precious metals). The share of construction in GDP reaches about 6%.

Within the manufacturing industry, measured by output value, the basic metals industry is the biggest industry (see Table 5.1). The ICT industry ranks second (12.3%), followed by the chemical industry (10.5%), food and beverages (8.1%), machinery (8.2%) and the transport equipment industry (7.7%). The high share of the ICT industry – also very high by international standards and significantly higher than in the EU (8.5%) – is obviously related to the specialization of exports in this field. The clothing industry and the leather & shoe industry on the other hand, which also figure prominently in Chinese exports, take only relatively small shares in Chinese manufacturing, but a larger share than in the EU27 as well. The prominent position of basic metals reflects China's development from the biggest importer of steel to a major exporter of steel. In contrast, the shares of the food & beverages industry, the printing industry and the transport equipment industry in China are relatively small by international standards. As illustrated in Table 5.1, the share of enterprises with foreign funds (FIEs) is particularly high in the ICT industry (82%), but has an over-proportionate share in the low-wage, export-oriented industries (e.g. wearing apparel, leather & leather products, furniture & other manufactured goods n.e.c.) and in the transport equipment industry.

### Size structure

Similar to other countries, most manufacturing enterprises in China are small (89%) or medium-sized enterprises (10%). However, large enterprises, with a share of only 1% of all enterprises, produce 35% of total output. Most of these are state-owned, state-controlled or collectively owned, but there exist some big private enterprises as well (e.g. Jiangsu Shagang Group, the 5<sup>th</sup> largest steel company, Geely holding, a major car producer).

Table 5.1

#### Structure of manufacturing industry in China and in the EU27, 2006/2007

Code (NACE rev.1)	Industry	China (2007)	EU27 (2006)	Share of FIEs in
		output shares in %	output shares in %	Chinese manuf. output (2007) in %
15	Food and beverages	8.1	12.7	31.6
16	Tobacco products	1.1	0.9	0.2
17	Textiles	5.3	1.6	23.8
18	Wearing apparel	2.1	1.2	45.1
19	Leather and leather products	1.5	0.7	50.2
20	Wood and wood products	1.0	2.0	18.9
21	Paper and paper products	1.8	2.5	34.8
22	Printing and publishing	0.6	4.0	30.7
23	Coke and refineries	5.0	4.3	14.8
24	Chemicals and chemical products	10.5	10.3	27.8
25	Rubber and plastic	3.3	4.0	38.3
26	Non-metallic mineral products	4.4	3.6	18.4
27	Basic metals	14.6	5.9	14.9
28	Fabricated metal products	3.2	7.2	34.8
29	Machinery and equipment	8.2	9.3	27.3
31	Electrical machinery and apparatus	6.8	4.2	37.3
30+32+33	Office mach., radio, TV, med. and opt. instr.	12.3	8.5	81.9
34+35	Transport equipment	7.7	13.6	45.5
36	Furniture; other manufactured goods n.e.c.	2.2	2.6	47.0
37	Recycling	0.2	0.5	21.5
D	<i>Total manufacturing</i>	<i>100</i>	<i>100</i>	<i>35.0</i>

Note: Industrial enterprises above designated size only (annual revenue from principal business over 5 million yuan (= 480,000 euro); FIEs: foreign invested enterprises.

Source: China Statistical Yearbook 2008, Eurostat SBS.

### Guidelines for industrial restructuring

In line with the new development model outlined above, a new 'Catalogue for Guiding Industrial Restructuring' was drafted in 2007. Industries classified as 'encouraged' will be given support through preferential credit and taxation policies; those listed in the 'restricted' category will not get government approval and financial institutions are not allowed to grant loans to them. New industries in the 'encouraged' category are, for instance, the development of financial services (e.g. credit card services, SME guarantee services); the prospecting, exploitation and transportation of various kinds of energy (including

unconventional energy resources); the renovation of sewage treatment plants; and the construction of eco-friendly and alternative fuel cars. Changes in the restricted category refer, for instance, to the length of cars allowed in different categories, small coal mines and small thermal power generators working below a certain efficiency threshold. Certain types of old, inefficient or heavily polluting thermal power stations were added to the list of technologies to be 'eliminated' in the next couple of years.

#### *New guidelines for foreign direct investment*

In December 2007, a new 'Catalogue for the guidance of foreign investment industries' became effective instead of the 2004 Catalogue. The catalogue classifies industries for potential investment as prohibited or restricted (for instance, only permitted in a joint venture with a Chinese partner) or encouraged (investments the government wants to support, sometimes with incentives). Investment that does not fit into one of these three categories is considered permissible, but there are no policy incentives applicable to it. The new catalogue is in line with the policy change from export-led growth to quality investment supporting domestic market-led growth and also reflects China's WTO commitments to open up its services sector.

New industries on the list of encouraged FDI are, for instance, modern agricultural methods, resource conservation and environmental protection (e.g. recycling, renewable energy, clean production), services outsourcing and modern logistics, advanced or new technologies and new materials. On the other hand, FDI in certain kinds of basic manufacturing that China has clearly mastered (e.g. clothing) will be permitted, but no longer encouraged. Foreign investments in highly energy- or resource-intensive and highly polluting projects are now either restricted or have been added to the prohibited category, which also includes mainly strategic and sensitive industries such as mining of certain minerals (e.g. tungsten, rare earths). The restricted category includes, for instance, the smelting of various metals, telecommunication companies, printing of publications and the construction and operation of high-grade real estate.

Supplementary to the foreign investment catalogue, a new 'Central-Western Area Foreign Investment Advantage Industry Catalogue' was issued in January 2009, which should help to expand foreign investment to so far neglected areas. 'Encouraged' investments will enjoy tax breaks, low-interest loans and cheap rent on industrial purpose land. They include investments in agriculture, environmental protection, services, infrastructure and upgrading of existing industries.

