# GROWTH, EMPLOYMENT AND INEQUALITY IN BRAZIL, CHINA, INDIA AND SOUTH AFRICA: AN OVERVIEW

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# INTRODUCTION

Economic growth depends on productivity improvements and the functioning of labour markets, but well-functioning labour markets rest in turn on a sustained and stable path of economic growth. Moreover, labour markets are the main channels through which inequalities may develop and persist. Globalisation, with its promise of economic growth, is often perceived as having positive impacts on living standards, although the gains are not automatic, and can even be negative for some segments of the labour market. Some of the major areas of concern include the loss of jobs in industries that are becoming less competitive, the bias of technological change against unskilled workers, and the growing segmentation of the workforce, which is often accompanied by a race to the bottom in terms of labour standards and social protection.

In the last two decades, Brazil, China, India and South Africa (the BCIS countries) have become very important actors in the globalisation process, which is why, analysing the evolution of the drivers behind that process and its impacts on people's lives is crucial to a better understanding of these countries' economies as well as of living standards in other emerging economies and worldwide.

For that purpose, this Chapter intends to give a comparative overview of the trends in economic growth, labour market outcomes and income inequality since the early 1990s in Brazil, China, India and South Africa, a period during which these countries initiated important reforms and attained a sustained growth path, at least until the recent economic crisis.[1]

The Chapter is structured as follows: Section I start with an overview of the economic performance of these economies in the context of the globalisation process and of their progressive integration into the world economy. Section II starts by reviewing briefly the urbanisation and migration processes observed since the early 1990s in the four countries and then focuses on the evolution of the employment and unemployment outcomes in each country. The quality of the employment created during that period matters as much as its quantity, and this section discusses the implications of working conditions for different groups of the population and among different segments of the labour market. Section III analyses the main trends in poverty and income inequality and points to the main drivers involved.

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1. The consequences of the recent international financial and economic crisis in these countries will not be

# 1. ECONOMIC GROWTH SINCE THE EARLY 1990s: MODELS AND OUTCOMES

## Economic reforms favoured productivity increases

Brazil, China, India and South Africa are a highly heterogeneous group of countries, differing significantly in terms of size, population and weight in the world economy. They are also at different stages of development, with the variation among their GDP per capita levels being similar to that among the OECD countries overall, and they also have different long-term growth prospects (OECD, 2010a). However, they have also all enjoyed a long and sustained economic growth path during the past decades, which is expected to continue, and have other economic features in common (summary Table).

**Summary Table on main economic outcomes in the BCIS countries, 1990-2008**

| Main variables | | Brazil | | | China | | | India | | | South Africa | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Variables change | | Latest year value | Variables change | | Latest year value | Variables change | | Latest year value | Variables change | | Latest year value |
| | | 1990s | 2000s | | 1990s | 2000s | | 1990s | 2000s | | 1990s | 2000s | |
| Macroeconomic Outcomes | GDP growth[a] | - | ++ | 5.1 | +++ | +++ | 9.0 | ++ | ++ | 6.1 | + | + | 3.1 |
| | GDP per capita [b] | ↘ | ↗ | 9517 | ↗ | ↑ | 5511 | → | ↗ | 2742 | ↓ | ↗ | 9343 |
| | FDI [c] | ++ | ++ | 288 | +++ | + | 378 | +++ | +++ | 123 | +++ | ++ | 120 |
| | Trade to GDP ratio [d] | + | ++ | | ++ | +++ | | + | ++ | | ++ | +++ | |
| Labour Market Outcomes [e] | Employment to population ratio | ↘ | ↗ | 68.2 | ↘ | ↘ | 80.2 | ↗ | ↘ | 58.2 | ↘ | ↗ | 42.2 |
| | Unemployment rates | ↗ | ↘ | 7.4 | ↗ | ↗ | 4.2 | → | → | 3.4 | ↗ | ↘ | 23.8 |
| | Informal employment | | ↘ | | | | | | ↗ | | | ↗ | |
| Living standards | Poverty incidence [f] | ↓ | ↓ | 10.6 | ↓ | ↓ | | ↓ | ↓ | 73.9 | ↘ | → | 29.4 |
| | Income inequality [g] | → | ↓ | 0.55 | ↑ | → | | ↗ | ↗ | 0.376 | → | → | 0.7 |

Notes: (a) For GDP growth (-) indicates below OECD average; (+) GDP growth between 2-5%, (++) between 5-8% and (+++) above 8%. (b) GDP per capita variation is measured with respect to the OECD average and the latest year value is in 2005 constant USD. (c) FDI corresponds to the inward stock: (+) indicates that FDI inward stock has increased on average above 5%, (++) above 10% and (+++) above 20%. The latest year available value is in thousand million current USD(d) Trade to GDP ratio measures the average trade openness during each period: (+) indicates the ratio is below 20%, (++) between 20-40% and (+++) above 40%. (e) 2008 data or the latest year available is given for reference. (f) Poverty incidence refers to the variation in the share of the population living on less than USD 2 per day. (g) Income inequality refers to the variation of the Gini coefficient of household income or consumption.

*Source*: Own elaboration.

Indeed, during the past two decades, the BCIS countries' real GDP has grown faster than the OECD average. This was particularly the case in China and India, whose annual growth rates exceeded or approached two-digit levels until the current financial and economic crisis. Brazil and South Africa experienced a more erratic and less impressive growth, although their GDP growth rates accelerated in the 2000s (Table 1). These positive outcomes were favoured both by major macro-economic policy reforms which started in the 1980s in China, in the mid-1980s in India, and in the early 1990s in Brazil and South Africa, and by significant productivity gains and a rapid integration into the world economy, providing greater access to new technology, capital and financial markets.

From 1990 to 2008, the weight of these economies in the world economy has progressively increased, with the exception of South Africa. China recorded the most impressive performance, with its share of total world GDP expanding from 1.6% in 1990 to 7.1% in 2008, surpassing some of the G-7 countries (namely Canada, France, Germany, Italy and the United Kingdom), whereas Brazil and India reached shares of total world GDP of 2-3%, comparable to the levels of the Russian Federation and Canada.

Table 1.   **Growth of real GDP in selected OECD and BCIS countries a,b**

| | Share in total World GDP 1990 | Share in total World GDP 2008 | Average GDP growth 1990-1999 | Average GDP growth 2000-2008 | Annual GDP growth | | | Projections | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2006 | 2007 | 2008 | 2009 | 2010 |
| **G-8 countries** | | | | | | | | | |
| Canada | 2.7 | 2.3 | 2.9 | 2.3 | 2.9 | 2.5 | 0.4 | -2.7 | 2.0 |
| France | 5.7 | 4.7 | 2.0 | 1.6 | 2.4 | 2.3 | 0.3 | -2.3 | 1.4 |
| Germany | 7.9 | 6.0 | 1.8 | 1.2 | 3.2 | 2.6 | 1.0 | -4.9 | 1.4 |
| Italy | 5.2 | 3.8 | 1.6 | 0.9 | 2.1 | 1.5 | -1.0 | -4.8 | 1.1 |
| Japan | 13.8 | 8.1 | 1.2 | 1.3 | 2.0 | 2.3 | -0.7 | -5.3 | 1.8 |
| United Kingdom | 4.6 | 4.4 | 2.5 | 2.3 | 2.9 | 2.6 | 0.6 | -4.7 | 1.2 |
| United States | 26.4 | 23.4 | 3.4 | 2.2 | 2.7 | 2.1 | 0.4 | -2.5 | 2.5 |
| Russia | 2.4 | 2.7 | 1.8 | 6.5 | 7.7 | 8.1 | 5.6 | -8.7 | 4.9 |
| **Total OECD** | **79.9** | **67.4** | **2.8** | **2.2** | **3.1** | **2.6** | **0.6** | **-3.5** | **1.9** |
| **Non-OECD** | | | | | | | | | |
| Brazil | 2.1 | 2.7 | 2.1 | 3.6 | 3.9 | 5.6 | 5.1 | 0.0 | 4.8 |
| China | 1.6 | 7.1 | 10.1 | 10.2 | 11.6 | 13.0 | 9.0 | 8.3 | 10.2 |
| India | 1.5 | 2.0 | 6.2 | 7.4 | 9.7 | 9.1 | 6.1 | 6.1 | 7.3 |
| South Africa | 0.5 | 0.5 | 2.9 | 4.1 | 5.4 | 5.1 | 3.1 | -2.2 | 2.7 |

a) The OECD Secretariat's projections methods and underlying statistical concepts and sources are described in detail in "Sources and Methods: OECD Economic Outlook", which can be downloaded from the OECD internet site.

b) Aggregates are computed on the basis of 2005 GDP weights expressed in 2005 purchasing power parities.

*Source*: OECD (2009a) and World Bank, WDI 2009 Database.

Figure 1.   **GDP per capita in BCIS countries, 1990-2008**

(at constant 2005 USD)



*Source*: WDI 2009 database, World Bank.

In the period since 1990, GDP per capita more than doubled in the four countries, thus closing the gap with the OECD countries. However, in 2008, GDP per capita was still at 25% of the OECD average in Brazil and South Africa, 16% in China and 8% in India. Starting from very low levels, the path of narrowing living standards with OECD countries has been more impressive in China than in India. Brazil and South Africa, which started from higher GDP levels, saw their differences with the OECD countries deteriorate slightly during the 1990s, then improve somewhat since 2000 (Figure 1).