## **5.6 Future prospects and challenges**

### *Impacts of the current crisis*

The current global financial and economic crisis reached China in November last year. GDP growth fell from 9.9% during the first three quarters of 2008 to 6.8% in the last quarter and reached only 6.1% in the first quarter of 2009. However, the transmission of the crisis did not take place via the financial sector, which is still rather closed in China, but via declining exports due to sluggish external demand, which then triggered a slowing-down of industrial production and investments.<sup>67</sup> With some delay, because of falling incomes and rising unemployment respectively, private consumption lost steam as well.<sup>68</sup> Also, China was not spared from the global contraction of foreign direct investment, with FDI inflows staying below the respective previous year's levels since October 2008. Real estate investment contracted particularly strongly in the first quarter of 2009. Stock prices were falling dramatically until the end of 2008.

To contain the crisis, the Chinese government announced a massive 'stimulus package' in November 2008, providing additional funds of more than EUR 400 billion for 2009 and 2010 (equivalent to some 7% of GDP per annum). The funds will be spent mainly on infrastructure (37.5%; highways, railways, airports and rural infrastructure); reconstruction of earthquake-hit areas (25%); affordable housing (10%); improvement of villages (9.25%); public health and education (3.75%); and restructuring of industry (14.5%). The latter measures are concentrated on 11 specified industries that are considered to be hit particularly hard by the crisis.<sup>69</sup> Of the total, only one third will come from the central government, the rest will be put up by local governments, state-owned enterprises and banks. In addition, a wide range of measures designed to stimulate the economy or certain parts thereof in a more direct manner have been adopted. These include increased VAT refunds for exporters, the government instructing banks to extend loans to small and medium-sized private enterprises and consumers, lowering of thresholds on mortgage loans for private households, cutting the sales tax on cars with engines of 1.6 litres or less, and consumer subsidies granted to farmers when buying household appliances such as TV sets, washing machines, microwaves, mobile telephones etc. but small cars, minivans and small trucks as well.

Thanks to its huge domestic market and its massive and timely stimulus policies, China appears to be the BRIC which is least affected by the crisis and its economy seems to

---

<sup>67</sup> While at the beginning of the crisis China was successful in penetrating new markets including the other BRICs to substitute for declining demand from the Triad (EU, USA, Japan), this strategy was no longer sustainable with the crisis turning global.

<sup>68</sup> In recent years, China's exports of goods have ranged close to 30%, but more than half of the country's exports are classified as 'processing trade', major components of which are imported; hence the value added of exports and the contribution of net exports to GDP is markedly less.

<sup>69</sup> Steel, shipbuilding, textiles, machinery, IT, light industry (food, home appliances, paper making), petrochemicals, non-ferrous metals, logistics and the automobile industry.

bottom out earlier than the advanced economies, similar to that of Brazil and India. GDP growth reached 7.9% in the second quarter and 8.9% in the third quarter of 2009. The strongest support came from fixed asset investment, pushed up by public expenditures. Private consumption was picking up too, although moderately. On the supply side, industry, which had suffered the heaviest slump of all sectors, was on the rise as well. Stock prices gained more than 60% during the first half of the year.

IMF forecasts from October 2009 suggest a growth rate of 8.5% for the Chinese economy in 2009 and of 9% for 2010 (see Table A1).

In the medium term, the major question is whether the Chinese government will continue its policy of qualitative rather than quantitative growth in the face of the current global financial crisis, with exports and FDI shrinking worldwide. Also, with China's growth decelerating and probably falling below the targeted growth rate of 8%, it will be difficult to absorb the workers laid off from the low value added, labour-intensive export industries in other sectors of the economy. Already, contrary to the proclaimed policy, export rebates (VAT refunds) to these industries have been increased recently as part of the stimulus measures, and the textile and clothing industry is one of the 11 industries that will be supported under the government's special support programme to fight the crisis. Also, the construction industry – which is very energy-intensive and a big polluter (cement, glass, aluminium) – will be particularly favoured by the government's 'stimulus package'. Perhaps some 'qualified return' to the export-led model will occur, implying that support for labour-intensive, low-tech manufacturing will return as well as support for purely export-oriented manufacturing; however, industries listed as restricted or prohibited in the 'Industrial restructuring catalogue', such as high-pollution, high-waste and highly energy-intensive industries, will continue to be restricted or prohibited.

### *Long-term prospects*

Some years ago, numerous forecasts predicted an 'imminent collapse' of the Chinese economy, often by authors clearly in favour of a free market system (Agresano, 2008, p. 335). The main reasons given were poor decisions made by Chinese policy makers, particularly regarding investment, a collapse of the banking system because of an overload with nonperforming loans, an uncompetitive public enterprise sector, corruption and social unrest due to rising inequalities.<sup>70</sup> More recently, environmental problems, resource constraints, including energy, and related price hikes, social security, a rapidly ageing population, rising labour costs and unsustainable imbalances in foreign trade are considered major challenges to further rapid growth of the Chinese economy. These challenges have also been taken up by the Chinese government when proclaiming a policy of qualitative growth in 2003. But there is a long list of opportunities in support of high

---

<sup>70</sup> See, for instance, Chang (2001) and Gang (2003).

growth as well, including urbanization (migration from agriculture to more productive activities in the industrial and services sectors); further expansion of the private economy; improvement of the institutional and regulatory framework; restructuring and technological upgrading of industry; new fields for industrial activity (energy-saving technology, pollution control equipment, waste treatment); becoming a pioneer in developing and using renewable energy resources; innovative practices in traditional farming; and increased regional trade because of closer regional economic cooperation. Depending on the weights attached to the different challenges and opportunities, different assessments of the future outlook for the Chinese economy will result. However, in recent years, most estimates for China's long-term economic development until 2020 have been in the range between 6% and 9% average annual growth of GDP<sup>71</sup>, which is also in line with the Chinese government's target of 7% to 8%. The question is whether the current global crisis will affect these estimates. If the crisis is over in one or two years, little will change, but if the world slides into a prolonged recession, China's transition from an export-led to a domestically oriented economy will have to proceed faster than envisaged and FDI inflows and technology transfer will also be slower than expected, probably resulting in about one to two percentage points less growth than otherwise. But there is no doubt that China will move from a developing to a developed country and from a regional to a global economic power in the years to come.

### **5.7 EU-China relations**

The first 'Trade Agreement' between China and the European Economic Community (EEC) was concluded in 1978. It was substituted by the 'EEC-China Trade and Economic Cooperation Agreement' in 1985, which is still in force. However, in September 2006, the two parties started negotiations on a new comprehensive 'Partnership and Cooperation Agreement' (PCA) to replace the 1985 trade agreement, which should take account of the highly increased bilateral trade and investment relations since that time and China's and the EU's rise as political powers as well. On the side of the EU, the negotiations are regarded as part of the wider 'Global Europe' trade policy, launched in October 2006<sup>72</sup>, which goes well beyond traditional trade policy. With the broad aim to improve the market access for European companies abroad, the new trade policy addresses tariff and non-tariff barriers to trade, issues related to foreign direct investment, restrictions on the access to resources (e.g. energy), subsidies, intellectual property rights, trade in services and public procurement. On the side of China, the Chinese and the EU economies are

---

<sup>71</sup> The International Monetary Fund estimated a growth rate of 7.6% of GDP for the period 2002-2020 (IMF, 2004, p. 98); Justin Lin Yifu, chief economist of the World Bank, forecasted a long-term growth rate of about 8%, when he was still head of Beijing University's China Center for Economic Research in 2007 (*Harvard Business Review's* Chinese edition, quoted in *China Daily*, 2-4 May 2008).

<sup>72</sup> European Commission, Communication 'Global Europe: Competing in the World. A contribution to the EU's Growth and Jobs Strategy', [COM (2006) 567 final], 4 October 2006  
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0567:FIN:EN:PDF>



considered highly complementary, implying broad prospects for bilateral trade and economic and technological cooperation. But there are major concerns as well. The EU arms embargo (in force since 1989) and related restrictions on European high-tech exports to China (dual use technologies) should be lifted; full 'market economy status' should be granted as soon as possible; the EU should reduce antidumping and other discriminatory policies and practices against China. To discuss these issues and to support the ongoing negotiations for the new 'Partnership and Cooperation Agreement', a 'High Level Economic and Trade Dialogue' was established in Spring 2008. In addition, a working group with members of the People's Bank of China (PBoC), China's central bank, and the European Central Bank (ECB) will deal with bilateral exchange rate issues.

## References

- Angresano, James (2008), 'The State of China's economy 2009', *Real-world Economics Review*, No. 48.
- Chang, Gordon G. (2001), *The Coming Collapse of China*, Random House, New York.
- European Commission (2004), 'The Challenge to the EU of a rising Chinese Economy', European Competitiveness Report, Commission staff working document SEC (2004) 1397, Enterprise and Industry publications, Chapter 5, pp. 235-277.
- Gang, Lin (2003), 'China's Economy: Will the Bubble Burst?', Asia Program Special Report, Woodrow Wilson International Center, Washington DC, June.
- IMF – International Monetary Fund (2004), *World Economic Outlook*, April.
- OECD (2005), 'China', *Economic Surveys*, Volume 2005/13, September.
- Urban, Waltraut (1992), 'Economic Lessons for the East European Countries from Two Newly Industrializing Countries in the Far East?', *wiiw Research Reports*, No. 182, The Vienna Institute for International Economic Studies (wiiw), April.
- Urban, Waltraut (2008), 'Eastern Europe and China as alternative locations for outward investment of Austrian manufacturing companies', Final Report, research supported by the Jubilee Fund of the Austrian National Bank, May.
- Wang, Xiaolu and Gang Fan (2009), 'The road to China's economic transformation: past, present and future', *wiiw Monthly Report*, No. 6, The Vienna Institute for International Economic Studies (wiiw), June.

## **6 Future challenges and opportunities for EU competitiveness**

*Rising demand for consumer goods.* The ongoing catching-up process in the BRICs and the rising population (the latter except in Russia) will lead to an over-proportionate demand for more sophisticated and high-quality consumer goods, which will provide ample opportunities for EU exports and market-seeking FDI in these fields. Thus, the currently skewed export structure, focusing on investment goods and intermediates (again except in Russia) is expected to become more balanced.

*Technological upgrading.* Competition from the BRICs in high value added and technology-driven manufacturing products will increase on the EU market and on third markets, in particular in other emerging economies. China has already entered this path. The new outward-looking policy in Brazil and the new industrial policy in India with ambitions to become part of the 'Asian supplier network' will support this development. To stay ahead, EU companies will have to accelerate their technological development.

*Expanding R&D.* Due to rising expenditures for R&D in the BRICs, competitive pressure on the EU may also increase in certain high-tech areas where the individual BRICs choose to specialize. But on the other hand, new opportunities for technical & scientific cooperation and for knowledge flows between the EU and the BRICs will emerge.

*Broadening of supply/demand.* There are several signs that the BRICs will broaden the range of their supplies on their home markets as well as abroad. China will advance its relatively undersized services sector, also promoting outsourcing activities, and will spur the modernization of agriculture; Brazil, India and Russia intend to further diversify their industrial structure. This will widen the competition from the BRICs, but will also open up new opportunities for EU enterprises on the BRICs markets in these fields.

*Stronger demand for investment goods.* The envisaged restructuring and technological upgrading of the BRICs will absorb a large amount of investment goods, where the EU has shown a comparative advantage with respect to the BRICs already and is expected to do so in the future as well.

*Focus on infrastructure.* All BRICs have ambitious plans to increase infrastructure investment – such as for transport infrastructure in Brazil, Russia and India; for increasing energy efficiency and protecting the environment in China; and for power generation and telecommunications in India. This will open up many new opportunities for EU suppliers specialized in these fields.

*Large distances.* For some business areas, a large distance between supplier and customer, as it is the case between the EU and the BRICs, is considered a serious obstacle. Furthermore, when economic relations become more complex, the local

presence of EU enterprises is gaining importance. However, there are still various restrictions on FDI in the BRICs (in particular in China and Russia). Also, SMEs typically face more problems in investing in more distant places than larger companies.