Another factor influencing the growth outcomes of these countries during this period is the profound economic reforms that they all experienced. Reforms mainly oriented at achieving greater ec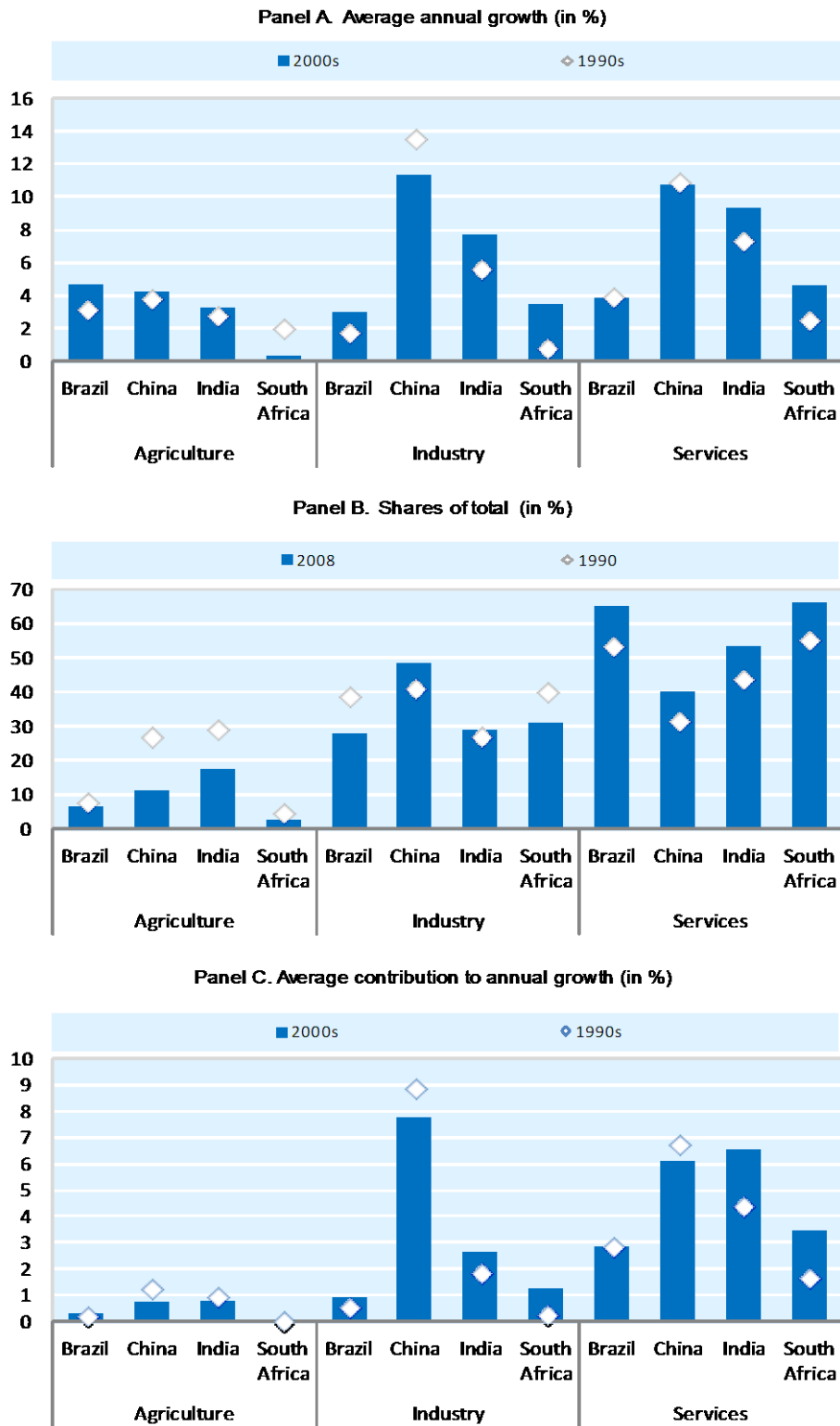onomic stability and liberalisation have increased productivity and favoured trade and foreign capital flows as never before. In China, economic reforms that started in the early 1980s promoted important structural changes and an export-led growth pattern that rests on labour shifts from low-productivity agriculture to higher-productivity industry and services. As a result, agriculture's share of total output has decreased significantly, with the highest decline of the four countries, and with an equal increase of the shares of both the industrial and the services sector (Figure 2).

India's performance was also favoured by the market reforms initiated in the mid-1980s, which gathered momentum in the early 1990s. Restrictions on investments by large corporations were lifted, financial markets reformed and infrastructures progressively improved, in a context of reduced budget deficits and improved tax reforms (OECD, 2007a). Although Indian economic growth has been much discussed, with a range of views on its different phases, there seems to be general agreement that India's development path during this period was somewhat unusual, as the shift of production from agriculture into manufacturing has been slower than that observed in countries at a similar stage of development, while the shift to services has been more rapid. As a result, the service sector's share of total output increased significantly between 1990 and 2008, whereas the share of the industrial sector remained almost stable at around 30% (Figure 2, Panel B). India's manufacturing firms have not fully exploited the comparative advantages of their low labour costs and have remained small in scale, not fully exploiting economies of scale to increase their size. This led to limited productivity gains and weak job creation.[2]

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2.    See OECD (2007*a*) for further details.

Figure 2.   **Value added by sector of activity in BCIS countries, 1990-2008**

(at constant 2000 USD)

**Panel A.  Average annual growth (in %)**



**Panel B.  Shares of total  (in %)**



**Panel C. Average contribution to annual growth (in %)**



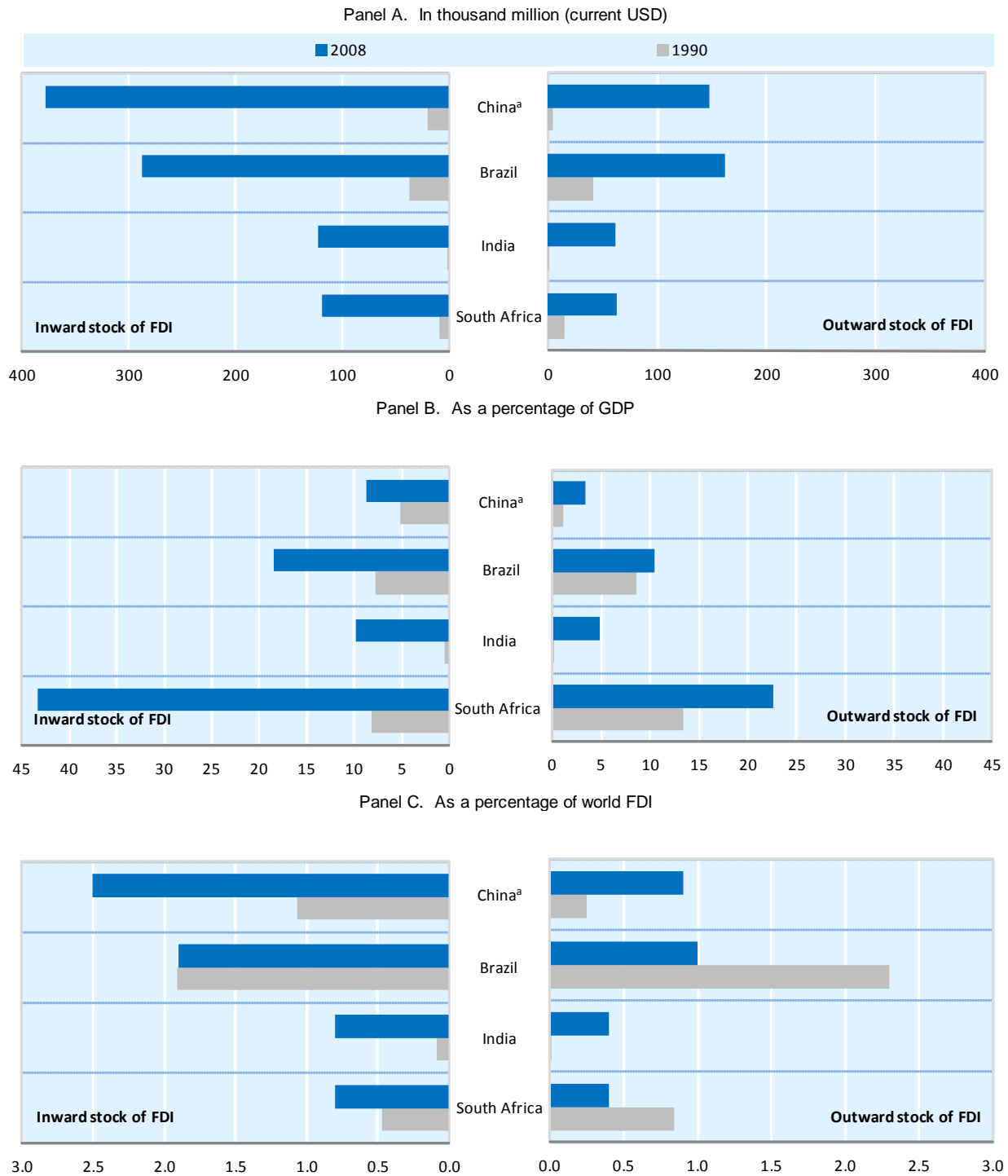*Source*: WDI 2009 database, World Bank.

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Brazil also changed its development strategy in the 1990s by opening its economy, reducing the role of the state and applying restrictive macroeconomic policies. The abandonment of the exchange rate management mechanism in 1999 and the adoption of a policy framework that combined inflation targeting and better fiscal management, favoured a considerable improvement in macroeconomic fundamentals. This permitted higher growth rates than in most Latin American countries since the early 2000s, with a growth pattern in which production is less export-oriented than in China, and more sector-balanced than in India. Indeed, annual GDP growth rose to 4.7% in the period 2004-2008, doubling the level of the five years that followed the float of the country's currency (OECD, 2009b).

In South Africa, the fall of Apartheid and the general elections in 1994 marked a reverse of the poor productivity trends observed until then. Although growth initially remained sluggish, it accelerated thanks to rising labour productivity, first pushed by the mining sector and then spreading to other sectors of the economy. This was achieved by a much lower rate of capital accumulation and a more efficient use of the factors of production. Indeed, over the period 2000-2005, total factor productivity growth for the economy as a whole reached 2%, after having stagnated during the last two decades of Apartheid (OECD, 2008). Compared to other middle-income countries, South Africa has a relatively strong average labour productivity but extremely low employment which, until 2000, contributed to a divergence in living standards with the OECD countries. The contribution to output growth accelerated after that date, with the highest contribution to growth recorded by the services sector (Figure 2).

**The role of trade liberalisation and capital accumulation**

Other than increasing productivity, the BCIS countries' economic reforms significantly increased investment and favoured trade integration. Since the early 1990s, the four countries have experienced a substantial increase of foreign direct investment (FDI), both in volume, and in relative terms as a percentage of GDP and world foreign investment (Figure 3). Starting from a very low level, mainly in India and South Africa, the inward stock of FDI has been multiplied in the past two decades by 74 in India, by 18 in China, by 13 in South Africa and by eight in Brazil. The weight of inward FDI with respect to world FDI has changed significantly only in China, reaching a higher level than in some OECD countries (namely, Belgium, France, Germany, Netherlands, Spain, Switzerland, the UK and the US). It remained unchanged in Brazil and increased slightly in India and South Africa, although it was still low in these two countries. On the other hand, outward FDI shares in world FDI decreased in Brazil and South Africa.

Figure 3. **Foreign direct investment in BCIS countries, 1990-2008**

Panel A. In thousand million (current USD)



Panel B. As a percentage of GDP
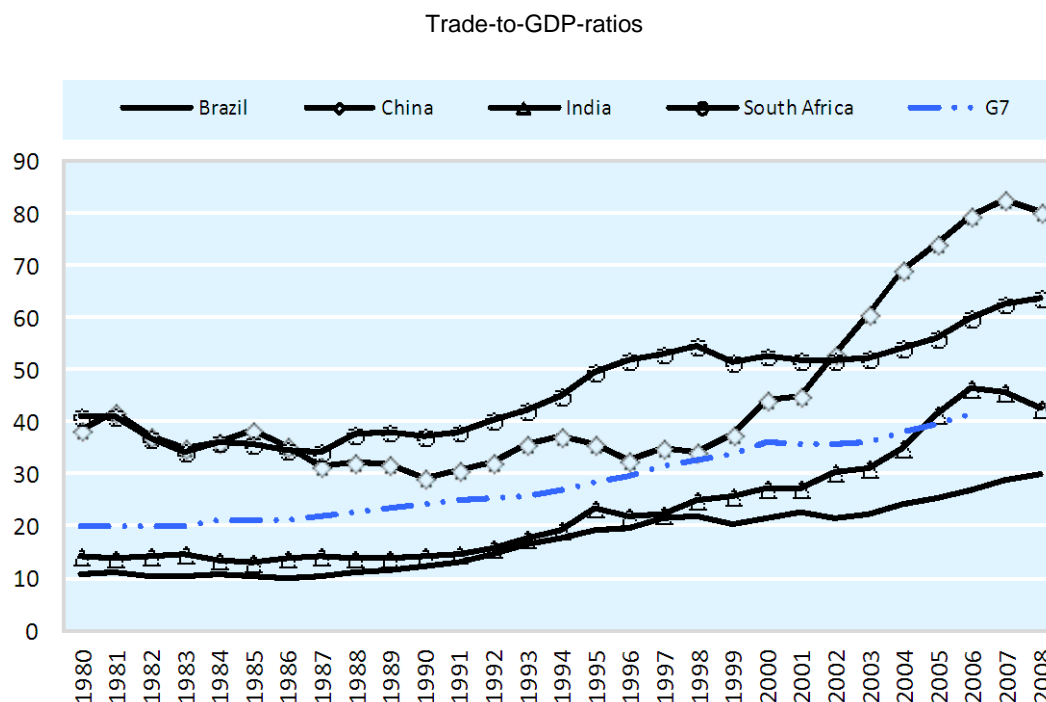


Panel C. As a percentage of world FDI



a) China corresponds to China mainland.

*Source*: UNCTAD and WTO Databases.

Trade openness, measured by the trade-to-GDP ratio, has more than doubled in Brazil, China and India since the 1980s, accelerating significantly since the mid-1990s. It has increased less in South Africa although in 2008 its trade-to-GDP ratio was 60%, 20 percentage points below China, but above Brazil and India (Figure 4). Indeed, in China, the contribution of exports in terms of value added to GDP growth doubled during the 1990s, reflecting a rapid growth of exports that contributed to expanding its global market shares considerably (Guo and N'Diaye, 2009). India's share of world exports doubled in that period, but remains below 2%, as it does in Brazil and South Africa.

Figure 4.  **Trade openness in OECD G7 and BCIS economies, 1980-2008**

Trade-to-GDP-ratios



*Source*: World Development Indicators database, World Bank

Indeed, since the mid-1990s the trade sector in South Africa was unable to keep up with developments in world trade, especially in raw materials and intermediate goods. As a result, its trade position remained quite constant. Both imports and exports as a percentage of world trade remained low even though international sanctions on trade and investment were dropped after the fall of Apartheid.[3] However, since 2004, South Africa's export performance has accelerated in value terms due to the increase in the price of its main export commodities (OECD, 2008).

Trade developments in China and India have differed considerably in terms of composition and the pattern of specialisation. Whereas China has become the world's third-largest exporter of manufacturing goods, the recent growth of India's trade has been led by services rather than manufacturing. Instead of developing a pattern of specialisation in low-skilled labour-intensive sectors, as in China, India has

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3.    As suggested by Kowalsky *et al.* (2009), the lagging trade progress experienced by South Africa since the mid-1990s may be related in part to the way it implemented trade liberalisation. It maintained a complex system of quantitative restrictions and relatively high and dispersed tariffs on consumer products, resulting in relatively high effective rates of protection.

specialised in activities that are relatively skill and capital intensive, whereas its manufacturing trade has been highly concentrated in low-technology goods (Kowalski and Dihel, 2009). This also explains a growth process that has not been intensive in job creation, since labour demand, particularly for high-skilled workers, has been concentrated in these more competitive specialised services (mainly services related to information technology and pharmaceuticals).

On the other hand, China's increased weight in world trade has also considerably influenced the other BCIS countries, in particular, Brazil. Indeed, other than benefiting from the terms of trade since 2002, Brazil has maintained a comparative advantage in the production of commodities to increasingly satisfy demand from China (Cardoso, 2009). Not only have Chinese exports stimulated resource allocation in Brazilian manufacturing (mainly manufactures and equipment products), but the Chinese market has also become increasingly important for Brazilian exports of agricultural goods (Lattimore and Kowalski, 2008).

This evolution of trade and investment, which has been spurred both by progressive liberalisation and technological change, has had a significant impact on the labour markets in these countries. It has facilitated a shift of jobs from declining sectors or occupations to expanding ones, in line with changes in comparative advantage. This has resulted in significant shifts and labour adjustments between regions and sectors, particularly in China.

## 2. LABOUR MARKET DEVELOPMENTS

### Employment and unemployment outcomes

Although in general, economic growth has a positive impact on employment growth, the magnitude of the impact varies considerably among the BCIS countries and the periods observed, depending on the initial labour market structure and composition as well as on the labour market regulations and policies in place.

Over the past decades, the main challenge of the BCISs has been to increase employment rapidly enough to cope with the growth in the labour force. In the period 1993-2008, the working-age population (15-64) has increased on average by more than 7 million people each year in China, by almost 6 million in India, by around 2 million in Brazil and by 300 000 in South Africa.

In both the 1990s and 2000s, employment growth was below GDP growth in Brazil, China and India, whereas South Africa registered higher employment growth in the first period compared to GDP and a significant decline in the second. The elasticity of employment to economic growth is larger in both Brazil and South Africa compared to China and India[4], which means that a higher rate of economic growth has to be maintained in the latter in order to create enough employment to absorb the numbers of people entering the labour force every year.[5] This also confirms the differences in the growth pattern of the BCISs, with China and India's low employment elasticity pointing to important structural changes and productivity growth. In contrast, in Brazil and South Africa economic growth since the late 1990s has favoured bringing more people into employment instead of redistributing the existing employment between sectors and favouring rapid economic structural change, as has been the case in China, and to a lesser extent in India.

Labour force participation rates vary considerably among the BCIS countries, with China and Brazil being above the OECD average, whereas India and South Africa are significantly below. Although China and India have experienced a slight decline during the past decade, the trend was the opposite in Brazil and South Africa, mainly due to the growing labour market participation of women and youth in recent years.[6] However, in South Africa labour force participation rates remain very low due to extremely low employment rates, especially among the African population. As a result, the employment-to-population ratio in India and South Africa is between 10-15 points below the OECD average, whereas it is significantly above the OECD average in China and just slightly above in Brazil (Table 2).