*Regionalism.* Regional economic cooperation agreements give the individual BRICs a relative advantage compared to the EU in the respective region. This is particularly relevant in Asia, where regionalism is on the rise. In 2010, a free trade agreement between China and ASEAN will become effective, and India is seeking closer links to the ASEAN Free Trade Area (AFTA) as well. Brazil holds a privileged position within Mercosur, but this will fade when the ongoing negotiations for an FTA between the EU and Mercosur are concluded successfully. A number of challenges with respect to Russia exist in shaping EU relations with its Eastern neighbours (Belarus, Moldova, Ukraine, etc.).

*Changing roles.* China has propagated to follow a more domestically orientated development model in the future, which is expected to somewhat reduce its competitive pressure in international markets. Brazil, India and Russia, on the other hand, are striving for a more outward oriented policy in the years to come, which may increase competitive pressure from their side.

## 7 Summary results

Starting with the common features, all BRICs are characterized by big land size, a large population (between 1321 million in China and 143 million in Russia) but lower incomes, wages and productivity than the EU. In 2007, GDP per capita at PPP ranged from 50% of the EU average in Russia to only 8.5% in India. All BRICs show great personal and regional income differentials (Gini coefficients between 0.37 in India and 0.57 in Brazil); nevertheless, a sizeable prosperous middle class is emerging (reaching, for instance, about 300 million persons in China and probably 100 million in Brazil). The role of the state in the BRICs' economies is substantial and their scores with regard to regulatory quality, rule of law, control of corruption and political stability are typically low. BRICs represent important regional economic powers and are also global players in certain fields (e.g. Brazil in biofuels, Russia in energy supply, India in IT services and China in manufacturing). BRICs economies are typically expanding faster than the advanced industrialized countries, including the EU, with average growth rates for the period 2000-2007 ranging between 3.4% for Brazil and 10.1% for China. In the medium term their catching-up process is expected to continue. However, to achieve this growth, the individual BRICs have been pursuing different models of economic development:

*Brazil* followed the model of a domestically oriented, service-driven economy, with a relative large private sector (>80% of GDP) and foreign direct investment playing an important role. On the negative side there are poor infrastructure, high informality, low productivity and little innovation. The services sector takes the biggest share (66% of GDP), supplying services for the domestic economy mainly. Major manufacturing industries include aerospace, bio-ethanol and automotives. Since 2004, a more outward looking policy has been propagated by the government, promoting exports and fostering technological development to increase international competitiveness. In 2008, additional tax incentives for investment, R&D and exports were introduced.

*Russia*, when transforming from a centrally planned economy to a market economy, has liberalized first and 're-centralized' later. In 2007, the private sector accounted only for 65% of GDP. FDI helped to support growth, but its stock is still relatively low, due to many impediments. On the negative side of high economic growth there are high inflation, strong appreciation of the rouble without increases in productivity, and a declining population and labour force. Economic development is highly dependent on the extraction and export (price!) of mineral oil and gas. In 2007, a new long-term development programme and a new industrial policy, respectively, was launched, aiming at the diversification of the production structure towards (high-tech) manufacturing by improving the investment climate, promoting 'public private partnership' and investing more in infrastructure. The ambitious investment plans will have to be scaled back in view of the global crisis.

*India's* economic development is essentially service-led, supported by exports of services (especially IT-enabled services); manufacturing exports are relatively small and are concentrated on a few sectors only. The share of agriculture in GDP is still very high (16%). After liberalization, starting in 1980, the private sector is currently generating more than 80% of GDP. Rules for FDI have been eased as well, yet the FDI stock is still small. Wages are very low, but the overall education level, particularly with respect to technical qualifications, is very low as well. A major stumbling bloc to further development is the underdeveloped infrastructure. A new government programme has been launched recently to expand rural infrastructure and to increase funding for education and infrastructure in general.

*China* refers to its system as a 'socialist market economy,' with markets taking a pivotal role, but public ownership, direct government interference and industrial policy measures representing an integral part of the system. Currently, the private sector is estimated to generate about 65% of GDP. China's economic development is driven by manufacturing exports and by investments (including infrastructure). FDI plays an important role, especially for exports. Recently outward FDI, mainly to secure raw materials, has been increasing. Although generating fast growth for over 30 years, the system has come under criticism recently because of rising income inequalities, environmental degradation, rapidly increasing energy demand and external imbalances. Therefore, a new model of 'qualitative growth' is propagated by the Chinese government since 2003, emphasizing domestically oriented growth, industrial restructuring towards higher value added industries, cleaner and more energy-efficient technologies and more balanced regional and sectoral development; FDI should support these goals.

Looking at the more recent policies and future development plans of the BRICs, a certain 'convergence' of their development strategies can be observed: More export orientation and state-led industrial policy in Brazil; greater industrial diversification and promotion of investment in Russia; more emphasis on the development of other sectors than services, higher expenditures on infrastructure investment in India; and a gradual switch from export-oriented to more domestic-market oriented growth with less dominance of manufacturing in China.

Also common to all BRICs is the aim to upgrade their industrial structures towards higher value added and high-tech products respectively, frequently supported by government programmes, and the trend towards increased expenditures for R&D.

#### *Impacts of the crisis*

Initial hopes that the BRICs would be able to 'de-couple' from the economic slowdown in the Triad countries have not materialized. The main mechanism of transmission is represented by rapidly declining exports and the respective multiplier effects, decreasing

FDI and plummeting stock prices; in some countries (Russia, India and Brazil), a significant outflow of financial capital occurred as well. To fight the crisis, all countries have taken certain financial and/or fiscal measures. Brazil has focused on financial measures to shelter its currency and to secure credit supply but has introduced cuts in taxes on capital goods and durable consumer goods to stimulate domestic demand as well. Russia has launched a comprehensive rescue package for domestic banks, and supports the exchange rate and consumption by drawing on accumulated reserves and raising new debt. The various forms of rescue and stimulation measures are estimated to cost around 10% of GDP. India tries to keep the credit supply alive in order to support domestic demand and to speed up infrastructure investments. China has adopted a massive fiscal stimulus package and various rescue measures including increased expenditures for infrastructure, consumer subsidies and support for its ailing export industries. Russia is so far the most affected economy because of both declining demand and lower prices of oil; China appears to be least affected due to its massive stimulus policies and the huge domestic market. In the short term, the crisis may delay restructuring processes in the BRICs, but in the medium and longer term it will rather reinforce existing development plans and make these economies stronger and more independent.