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4.    The ILO estimates of employment elasticity to GDP growth are: 0.7 in Brazil, 0.6 in South Africa, 0.3 in India, 0.1 in China (ILO, KILM 2007 database).

5.    For example, in China the Development and Reform Commission (DRC) estimated that around 13 million new young workers enter the labour market each year, increasing labour supply significantly and adding pressure on job creation. In India, the government set a target of creating 65 million employment opportunities during the 11th Plan period (2007-2012), on the assumption of 9% GDP growth on average and unchanged elasticity of employment. This means an acceleration of employment creation compared to the previous Plan, under which 47 million employment opportunities were created, close to the 50 million target (Planning Commission).

6.    Lower employment rates in emerging economies are typically the result of lower female participation in the labour force. This is often related to high fertility rates and can also reflect gender discrimination due to economic and societal norms.

Table 2. **Main labour-market indicators in selected OECD and non-OECD countries, 1993-2008**

| | 1993 | 1999 | 2005 | 2008 | 1993 | 1999 | 2005 | 2008 | 1993 | 1999 | 2005 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total population (000s) | | | | Working age population 15-64 (000s) | | | | Labour force population 15-64 (000s) | | | |
| **G-8 countries** | | | | | | | | | | | | |
| Canada | 28,685 | 30,401 | 32,245 | 33,311 | 18,974 | 20,276 | 21,882 | 22,682 | 14,242 | 15,370 | 17,024 | 17,818 |
| France | 57,467 | 58,677 | 61,181 | 62,277 | 37,085 | 37,697 | 39,367 | 40,012 | 24,682 | 25,567 | 27,327 | 27,897 |
| Germany | 81,156 | 82,100 | 82,469 | 82,110 | 55,452 | 55,145 | 54,875 | 54,166 | 39,232 | 39,261 | 40,521 | 41,130 |
| Italy | 56,832 | 56,916 | 58,607 | 59,832 | 38,805 | 38,805 | 38,646 | 39,182 | 22,645 | 23,191 | 24,097 | 24,696 |
| Japan | 124,938 | 126,686 | 127,768 | 127,692 | 86,920 | 86,770 | 84,610 | 82,440 | 62,000 | 62,840 | 61,460 | 60,840 |
| Russian Federation[a] | 148,729 | 147,205 | 143,170 | 141,394 | 98,897 | 101,391 | 101,828 | 101,788 | .. | 72,379 | 73,431 | 75,758 |
| United Kingdom | 57,714 | 58,684 | 60,238 | 61,383 | 36,323 | 36,829 | 38,008 | 39,603 | 27,658 | 28,032 | 28,966 | 30,409 |
| United States | 259,919 | 279,040 | 295,561 | 304,060 | 164,204 | 175,269 | 191,014 | 196,626 | 125,763 | 135,363 | 144,043 | 148,042 |
| Total OECD | 708,302 | 744,607 | 779,980 | 796,251 | 685,204 | 727,549 | 764,935 | 778,185 | 475,222 | 509,529 | 537,405 | 551,963 |
| **Non-OECD countries** | | | | | | | | | | | | |
| Brazil | 156,873 | 171,675 | 186,075 | 191,972 | 96,569 | 110,747 | 123,339 | 128,739 | 64,223 | 73,370 | 88,676 | 92,958 |
| China | 1,185,675 | 1,256,729 | 1,312,253 | 1,337,411 | 786,219 | 843,234 | 924,229 | 956,664 | 662,396 | 706,625 | 751,155 | 773,315 |
| India | 916,692 | 1,024,799 | 1,130,618 | 1,181,412 | 539,602 | 619,121 | 704,611 | 750,137 | 322,995 | 364,495 | 393,262 | .. |
| South Africa[b] | 39,561 | 44,215 | 48,073 | 49,668 | 23,561 | 27,574 | 30,897 | 32,219 | 11,345 | 11,509 | 16,700 | 16,320 |

| | Labour force participation rate | | | | Employment population ratio | | | | Unemployment rate | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **G-8 countries** | | | | | | | | | | | | |
| Canada | 75.1 | 75.8 | 77.8 | 78.6 | 66.5 | 70.0 | 72.5 | 73.7 | 11.5 | 7.6 | 6.8 | 6.2 |
| France | 66.6 | 67.8 | 69.4 | 69.7 | 59.1 | 59.8 | 63.2 | 64.6 | 11.2 | 11.8 | 8.9 | 7.4 |
| Germany | 70.7 | 71.2 | 73.8 | 75.9 | 65.1 | 65.2 | 65.5 | 70.2 | 7.9 | 8.5 | 11.3 | 7.6 |
| Italy | 58.4 | 59.8 | 62.4 | 63.0 | 52.5 | 52.9 | 57.5 | 58.7 | 10.1 | 11.5 | 7.8 | 6.8 |
| Japan | 71.3 | 72.4 | 72.6 | 73.8 | 69.5 | 68.9 | 69.3 | 70.7 | 2.6 | 4.9 | 4.6 | 4.2 |
| Russian Federation[a] | .. | 71.4 | 72.1 | 74.3 | .. | 62.1 | 66.9 | 68.0 | 8.3 | 12.9 | 7.6 | 6.4 |
| United Kingdom | 76.1 | 76.1 | 76.2 | 76.8 | 68.2 | 71.5 | 72.6 | 72.7 | 10.4 | 6.0 | 4.7 | 5.4 |
| United States | 76.6 | 77.2 | 75.4 | 75.3 | 71.2 | 73.9 | 71.5 | 70.9 | 7.0 | 4.3 | 5.1 | 5.8 |
| Total OECD | 69.4 | 70.0 | 70.3 | 70.9 | 63.9 | 65.3 | 65.5 | 66.7 | 7.9 | 6.7 | 6.7 | 6.0 |
| **Non-OECD countries** | | | | | | | | | | | | |
| Brazil | 71.5 | 71.5 | 73.9 | 73.6 | 67.0 | 64.4 | 66.7 | 68.2 | 6.3 | 9.9 | 9.7 | 7.4 |
| China[c] | 84.3 | 83.8 | 81.3 | 80.8 | 75.5 | 74.2 | 71.7 | 71.0 | 2.6 | 3.1 | 4.2 | 4.2 |
| India | 62.1 | 64.5 | 60.2 | .. | 60.5 | 62.6 | 58.2 | .. | 2.7 | 2.8 | 3.4 | .. |
| South Africa[b] | 47.3 | 45.5 | 56.8 | 54.4 | 40.8 | 35.8 | 41.6 | 41.5 | 13.7 | 21.2 | 26.8 | 23.8 |

a) Data for 1993 refer to 1995. b) Data for 1999 refer to 1997. c) The unemployment rate for China refers to the official urban unemployment rate, and data for South Africa cover persons aged 16 to 64.

*Source*: Total population data are from the OECD Older Worker's Population database as are the working age population data for the Russian Federation; Labour force data, including working age population, for the OECD countries are from the OECD Labour Force Statistics database; and the remaining data are from national submissions.

Regarding unemployment, rates range from 3.4% in India to 23.8% in South Africa, with only Brazil having unemployment rates similar to the OECD average, in the range of 6%-10%. The estimated unemployment rate in China is double the rate of the official statistics, which are calculated only for urban areas on the assumption that agricultural workers cannot be classified as unemployed because they own land, requiring them to work to keep it (Box 1).[7]

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7. This is the case even if their main activity is outside agriculture. As a result, the unemployment rate for international comparison purposes should be computed as the number of unemployed divided by the urban working population not engaged in agriculture (OECD, 2010*b*).

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**Box 1. Estimating unemployment in China and its evolution since the mid-1990s**

In the mid-1990s China introduced a progressive market reform that dealt with both the restructuring of state-owned enterprises (SOEs) – allowing them to recruit workers without planning permission – and the substitution of life-time employment by indefinite and temporary labour contracts, as provided in the 1994 Labour Law. As a result, the weight of both employment in the private sector and urban unemployment increased significantly. Indeed, at the end of the 1990s, 4 million jobs were lost per year due to the restructuring of the SOEs.

Chinese official statistics show an increase in the urban registered unemployment rate from 2% to 4.2% between 1990 and 2008. However, this rate is not comparable to international standards. To be comparable, data have to be estimated from the annual labour force surveys, whose questions correspond to the job-search categories used internationally. These surveys provide data for total employment as well as the number of the economically active population, and unemployment is then calculated as the difference between the two. Following this method, it has been estimated that the unemployment rate of the urban working population, excluding those working in agriculture, peaked in 2000 at nearly 10% and decreased slowly thereafter to reach levels of around 6% in 2008 (*i.e* OECD, 2010b and OECD, 2010*c*). Cai and Du (2009) point to similar results, showing clearly that the unemployment level in China is higher than official statistics suggest.

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In South Africa, unemployment soared to levels of 30% in the early 2000s due to sluggish economic growth in the first years after the fall of Apartheid, which did not create enough jobs for the additional workers entering the labour force in that period. Even if the unemployment rate decreased thereafter due to improved economic growth, accompanied by both lower population growth and lower labour force growth – mainly due to the effects of HIV/AIDs – it remains at very high levels, and is very unevenly distributed, varying with ethnic group, age, gender and skills (OECD 2008a). Moreover, long-term unemployment is very high, with half of the unemployed having never worked, which has a clear incidence on poverty and inequality outcomes (OECD, 2008a and Leibbrandt, 2010). Almost one working-age person out of four is unemployed (one out of three if including "discouraged workers", defined as those not actively seeking a job). This makes job creation and unemployment reduction the main priority to reduce inequalities and sustain growth (Box 2).

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**Box 2. Unemployment, poverty and inequality in South Africa**

In the period 1993-2008, unemployment rates have increased across all age groups in South Africa, with the youth population registering the highest increase (from 20% to 33% for those aged 21-30). Even if the youth population is better educated than it was some years ago, they face greater difficulty accessing the labour market and have a higher probability of remaining unemployed for a longer time. Moreover, unemployment in South Africa is clearly correlated with race, with the African population registering the highest unemployment rates. While the differentials in unemployment rates between racial groups have considerably decreased, Africans still had an unemployment rate of 27% in 2008, compared to 10% for the White population.

Analysing unemployment rates by income decile in 1993, 2000 and 2008, Leibbrandt *et al.* (2010) found that unemployment rates decrease among higher deciles. Inequality has worsened since 1993, with unemployment rates falling significantly after 2000 in the top deciles of the income distribution. However, overall unemployment rates have increased since 1993, mainly due to the fast increase of unemployment among the bottom four income deciles.

This evolution has clearly contributed to a rise in poverty risks. Indeed, while the presence of an employed person in a household is not a guarantee that the household will be out of poverty, the lack of employment is a very strong marker of poverty.

The unequal distribution of unemployment across the income deciles has also contributed to the increase in income inequalities. However, this is not the only explanation, and inequality of labour income, measured by wage differentials, is equally important. Indeed, inequality of earnings has also increased for households with access to labour market earnings.

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In the BCIS countries, the lack of well-developed unemployment compensation schemes makes unemployment an "unaffordable" situation for the majority of the population, with the unemployed often

being obliged to search for any kind of employment at all just to survive. As a result, as will be seen below, under-employment and informal employment are widespread.

All four countries experienced a progressive decline of employment in agriculture and an increase in the share of employment both in industry and in the service sector, though India registered very low growth of employment in the manufacturing sector (see Box 3).

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Box 3. **Employment in the manufacturing sector in India**

One of the main patterns in India's growth in the past decades lies in a "dualistic" growth of the manufacturing sector. This refers to an increase of employment at both ends of the firms' size distribution, which has led to an underdevelopment of employment in medium-size firms (sometimes referred to as the "missing middle").[8] This pattern has contributed to the relatively slow growth of the manufacturing sector compared to the tertiary sector, in terms of both value added and employment. As a result, earning levels in the tertiary sector have been significantly above those in manufacturing, suggesting that growth in the tertiary sector has been productivity-led rather than employment-led.

Indeed, the manufacturing sector in India has been characterised by the persistence of a significant "dualism" regarding the size of establishments. This has favoured a strong bi-modal distribution of employment, with a strong concentration of employment at both the small and large establishments. As a result, productivity and wage gaps between these two groups have been larger in India than in other Asian economies.

The distribution of employment across different-sized firms matters, as both productivity and wages tend to increase with firm size. Of the six Asian countries for which productivity data were available in a recent Asian Development Bank (ADB) study, the lowest productivity (measured by the value added per worker) in small enterprises (5-49 employees) was observed in India, where productivity was below 10% of that observed in large firms (+200 employees). Indonesia and Philippines follow, with productivity gaps between small and large firms of around 20%.

With regard to employment in the manufacturing sector in India, 61% is found in microenterprises (defined as less than five employees), a share that is considerably higher than in other Asian countries (44% in Indonesia and less than 25% in China, Malaysia, Philippines and Thailand). Moreover, only India and Indonesia have a distribution of employment that does not increase with firm size. By contrast, China, Malaysia and Thailand followed a different pattern, in which the share of employment increases steadily with size, and where large enterprises (more than 200 employees) clearly dominate (ADB, 2009).

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However, employment in agriculture remains large in the four countries, accounting for around 10% of the workforce in Brazil and South Africa, 40% in China and 56% in India, compared to less than 5% in the OECD countries. Indeed, China and India are still characterised by a large excess of labour in rural areas. Whereas four in five workers in India are found in rural areas, in China the level is almost two-thirds, which gives an estimated labour surplus of around 170 million workers in China and 130 million in India (OECD, 2007b). With agricultural employment in China declining modestly in the past decade (less than 1.5% per year), it may take another decade for the share of labour in agriculture to fall to levels of 25% (OECD, 2010b).

Indeed, whether China is about to reach a turning point remains controversial. According to some authors (*i.e.* Cai and Du, 2009), this would mark the end of a long era of unlimited labour supply at the subsistence wage. OECD (2010a) opposes that view, arguing that the specific demographic factors that caused labour shortages were mainly due to the very small size of the 18-22 age cohort, and this will not apply for those born later.

Rural under-employment is expected to persist, but coexists with shortages of skilled and unskilled labour, mainly in industrialised coastal areas. Although these shortages have been reported since 2004, reflecting an increasing reluctance among young migrants to accept the worst, low-paid jobs, this phenomenon vanished for a time during the 2008 financial crisis. However, the economic recovery

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8.    See Dipak Mazumdar (2010) for further details.

experienced since mid-2009, has again brought evidence of the existence of labour shortages in the coastal areas, as migration flows from rural areas are now diversifying to other central regions where new infrastructure projects are being developed (CCIC, 2010). Such supply-side pressures are expected to provoke a gradual shift of labour demand towards more attractive and better-paid jobs.
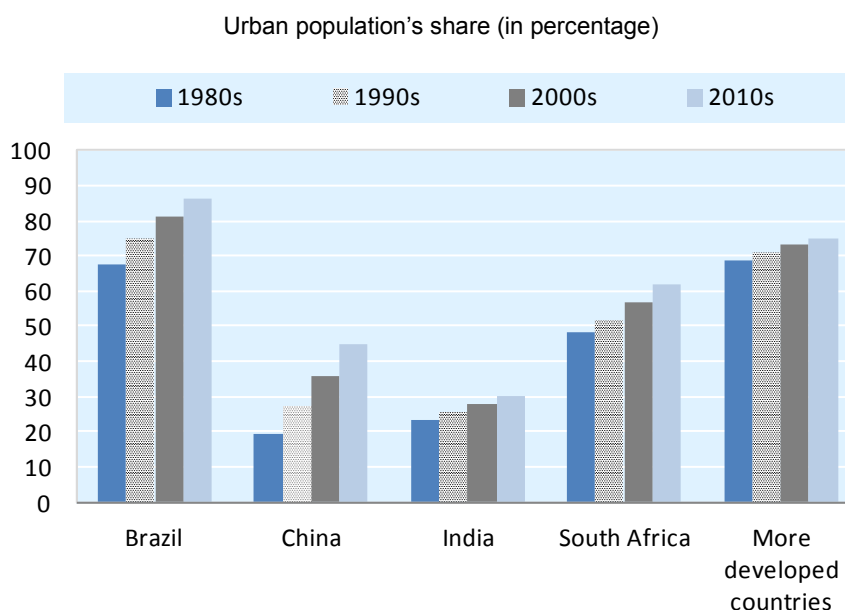
**Urbanisation and internal migration have shaped labour markets, especially in China**

During periods of rapid industrialisation, rural to urban migration tends to accelerate significantly, thus helping to shape labour markets. However, rural to urban migration depends not only on individual rational choices, but also on any institutional incentives or barriers that may exist in each country. Generally, rural workers and households make decisions to migrate or not depending on labour market conditions and their own endowments. They migrate to urban areas, where there are usually more job opportunities, when the expected benefits are greater than the associated costs.[9]

The BCIS countries have experienced an important rural to urban migration, as is shown by the significant increase in the shares of the urban population in recent decades (Figure 5). However, the evolution in China, which started with the lowest share of the urban population, is the most impressive. Indeed, in 1980, the urban population in China and India represented, respectively, 20% and 25% of the total population, whereas in South Africa and Brazil it represented half and two-thirds of their total populations. Over the subsequent two decades, these shares increased to over 40% in China, 30% in India, 60% in South Africa and over 80% in Brazil. This process is expected to continue, and according to the United Nations' population projections, it is estimated that in 2030, nine inhabitants out of ten in Brazil, eight in the developed countries (including Europe, North America, Australia, New Zealand and Japan), seven in South Africa, six in China and four in India will be living in urban areas.

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9. Rural to urban migration is characterised by a combination of both "push "and "pull" factors. In emerging and less developed countries the most common "push" factors are: famine, drought and natural disasters; war and conflict; agricultural change; unemployment; poor living conditions (i.e housing, education and health). Among the "pull" factors are: better employment opportunities, higher incomes, better healthcare and education facilities, urban facilities and way of life, protection from conflicts, etc.

Figure 5. **Urbanisation process in Brazil, China, India and South Africa, 1980-2010**

Urban population's share (in percentage)



Note: More developed countries include all regions of Europe, North America, Australia, New Zealand and Japan.

*Source*: United Nations, World Urbanisation Prospects. The 2007 revision population database.

The fastest urbanisation process, observed in China, is mainly due to unprecedented internal migration flows from rural areas to cities. Despite existing obstacles to labour mobility, mainly linked to the registration system (*hukou*) and the associated restrictions on social protection, the number of rural migrants to urban areas increased from 2 million in 1983 to 140 million in 2008. As a result, migrant workers have had a substantial and growing role in urban labour markets. For example, in 2008, they represented 47% of total urban employment, double the level just ten years earlier.