According to the latest IMF forecasts from October 2009, the growth rates in 2009 will be -0.7% for Brazil, 5.4% for India, 8.5% for China and -7.5% for Russia. Several statistical indicators suggest that the former three BRICs economies have bottomed out earlier than the advanced economies, with government stimulus measures seeming to play a crucial role. In the case of Brazil, for instance, sales of durable consumer goods have returned to pre-crisis levels, investment in the first quarter of 2009 was up 19%, and money from abroad is flowing in again. On the supply side, construction is doing well and industry is recovering. In India, industry is showing signs of revival as well and the government is continuing with tax cuts and other incentives for corporations. In China, the strongest positive signal comes from fixed asset investment, pushed up by public expenditures. Investment has increased by 33% in the first three quarters of 2009, faster than in the same period last year. Private consumption, which showed a significant deceleration at the beginning of the year, is picking up as well. Industry, which suffered the heaviest slump of all sectors in the economy, has hit bottom eventually. A significant rebound of stock prices can be observed in all BRICs countries.

## Annex – BRICs List of indicators

Table A1

### List of indicators for BRICs Year 2007 (unless otherwise mentioned)

<b>MACRO INDICATORS</b>	<b>Brazil</b>	<b>Russia</b>	<b>India</b>	<b>China <sup>1)</sup></b>
<b>Size of the economy</b>				
Landsize in 1000 sq km	8515	17075	3288	9600
Population, average, mn	189 <sup>2006</sup>	143 <sup>2006</sup>	1110 <sup>2006</sup>	1321 <sup>2006</sup>
Population aged 0-14, % of total	27.6 <sup>2006</sup>	14.9 <sup>2006</sup>	32.5 <sup>2006</sup>	21.1 <sup>2006</sup>
Population aged 15-64, % of total	66.2 <sup>2006</sup>	71.4 <sup>2006</sup>	62.4 <sup>2006</sup>	71.1 <sup>2006</sup>
Population aged 65 and above, % of total	6.3 <sup>2006</sup>	13.7 <sup>2006</sup>	5.0 <sup>2006</sup>	7.8 <sup>2006</sup>
Population, growth, %	1.3 <sup>2006</sup>	-0.5 <sup>2006</sup>	1.4 <sup>2006</sup>	0.6 <sup>2006</sup>
GDP in EUR at exchange rates, EUR bn	973	946	759	2467
GDP in EUR at exchange rates, EU 27=100	7.9	7.7	6.2	20.0
GDP in EUR at PPP, EUR bn	1484	1758	2339	5898
GDP in EUR at PPP, EU 27=100	12	14	19	48
GDP in EUR at exchange rates per capita	5142	6700 <sup>2007</sup>	684	1867
GDP in EUR at PPP per capita	7839	12400	2108	4464
GDP in EUR at PPP per capita, EU 27=100	31.5	49.8	8.5	17.9
GDP in EUR at exchange rates per person employed	11200	13973	1688	3204
GDP in EUR at PPP per person employed	17075	25965	5198	7661
GDP in EUR at PPP per person employed, EU 27= 100	30.2	46.0	9.2	13.6
<b>Distribution</b>				
Gini coefficient (based on all household incomes)	0.56 <sup>2006</sup>	0.40 <sup>2002</sup>	0.37 <sup>2005</sup>	0.47
1st income quintile (lowest), % of total	2.9 <sup>2005</sup>	6.1 <sup>2002</sup>	8.1 <sup>2005</sup>	4.3 <sup>2004</sup>
2nd income quintile, % of total	6.5 <sup>2005</sup>	10.5 <sup>2002</sup>	11.3 <sup>2005</sup>	8.5 <sup>2004</sup>
3rd income quintile, % of total	11.1 <sup>2005</sup>	14.9 <sup>2002</sup>	14.9 <sup>2005</sup>	13.7 <sup>2004</sup>
4th income quintile, % of total	18.7 <sup>2005</sup>	21.8 <sup>2002</sup>	20.4 <sup>2005</sup>	21.7 <sup>2004</sup>
5th income quintile (highest), % of total	60.8 <sup>2005</sup>	46.6 <sup>2002</sup>	45.3 <sup>2005</sup>	51.9 <sup>2004</sup>
Top 10% income earners, % of total	44.9 <sup>2005</sup>	30.6 <sup>2002</sup>	31.1 <sup>2005</sup>	34.9 <sup>2004</sup>
<b>Role of the state</b>				
Private sector, % of GDP	83 <sup>2) 2006</sup>	65	80	65
Employees in private enterprises, % of total	96. <sup>2006</sup>	56	95	75.
<b>Demand side factors, foreign trade</b>				
Distance Brussels - capital of respective BRICs country	8978	2255	6438	7968
Exports of goods, % of GDP	12.0	27.4	9.6	36.0
Imports of goods, % of GDP	9.0	17.3	14.5	28.3
Exports of services, % of GDP	1.7 <sup>2006</sup>	3.0	8.2	3.6
Imports of services, % of GDP	2.6 <sup>2006</sup>	4.6	4.7	3.8
Current account, % of GDP	0.1	5.9	1.6	11.0
Investment, % of GDP	17.7	24.7	39.7	42.3
Final consumption, % of GDP	80.7	66.5	46.0	48.8
Effectively applied tariff	12.2	8.3	14.0	8.8
Weighed tariff	6.83	6.00	10.42	4.30
Standard deviation of tariffs	7.0	6.5	14.9	6.6
<b>Foreign direct investment</b>				
Inward FDI stock, EUR bn	172	34	52	516
Inward FDI stock, % of GDP	19.0	3.6	7.3	22.5
Outward FDI stock, EUR bn	43	.	21	54
Number of companies in the world's top 500	10 <sup>2008</sup>	12	13 <sup>2008</sup>	25 <sup>2008</sup>

(Table A1 continued)

Table A1 (continued)

**MACRO INDICATORS**

	<b>Brazil</b>	<b>Russia</b>	<b>India</b>	<b>China <sup>1)</sup></b>
<b>Human resources and research</b>				
Economically active population, mn	96 <sup>2005</sup>	75	467	786
Participation rate (15-64, %)	76.7 <sup>2005</sup>	.	42.0	83.7
Average gross wages, monthly, EUR	418	388	71	207
Adult literacy, male, aged 15 and above, %	88 <sup>2005</sup>	100 <sup>2005</sup>	75 <sup>2004</sup>	95 <sup>2005</sup>
Adult literacy, female, aged 15 and above, %	89 <sup>2005</sup>	99 <sup>2005</sup>	54 <sup>2004</sup>	87 <sup>2005</sup>
School enrolment secondary, % of relevant age group	106 <sup>2006</sup>	91 <sup>2006</sup>	54 <sup>2006</sup>	76 <sup>2006</sup>
School enrolment tertiary, % of relevant age group	24 <sup>2006</sup>	70 <sup>2006</sup>	11 <sup>2006</sup>	22 <sup>2006</sup>
Total researchers per 10000 persons employed	10 <sup>2004</sup>	63 <sup>2006</sup>	3 <sup>2000</sup>	16
R&D, % of GDP	1.11	1.07 <sup>2006</sup>	0.75	1.49
IT expenditure, % of GDP	6.4 <sup>2006</sup>	3.2 <sup>2006</sup>	6.1 <sup>2006</sup>	5.4 <sup>2006</sup>
Royalty and license fees, payments (BoP), current EUR bn	1324 <sup>2006</sup>	1593 <sup>2006</sup>	755 <sup>2006</sup>	5279 <sup>2006</sup>
Royalty and license fees, receipts (BoP), current EUR bn	120 <sup>2006</sup>	238 <sup>2006</sup>	89 <sup>2006</sup>	163 <sup>2006</sup>
<b>Physical Infrastructure</b>				
Roads, total network, km per 1000 sq km	188 <sup>2006</sup>	55	1020	373
Raillines, total route km per 1000 sq km	3	5	33	8
Air transport, registered carrier departures worldwide, mn	560838 <sup>2006</sup>	421170 <sup>2006</sup>	453921 <sup>2006</sup>	1542564 <sup>2006</sup>
Renewable freshwater resources per capita, cubic metres	28999 <sup>2005</sup>	30127 <sup>2005</sup>	1152 <sup>2005</sup>	2156 <sup>2005</sup>
Fixed and mobile phone subscribers per 100 population	84	146	23	69
Internet subscribers per 100 people	4	21	1	11
<b>Institutional and policy framework</b>				
Regulatory quality (score (-2.5 to + 2.5))	-0.04	-0.44	-0.22	-0.24
Rule of Law (score (-2.5 to + 2.5))	-0.44	-0.97	0.10	-0.45
Government effectiveness (score -2.5 to + 2.5)	-0.12	-0.40	0.03	0.15
Control of corruption (score -2.5 to + 2.5)	-0.24	-0.92	-0.39	-0.66
Political stability index (score -2.5 to + 2.5)	-0.22	-0.75	-1.01	-0.33
Economic freedom index (score 0-100; top=100) <sup>3)</sup>	56.7	50.8	54.4	53.2
Country risk ranking, (1-157), rank <sup>4)</sup>	63	61	59	54
<b>SECTORAL INDICATORS</b>				
<b>Output structure</b>				
Agriculture, %of GDP	6.0	4.1	16.3	11.3
Mining, % of GDP	2.2	9.0	2.1	5.7 <sup>2006</sup>
Manufacturing, % of GDP	17.4	16.3	15.3	33.6 <sup>2006</sup>
Utilities (electr., gas and water), % of GDP	3.6	2.7	2.1	3.8 <sup>2006</sup>
Construction, % of GDP	4.8	5.1	7.2	5.6
Services, % of GDP	66.0	51.1	55.7	40.1
Proportion of market services in total services, %	66.0	77.5	75.0	61.0
Number of persons employed in primary sector, mn	18 <sup>5) 2005</sup>	7	246	314
Number of persons employed in secondary sector, mn	19 <sup>6) 2005</sup>	20	54	206
Number of persons employed in tertiary sector, mn	50 <sup>7) 2005</sup>	41	150	249
Number of persons employed, total, mn	87	68	450	770

(Table A1 continued)



Table A1 (continued)

**DEVELOPMENT INDICATORS**

	Brazil	Russia	India	China
Population projection for 2020				
Total population, mn	209	135	1367	1431
Population aged 0-14 , % of total	20.1	16.7	26.7	18.7
Population aged 15-64, % of total	70.4	67.9	67.0	69.6
Population aged 65 and above, % of total	9.6	15.4	6.3	11.7
Average annual growth rates, %				
GDP (1995-2007)	2.9	4.5	6.9	9.7
GDP(2000-2007)	3.4	5.3	7.6	10.1
Agriculture (1995-2007)	4.1	1.4	3.2	3.9
Industry (1995-2007)	2.3	4.3	6.1	11.2
Services (1995-2007)	2.9	.	8.7	10.2
GDP growth, 2009 (IMF forecast, October 2009), %	-0.7	-7.5	5.4	8.5
GDP growth, 2010 (IMF forecast October 2009), %	3.5	1.5	6.4	9.0

*Notes:*

1) Excluding Hong Kong and Macao.- 2) Total revenues of private enterprises, share in %.- 3) 100-80: free; 79.9-70:mostly free; 69.9-60:moderately free; 59.9-50: mostly unfree; 49.9-0 repressed.- 4) Euromoney country risk rating, March 2008. Rank 1 representing the lowest and rank 157 the highest risk.- 5) Working Population in primary sector.- 6) Working Population in secondary sector.- 7) Working Population in services.