Despite legislation constraints, internal rural-urban labour mobility has been one of the driving forces in China's rapid economic growth. As large labour surpluses of low-skilled workers in rural areas migrate to urban areas, non-agricultural sectors with low labour costs have expanded, at the same time raising productivity in the agricultural sector. This evolution has had two main effects: a resource reallocation effect (namely, the change from low-productivity agricultural employment to higher productivity sectors), and an income effect, as the growing number of migrants has led to increasing rural households' income through remittances, even if the wage rate of migrants has remained quite stable. As a result, labour migration has contributed to reducing rural poverty.

In India, both poor and rich households report rural-urban migration, although the reasons for migrating in each household and the nature of the jobs sought by migrant workers are different. On the other hand, educational attainment and the probability of finding a job weigh heavily in the migration decision. As shown by Kundu (2009), in India, even if the household motivation to migrate is in principle stronger for poorer households, the ability to "afford" migration is higher for richer households. This results *de facto* in higher migration rates among the latter, which seems to contradict the idea that mobility is higher among the poor when compared to middle-class and upper-class households in India. Indeed, two-thirds of migrants to urban areas are literate, with medium and small towns showing a higher incidence of migrants with secondary or higher levels of education than do the large cities (more than a million inhabitants). The most educated find it easier to get absorbed into India's cities, whereas poor, illiterate and unskilled labourers can generally get a job only in informal activities, mainly as casual

workers, limiting their employment opportunities and the prospects of poverty alleviation. This shows that urban areas have become less accommodating for the poor in recent years (Kundu, 2009).

In South Africa, migration patterns have changed since the fall of Apartheid. Prior to 1994, internal migration was largely determined by law,[10] which ascribed specific residential locations to ethnic groups. Since then, internal migration has been determined mainly by economic factors. However, the spatial distribution of the population inherited from the Apartheid period, which confined the African population to allocated rural homelands, has contributed to a labour force that is spatially segregated between rural and urban areas and has thus experienced different outcomes in terms of employment, unemployment and wages.

### Labour market segmentation: towards increased informalisation?

Migration has contributed to labour market developments in recent decades, especially in China, influencing the quality of jobs created. Although the lack of comparable data blurs the picture of the main characteristics and the quality of the jobs created in the four countries, there are some indications that the incidence of non-standard employment – mainly informal work but also part-time and temporary work – has increased, mainly in urban areas. Although the extent of informality is difficult to measure, there are indications that it is structurally high in India and more moderate in Brazil, China and South Africa (Box 4). In all cases, the BCIS labour markets are characterised by a higher degree of informality than the OECD countries which affects the less privileged more significantly and contributes to the persistence of income inequalities.

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Box 4. **Defining and measuring informality**

There is no universally accepted definition of informal employment (see OECD 2004, 2008b, 2009c and Perry *et al.,*2007). OECD (2008b) defines informal employment in a broad sense as: "employment engaged in the production of legal goods and services where one or more of the legal requirements usually associated with employment (such as registration for social security, paying taxes or complying with labour regulations) are not complied with". When trying to measure it, each country has its own definition of informality. However, the most commonly used concepts are those recommended by the ILO, which relate to *employment in the informal sector* and *informal employment.*
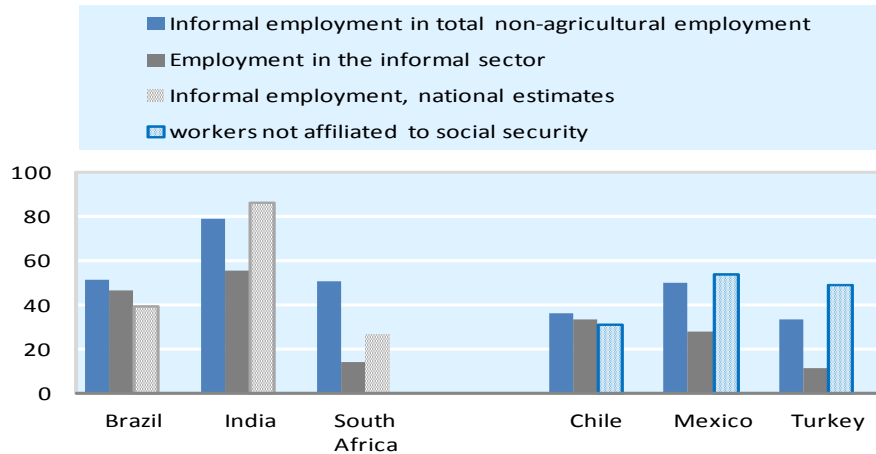
The first refers to the legal registration status of the enterprise unit and covers employment in unregistered enterprises which are private unincorporated (or household) enterprises that produce and sell legal goods and services, with paid employment up to a certain threshold (usually five employees). The second refers to jobs that do not comply with national labour legislation, income taxation, social protection or entitlement to certain employment benefits like advance notice, severance pay, and paid annual or sick leave. Informal jobs can thus be performed in units of any status, including both formal and informal-sector enterprises, as well as in households producing exclusively for own use.

While the two concepts of informality are complementary, the *informal employment* definition tends to be broader. Compared to informal-sector employment, informal employment adds two important groups, namely informal employees in the formal sector and paid employees in households producing exclusively for own use, while it subtracts a group that tends to be small in most developing countries, namely formal employees in informal enterprises.

The Figure below shows how the levels of informality differ significantly in three of the BCIS countries, depending on the definition used. Data from three OECD countries have been added for comparative purposes, although the column based on national estimates for the BCIS countries has been replaced in that case for data on workers not affiliated to social security (see OECD 2008b and OECD 2010c).

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10.     Bantu Authorities Act, Group Areas Act and Urban Areas Act.

Figure: Share of informal employment, latest years available

- Informal employment in total non-agricultural employment
- Employment in the informal sector
- Informal employment, national estimates
- workers not affiliated to social security

Data for Brazil refer to ages 10 and over for KILM (2001) and 15-64 for the national source (2008). Informal employment includes workers without a formal registration, self-employed and unpaid workers according to the national source.
Data for India refer to year 2000 for KILM and to 2005 for the national submission, which excluded agriculture and electricity, gas and water sectors.
Data for South Africa refer to ages 15 and over for KILM (2004) and to ages 15-64 for the national source (2008). Informal work covers non-registered businesses.
Data from KILM refer to the year 2000 for Chile and Turkey and to 2005 for Mexico.
Source: OECD (2009c) Is informal normal?; ILO KILM, National submissions and Chapter 2, Employment Outlook (2010c).

The evolution of informal employment in the past decade has nevertheless been different in these countries, decreasing in Brazil and increasing in China, India and to a lesser extent in South Africa. For example, in China informal employment, characterised by the absence of labour contracts and social insurance, increased mainly in urban areas. Many urban workers laid-off from SOEs at the end of the 1990s were employed informally while searching for better options. Many migrant workers coming to cities from rural areas also entered the informal sector. Estimations from household data show that the percentage of local urban residents working in informal employment almost doubled between 2001 and 2005, from 18% to 32% (Cai *et al.,* 2009). In the same period, the share of migrant workers working informally, already very high, has grown further to reach 84%. Moreover, there is some evidence that, compared to formal workers, these workers work more hours, are worse paid and more vulnerable, and lack social protection.

A similar pattern of increasing informality and deteriorating working conditions for some groups of the population has been observed in India, as most of the net increase in employment observed in recent years has occurred mainly in the least productive, unorganised and informal sector of the economy due to the decline of employment in both the public sector and the private organised sector, and the progressive increase in the proportion of self-employment and casual workers.

Indeed in India, informal workers, defined by the National Commission for Enterprises in the Unorganised Sector as those not having employment security, work security and social security, constitute around 86% of the total workforce. The Indian informal sector is very heterogeneous, including production units having different features and covering a wide range of economic activities, as well as people (*i.e.* workers, producers, employers) who work in service activities or produce under many different types of employment relations and production arrangements. Most of the Indian informal sector is constituted by

self-employed workers. Some also work as wage workers, but then are often employed on a casual basis. In addition, the informal sector in India is characterised by enterprises with low productivity due to a low technological level, limited access to inputs and services, and an inability to market their products remuneratively. As a result, most of those engaged in these jobs, both owners and workers are poor.

In Brazil, informal workers are defined as those without a registered labour card (documenting the employer-employee relationship). Informality started to increase in the 1990s, and peaked in 1999. Since then, the trend reversed and the informality rate dropped to 39% in 2008 (around 34 million workers). Indeed, since 2000, there has been a continuous growth in both job creation and job destruction, resulting in a net creation of 3.5 million jobs in 2007 in the formal sector (compared to 1 million in 1999). The fact that this has been accompanied by falling unemployment rates seems to indicate that the jobs created in the formal sector have been occupied, at least partly, by the unemployed.

In South Africa, informal employment includes both employment fulfilled in a non-registered firm and the employment of domestic workers. Informal employment is less widespread than in the other three countries, but has grown significantly since 1993, with a higher incidence among women than men, mainly due to the overrepresentation of women among domestic workers. This pattern is also observed in India.

In all countries the aggregate informality share masks different outcomes for different groups of workers. In general, there is a negative relationship between educational attainment and the informality rate, with the most educated having the lowest informality rate, whereas women and ethnic minorities tend to be overrepresented in informal employment. For example, in Brazil the informality rate is almost three times higher for the low-educated than the higher-educated; 3 points higher for women than men and 10 points higher for non-white workers than white workers.[11] In addition, as pointed out by Chen *et al.* (2004), women tend to be more represented in the lower segment of the informal sector, implying that they earn less than men.

The highest shares of informality are normally found at both extremes of the age distribution. This is confirmed both in South Africa and in Brazil. In South Africa, the youth have experienced the highest increase in participation in informal employment, and their informality rate is the highest of all age groups (32% compared to 24% for the prime age group and 28% for the oldest), in Brazil, the youth also have a higher informality rate than do prime-age workers, although the highest informality rate is recorded by older workers (10 points higher than for youth).

Informal employment is the only option when the skills or capital to become self-employed are lacking or there is a scarcity of formal salaried jobs. For the youth, informal employment is often a point of entry into the labour market, and as they cumulate experience, or simply queue, they find a job in the formal sector or become self-employed. For older workers, informality often reflects the difficulty of accumulating enough years to secure a meaningful pension. This is the case in Brazil, where the high informality rate among older workers is due mainly to the early retirement practices observed in the 1990s in the formal sector. Many of these retired workers, who had no incentive to pay social security charges because they were already receiving benefits, continued to work in the informal sector to complement their household income. Although social security reforms (in 1998 and 2003) lifted the minimum age for retirement, to 65 for men and 60 for women, the stock of early retired workers is still large.[12]

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11. It is however interesting to note that in Brazil, informality increased between 1992 and 2008 in the intermediate education groups (4-7 and 8-11 years of schooling), evolution that can be explained by the fast increase in the supply of intermediate levels of education and the slow job creation for this group of workers, due in part to the openness of the Brazilian economy (Menezes Filho, 2009).

12. Mello *et al.* (2006) found that in 2004 almost a third of Brazil's retirees were still working.

Finally, there are significant differences in informality depending on the activity sector. Although agriculture usually presents a higher informality rate than other sectors of the economy, this is less the case in China. Indeed, Chinese informal employment is found not so much in agriculture as among urban migrant workers in the industrial or service sectors. On the contrary, in Brazil, although a slow decline has been observed, two-thirds of agricultural workers are working informally.

While there might be a voluntary upper-tier of informal employment, most of the informal employment in these countries is involuntary and is normally associated with low productivity jobs and low wages, and there is a risk of maintaining workers in low productivity/low income traps, contributing to high poverty risks.[13] This is the case in India where the National Commission for Enterprises in the Unorganised Sector has estimated that four out of five workers in the unorganised sector are poor and vulnerable (NCEUS, 2007).

Low wage levels and the increasing wage differential across different segments of the labour market have resulted in widespread poverty among workers, particularly casual workers. Indeed, ILO (2008a) reports that in India the wages of casual workers, who make up a substantial share of the unorganised sector (35% and one-third of total employment in 2004/05) were 44% of the wages of a regular salaried worker. However, in 1993 this figure was 62%, showing that wage differentials increased considerably between informal and formal employment during the past decade. Moreover, discrimination regarding working conditions is often the norm, affecting mainly women, bonded and migrant workers, as well as some social or cultural groups (*i.e.* Muslims and scheduled tribes) and those from the countryside or above all with little or no education.

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13.    Some recent studies challenge the view that the informal sector provides only poor-quality jobs while all good jobs belong to the formal sector. For example, Perry *et al* (2007) and Kucera and Roncolato (2008) present evidence that some fraction of informal workers choose to belong to this segment of the labour market, showing that they are not necessarily the worst-off.

# 3. IMPACTS ON POVERTY AND INCOME INEQUALITY

High economic growth is expected to be accompanied by an increase in household living standards. It is generally accepted that GDP growth since the early 1990s has made it possible to reduce the numbers living in extreme poverty in Brazil, China, India and South Africa, although not to the same extent among all population groups. The scale of the reduction also varies with the poverty measure used (Box 5).

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Box 5. **Measuring poverty and income inequality**

Two main aspects of economic well-being are poverty and inequality. Poverty is defined as whether households or individuals have enough resources or abilities to meet their needs whereas inequality relates to the distribution of income, consumption or other resources across the population. To measure poverty, a relevant welfare measure has to be chosen, a poverty line needs to be selected – a threshold below which a given household or individual will be classified as poor – and, finally, a poverty indicator needs to be defined. One frequently-used poverty indicator is the headcount poverty rate (P0), which is the percentage of the population below a defined poverty line. Other indicators are the mean poverty gap (P1), which measures the poverty depth (*i.e.* the extent to which, on average, poor households are situated below the poverty line), and the squared mean poverty gap (P2), which measures its severity.

In addition, both extreme and relative poverty matter, as they show different aspects of poverty. Whereas the former refers to a standard set in all countries and does not change over time, the latter refers to a standard defined in terms of the society in which an individual lives and which, therefore, differs between countries and over time. Regarding the first, the generally accepted measure to estimate poverty worldwide is the reference set by the World Bank – the poverty lines set at 1.25 USD/day and 2 USD/per day, expressed in 2005 purchasing power parity terms. Regarding the second, the thresholds of 40% and 50% of median income are the indicators most often used to measure relative poverty in the OECD countries, and these will be considered for the BCIS countries when available (see Annex for detail on the sources used and their limitations in each of the four BCIS countries).
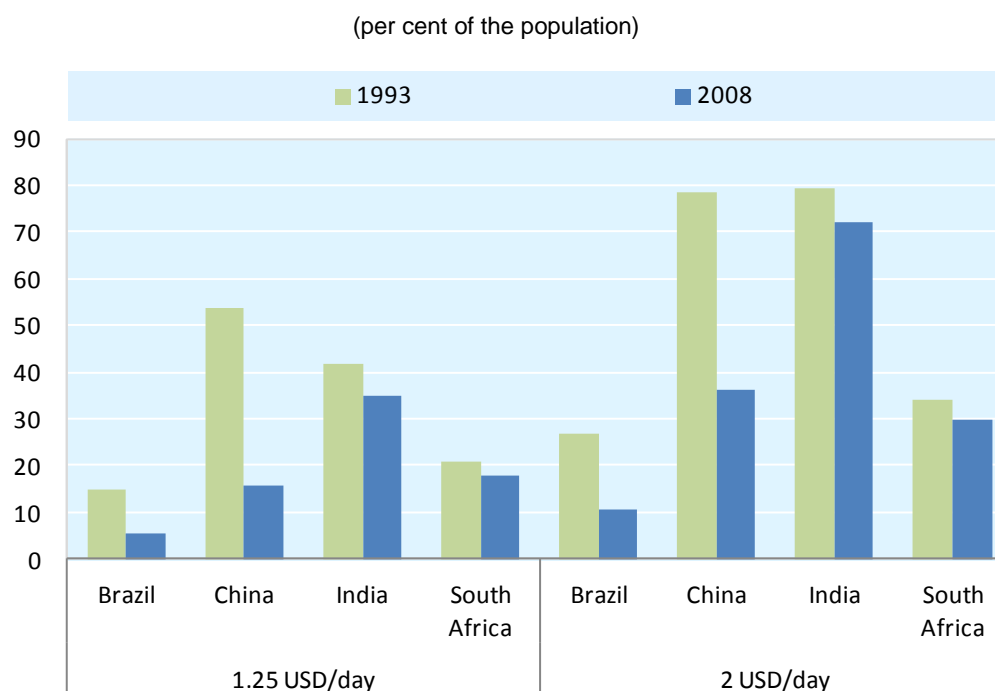
As for inequality, the most commonly used indicator is the Gini coefficient of the concentration of per capita income (or consumption). This is a common measure of inequality and ranges from 0 in the case of "perfect equality" (each share of the population gets the same share of income) to 100 in the case of "perfect inequality" (all income goes to the share of the population with the highest income). Other measures of inequality include the Theil and the Atkinson indexes.

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## Extreme poverty has significantly decreased, but is still a concern

Following the methodology developed by the World Bank, extreme poverty is conventionally measured with poverty thresholds of 1.25 USD or 2 USD per day in purchasing power parities. Using these two poverty thresholds, the BCIS countries have seen important reductions in extreme poverty since they started their economic reforms in the 1990s. Although the reduction in the total number of poor people world-wide has been driven by the impressive Chinese performance in the past two decades, Brazil managed to halve the percentage of people living under these two poverty lines, whereas India and South Africa showed much more discrete reductions. Indeed, despite the improvements, India has the highest headcount poverty rate of the four countries for both poverty lines (Figure 6).[14]

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14. Chen and Ravallion (2008) set a new threshold for extreme poverty at 1.25 USD a day in 2005 prices, using new data on purchasing power parities (PPPs), compiled by the International Comparison Program. These estimates do not reflect, however, the rise in food prices observed since 2005 and their impact on poor households.

Figure 6. **Extreme poverty has decreased but is still high in the BCIS countries a,b**

(per cent of the population)



a) 2008 data refer to 2005 figures for China and India.

b) Headcount poverty is the share of the population living in households with consumption or income per person below the poverty line of 1.25 USD or 2 USD per day (in purchasing power parity).

*Source*: National submissions and World Bank Indicators database for China.

World Bank estimates for China show that since the 1980s over 600 million people have been lifted out of poverty, although the decline was much more rapid in urban areas than in rural ones. In Brazil, 11 million people were lifted out of poverty in the same period until 2008, with a clear acceleration in recent years. In India, although the percentage of those in poverty has decreased significantly, at a slightly higher pace in rural areas than in urban ones, the number of poor has increased by around 40 million. This can be partly explained by demographic growth and migration, which has resulted in 30 million more Indians falling into extreme poverty in urban areas.