*General Sources:*

World Bank, World Development Indicators (WDI) and Worldwide Governance Indicators, 2008

Heritage Foundation

Euromoney Country Risk Rating, March 2008

International Telecommunication Union (ITU)

World Integrated Trade Solution (WITS) Trains database

Financial Times

UN, Population database, UN World Population Prospects, 2008 Revision

IMF, World Economic Outlook, October 2009

wiiw estimates and calculations

*Sources for Brazil:*

Instituto Brasileiro de Geografia e Estatística, Sistema de Contas Nacionais Referência 2000 (IBGE/SCN 2000 Anual) [National Account]

Instituto Brasileiro de Geografia e Estatística, Pesquisa Industrial da Empresa (Enterprises annual survey)

Perfil das Empresas Estatais (2006)

Fundação Centro de Estudos do Comércio Exterior

Brazilian Ministry of Science and Technology - Indicators

Institute for Scientific Information

Brazilian Central Bank

Departamento Intersindical de Estatística e Estudos Sócio-Econômicos, Anuário Estatístico dos Trabalhadores

Instituto Brasileiro de Geografia e Estatística, Pesquisa Mensal do Emprego (Employment monthly survey)

Departamento Nacional de Infra-Estrutura de Transportes, Anuário Estatístico do Transporte Terrestre (2007)

Agência Nacional dos Transportes Terrestres

Instituto Brasileiro de Geografia e Estatística, Demografia das Empresas - 2006 [Enterprises Demography - 2006]

Instituto Brasileiro de Geografia e Estatística

*Sources for Russia:*

Russian Statistical Yearbook 2008, Federal Bureau of Statistics (Rosstat), Moscow.

*Sources for India:*

Handbook of Statistics on Indian Economy

World Investment Report, 2008

National Accounts Statistics

National Sample Survey Report N. 515, 61st round, 2004-2005

India Railway Year Book 2006-07 (World Bank website)

*Sources for China:*

China Statistical Yearbook 2008, China Monthly Statistics, Chinese Academy of Social Sciences (CASS),

## Short list of the most recent wiiw publications (as of December 2009)

For current updates and summaries see also  
wiiw's website at [www.wiiw.ac.at](http://www.wiiw.ac.at)

### **Models of BRICs' Economic Development and Challenges for EU Competitiveness**

by Jayati Ghosh, Peter Havlik, Marcos P. Ribeiro and Waltraut Urban

wiiw Research Reports, No. 359, December 2009  
73 pages including 5 Tables, 9 Figures and 1 Box  
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

---

### **Foreign Direct Investment Flows between the EU and the BRICs**

by Gábor Hunya and Roman Stöllinger

wiiw Research Reports, No. 358, December 2009  
38 pages including 12 Tables, 13 Figures and 3 Boxes  
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

---

### **Trade in Goods and Services between the EU and the BRICs**

by Peter Havlik, Olga Pindyuk and Roman Stöllinger

wiiw Research Reports, No. 357, November 2009  
46 pages including 12 Tables and 24 Figures  
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

---

### **wiiw Monthly Report 11/09**

edited by Leon Podkaminer

- Russian Federation: signs of fragile recovery
- Ukraine: ongoing credit crunch
- Croatia: debt repayment remains a serious
- Macedonia: elusive recovery
- Turkey: waiting for new take-off after hard but safe landing
- Statistical Annex: Selected monthly data on the economic situation in Southeast Europe, Russia and Ukraine

wiiw, November 2009  
32 pages including 18 Tables and 6 Figures  
(exclusively for subscribers to the wiiw Service Package)

---

### **wiiw Handbook of Statistics 2009: Central, East and Southeast Europe**

covers key economic data on Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia and Ukraine

wiiw, Vienna, November 2009 (ISBN 3-85209-014-8; ISBN 978-3-85209-014-6)

440 pages including 265 Tables and 102 Figures

Hardcopy (data for 2000, 2004-2008), includes CD-ROM with PDF: EUR 92.00

CD-ROM, PDF (data for 2000, 2004-2008): EUR 75.00

CD-ROM, PDF long (data for 1990-2008): EUR 92.00

CD-ROM, MS Excel tables + PDF long (data for 1990-2008) + hardcopy: EUR 250.00

Individual chapters, MS Excel tables: EUR 37.00 per chapter

---

## **wiiw Monthly Report 10/09**

edited by **Leon Podkaminer**

- Bulgaria: from campaign rhetoric to post-election *realpolitik*
- Czech Republic: bottoming out likely
- Hungary: external financing secured, economy in deep
- Poland: recession resisted
- Romania: export demand may ease recession
- Slovakia: hitting bottom in the second quarter
- Slovenia: best performer in deep trouble
- Baltics: in the midst of depression
- Statistical Annex: Selected monthly data on the economic situation in Central and Eastern Europe

wiiw, October 2009

42 pages including 17 Tables

(exclusively for subscribers to the wiiw Service Package)

---

## **wiiw Monthly Report 8-9/09**

edited by **Leon Podkaminer**

- Austria's economic relations with Ukraine
- NMS grain production in 2009: calm on the market
- Multiplier effects of governmental spending in Central and Eastern Europe: a quantitative assessment
- Statistical Annex: Selected monthly data on the economic situation in Southeast Europe, Russia and Ukraine

wiiw, September-October 2009

32 pages including 18 Tables and 6 Figures

(exclusively for subscribers to the wiiw Service Package)

---

## **Skills and Industrial Competitiveness**

by **Michael Landesmann, Sebastian Leitner, Robert Stehrer and Terry Ward**

wiiw Research Reports, No. 356, August 2009

99 pages including 39 Tables and 18 Figures

hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

---

## **wiiw Monthly Report 7/09**

edited by **Leon Podkaminer**

- Austria's economic relations with Russia
- The structure of jobs across the EU: some qualitative assessments
- The government expenditure multiplier and its estimation for Poland
- Statistical Annex: Selected monthly data on the economic situation in Southeast Europe, Russia and Ukraine

wiiw, July 2009

28 pages including 10 Tables and 4 Figures

(exclusively for subscribers to the wiiw Service Package)

---

## **Where Have All the Shooting Stars Gone?**

by **Vladimir Gligorov, Josef Pöschl, Sándor Richter et al.**

wiiw Current Analyses and Forecasts. Economic Prospects for Central, East and Southeast Europe, No. 4, July 2009

171 pages including 47 Tables and 50 Figures

hardcopy: EUR 70.00 (PDF: EUR 65.00)

---

## **Inequality in Croatia in Comparison**

by **Sebastian Leitner and Mario Holzner**

wiiw Research Reports, No. 355, June 2009

38 pages including 6 Tables and 10 Figures

hardcopy: EUR 22.00 (PDF: EUR 20.00)

---

## **wiiw Monthly Report 6/09**

edited by **Leon Podkaminer**

- Crisis management in selected countries of Central, East and Southeast Europe
- The road to China's economic transformation: past, present and future
- Statistical Annex: Selected monthly data on the economic situation in Central and Eastern Europe

wiiw, June 2009

32 pages including 11 Tables and 2 Figures

(exclusively for subscribers to the wiiw Service Package)

---

## **The Determinants of Regional Economic Growth by Quantile**

by **Jesus Crespo-Cuaresma, Neil Foster and Robert Stehrer**

wiiw Working Papers, No. 54, May 2009

28 pages including 7 Tables and 4 Figures

hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

---

## **Changes in the Structure of Employment in the EU and their Implications for Job Quality**

by **Robert Stehrer, Terry Ward and Enrique Fernández Macías**

wiiw Research Reports, No. 354, May 2009

106 pages including 29 Tables and 48 Figures

hardcopy: EUR 22.00 (PDF: free download from wiiw's website)

---

## **wiiw Database on Foreign Direct Investment in Central, East and Southeast Europe, 2009: FDI in the CEECs under the Impact of the Global Crisis: Sharp Declines**

by **Gábor Hunya**. Database and layout by **Monika Schwarzhappel**

wiiw Database on Foreign Direct Investment in Central, East and Southeast Europe, May 2009

106 pages including 84 Tables

hardcopy: EUR 70.00 (PDF: EUR 65.00), CD-ROM (including hardcopy): EUR 145.00

---

## **wiiw Service Package**

The Vienna Institute offers to firms and institutions interested in unbiased and up-to-date information on Central, East and Southeast European markets a package of exclusive services and preferential access to its publications and research findings, on the basis of a subscription at an annual fee of EUR 2,000.

This subscription fee entitles to the following package of **Special Services**:

- A free invitation to the Vienna Institute's **Spring Seminar**, a whole-day event at the end of March, devoted to compelling topics in the economic transformation of the Central and East European region (for subscribers to the wiiw Service Package only).
- Copies of, or online access to, **The Vienna Institute Monthly Report**, a periodical consisting of timely articles summarizing and interpreting the latest economic developments in Central and Eastern Europe and the former Soviet Union. The statistical annex to each *Monthly Report* contains, alternately, country-specific tables or graphs with monthly key economic indicators, economic forecasts, the latest data from the wiiw Industrial Database and excerpts from the wiiw FDI Database. This periodical is not for sale, it can only be obtained in the framework of the wiiw Service Package.
- Free copies of the Institute's **Research Reports** (including *Reprints*), **Current Analyses and Forecasts**, **Country Profiles** and **Statistical Reports**.
- A free copy of the **wiiw Handbook of Statistics** (published in October/November each year and containing more than 400 tables and graphs on the economies of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Russia, Serbia, the Slovak Republic, Slovenia and Ukraine)
- Free online access to the **wiiw Monthly Database**, containing more than 1200 leading indicators monitoring the latest key economic developments in ten Central and East European countries.
- **Consulting**. The Vienna Institute is pleased to advise subscribers on questions concerning the East European economies or East-West economic relations if the required background research has already been undertaken by the Institute. We regret we have to charge extra for *ad hoc* research.
- Free access to the Institute's specialized economics library and documentation facilities.

Subscribers who wish to purchase wiiw data sets **on CD-ROM** or special publications not included in the wiiw Service Package are granted considerable **price reductions**.

**For detailed information about the wiiw Service Package  
please visit wiiw's website at [www.wiiw.ac.at](http://www.wiiw.ac.at)**

To  
The Vienna Institute  
for International Economic Studies  
Rahlgasse 3  
A-1060 Vienna

- Please forward more detailed information about the Vienna Institute's Service Package
- Please forward a complete list of the Vienna Institute's publications to the following address

Please enter me for

- 1 yearly subscription of *Research Reports* (including *Reprints*) at a price of EUR 180.00 (hardcopy, Europe), EUR 220.00 (hardcopy, overseas) and EUR 140.00 (PDF download with password) respectively
- 1 yearly subscription of *Current Analyses and Forecasts* a price of EUR 130.00 (hardcopy, Europe), EUR 145.00 (hardcopy, overseas) and EUR 120.00 (PDF download with password) respectively

Please forward

- the following issue of *Research Reports* .....
- the following issue of *Current Analyses and Forecasts* .....
- the following issue of *Working Papers* .....
- the following issue of *Research Papers in German language* .....
- the following issue of *wiiw Database on Foreign Direct Investment* .....
- the following issue of *wiiw Handbook of Statistics* .....
- (other) .....

.....  
Name

.....  
Address

.....  
Telephone

Fax

E-mail

.....  
Date

.....  
Signature

---

Herausgeber, Verleger, Eigentümer und Hersteller:

Verein „Wiener Institut für Internationale Wirtschaftsvergleiche“ (wiiw),  
Wien 6, Rahlgasse 3

Postanschrift: A-1060 Wien, Rahlgasse 3, Tel: [+431] 533 66 10, Telefax: [+431] 533 66 10 50

Internet Homepage: [www.wiiw.ac.at](http://www.wiiw.ac.at)

Nachdruck nur auszugsweise und mit genauer Quellenangabe gestattet.

P.b.b. Verlagspostamt 1060 Wien