Economic growth did not mirror poverty reduction in the BCIS countries during this period. Whereas China had the highest GDP growth and the highest poverty reduction rate, Brazil achieved a higher rate of progress against poverty than did India, despite lower GDP growth. As shown by Ravallion (2009), the elasticity of poverty to growth – the change in poverty per unit of growth in GDP per capita – was highest in Brazil (-4.3% compared to -0.8% in China and -0.4% in India for the period 1981-2005).

*National poverty estimates provide additional insights*

The analysis of poverty is clearly very sensitive to the poverty line chosen. At the national level, different definitions of the poverty line are used, rendering comparisons between countries difficult. Nevertheless, national definitions present some advantages, as they give a more detailed picture of poverty trends in the last decade in each country, but most importantly, national poverty lines are used by policy makers as the references to monitor national anti-poverty policies.

For example, in Brazil, using the national poverty line – set at 137 BRL per month, equivalent to 80 USD – 35% of Brazilian households were considered poor in 1992, a figure that dropped to 16% in 2008, with the greatest poverty reduction observed after the stabilisation plan implemented in 1994, and then again, more recently, after 2003 (Table 3). Although this reduction in poverty has been observed all over the country, important differences between regions remain. Whereas in the North-eastern regions poverty incidence decreased by 38% between 2003 and 2008, the poverty rate in 2008 was still three times higher in the North-east than in the South-east.[15]

In China, national statistics compute poverty only in rural areas according to an annual poverty line set by the government.[16] Under this national poverty line, the number of rural poor decreased considerably between 1993 and 2008 (from 70 to 15 million). Although not easy to quantify, there is growing agreement that poverty in urban areas has increased since the early 1990s, in association with the labour market transformations that occurred with the restructuring process in State-Owned Enterprises – and the consequent lay-offs – and the migration flows from rural to urban areas (Cai *et al.,* 2008).

Table 3.   **Incidence of poverty in the BCIS countries by region, 1993-2008 a,b**

National poverty lines

| Population under the national poverty line (in millions) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Brazil | | | China | India | | | South Africa | |
| 1993 | 51.6 | | | 70.0 | 397.8 | | | 21.6 | |
| 2000 | 45.8 | | | 32.1 | 245.7 | | | 22.4 | |
| 2008 | 29.8 | | | 14.8 | 272.2 | | | 26.5 | |
| Headcount poverty rate (in %) | | | | | | | | | |
| | Total | Rural | Urban | Rural | Total | Rural | Urban | Total | Rural | Urban |
| 1993 | 35.0 | 61.4 | 28.0 | 7.7 | 30.7 | 31.6 | 28.0 | 54.0 | 75.8 | 31.6 |
| 2000 | 28.7 | 53.5 | 22.9 | 3.4 | 26.1 | 27.0 | 23.4 | 53.7 | 74.3 | 38.5 |
| 2008 | 16.0 | 34.8 | 13.0 | 1.6 | 21.8 | 21.7 | 21.9 | 54.5 | 77.0 | 39.3 |

a) For Brazil data refer to 1993, 1999 and 2008; for China 1994 instead of 1993 and only for rural areas. For India, data refer to 1993/94, 1999/00 and 2004/05 and are based on consumption expenditures.

b) For Brazil, the national poverty line used is 137 BRL (80 USD per month) and for South Africa it is 515 ZAR (121 USD per month).

*Source*: PNAD for Brazil, NBS China Statistical Abstract for China, NSS for India and for South Africa data from SALDRU 1993, IES 2000 and NIDS 2008.

In India, the estimation of poverty has often been the subject of substantial controversy.[17] Although there is good evidence that overall poverty fell in terms of head-count ratios, there is no consensus on what happened to poverty in India in rural areas. Discrepancies between household surveys – like the national sample survey (NSS) – and national accounts (NSA) have made it difficult to derive a single picture of the

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15.   Both in 2003 and in 2008, the highest poverty rates were found in Alagoas and Maranhao, whereas the lowest were found in Santa Catarina and Parana (see Chapter 2 for details).

16.   The Chinese National Bureau of Statistics (NBS) defines a poverty line for rural areas according to an estimated basic expenditure by household on food based on a minimum nutrition standard. Then the expenditure on non-food goods is added to basic food consumption.

17.   For India there is no information on income. Only information on consumption is available.

evolution of poverty in India.[18] Using data from the NSS, which is the most often used source for poverty measurement purposes, the percentage of people below the national poverty line decreased from 30.7% in 1993/94 to 22% in 2004/05, with a sharper decrease in rural areas (Table 3).[19] This decline was accompanied by a decrease of the poverty depth of 50% between 1983 and 2004/05, from 12.6% to 5.7%, also with a higher decline in rural areas (Topalova, 2008).

The slower reduction of the incidence of poverty in urban areas compared to rural ones can be considered anomalous, as urban centres have been hailed as the engines of growth. According to Kundu (2009), this could not be attributed to significant movements of the labour force from rural to urban areas, as the rural-urban migration rate has remained quite stable, even if growth in agriculture has been modest and has experienced high volatility. On the contrary, urban poverty is higher in many of the developed and rapidly growing states, which raises the question of whether this is due to development or to the lack of it. Indeed, rural poverty is generally low in states with high per capita GDP, but that is not the case of urban poverty. The latter does not respond directly to economic growth, but can largely be attributed to the segmentation of the labour market between rural and urban areas and to barriers to migration from rural areas into cities and towns.

South Africa is the only country that has not experienced significant changes in poverty incidence since 1993 according to national definitions. Several authors found some increase in poverty until 2000 (Statistics South Africa 2002, Hoogeveen and Ozler, 2006), with this stabilising or slightly moderating thereafter (Van der Berg, 2006). The current consensus is that in the first five years of democracy there have been no major shifts in the overall extent of poverty (Bhorat and Van der Westhuizen, 2008).
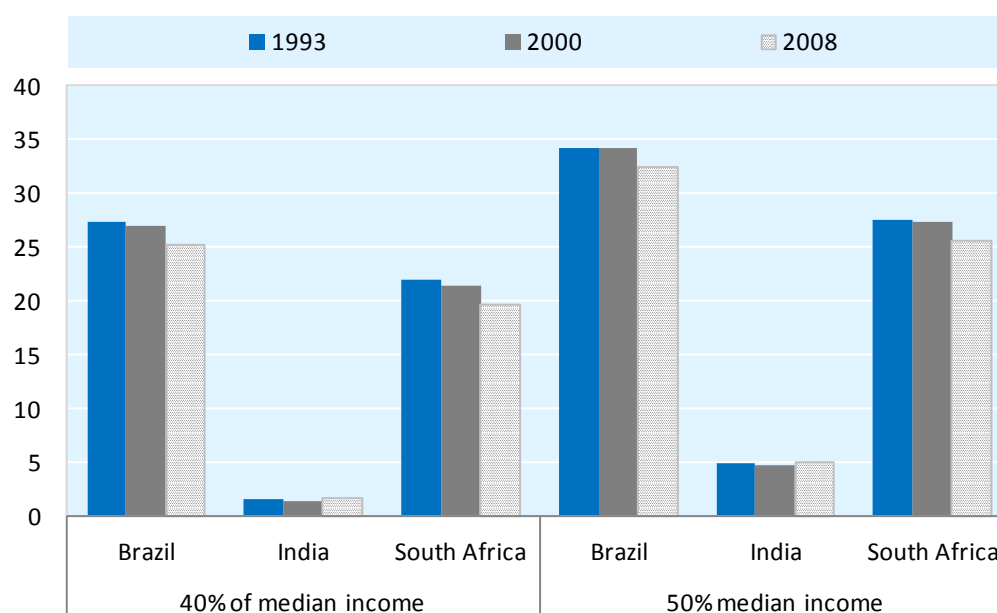
Using the lower-bound national poverty line set at 515 ZAR per month (121 USD), Leibbrandt *et al.* (2010) also found no significant change in poverty incidence between 1993 and 2008. However, looking at the relative measures of poverty (*i.e.* 40% or 50% of median income), poverty reduction is more pronounced (Figure 7). This trend is due to the decline in poverty incidence among the African population, particularly males, even if the headcount poverty rates for the 50% of median income poverty line was 30% for Africans in 2008, compared to 1.3% for Whites. Moreover, when considering other poverty indicators, like the mean poverty gap, which measures the poverty depth (or the squared mean poverty gap, which measures its severity), the gains over the period are slightly higher than indicated by the headcount poverty rate. Poverty has increased in urban areas, and remains clearly concentrated among the African population – which accounts for more than 90% of the country's poverty share – followed by Coloured people. [20]

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18.    See Deaton and Kozel (2005) and Chapter 4 of this report for the debate on measuring poverty in India.

19.    Using NSS data, the Planning Commission provides two estimates of poverty, based on two different consumption distributions: one distribution from the consumption data collected using a 30-day period and another obtained from the consumer expenditure data collected during a 365-day period. Using the 30-day period, the percentage of people under the poverty line fell from 35.8% in 1993 to 27.5% in 2004/2005.

20.    Over the entire post-Apartheid period up to 2008, there have, however, been continuous improvements in non-monetary well-being (i.e. access to piped water, electricity and formal housing) for the entire South African population.

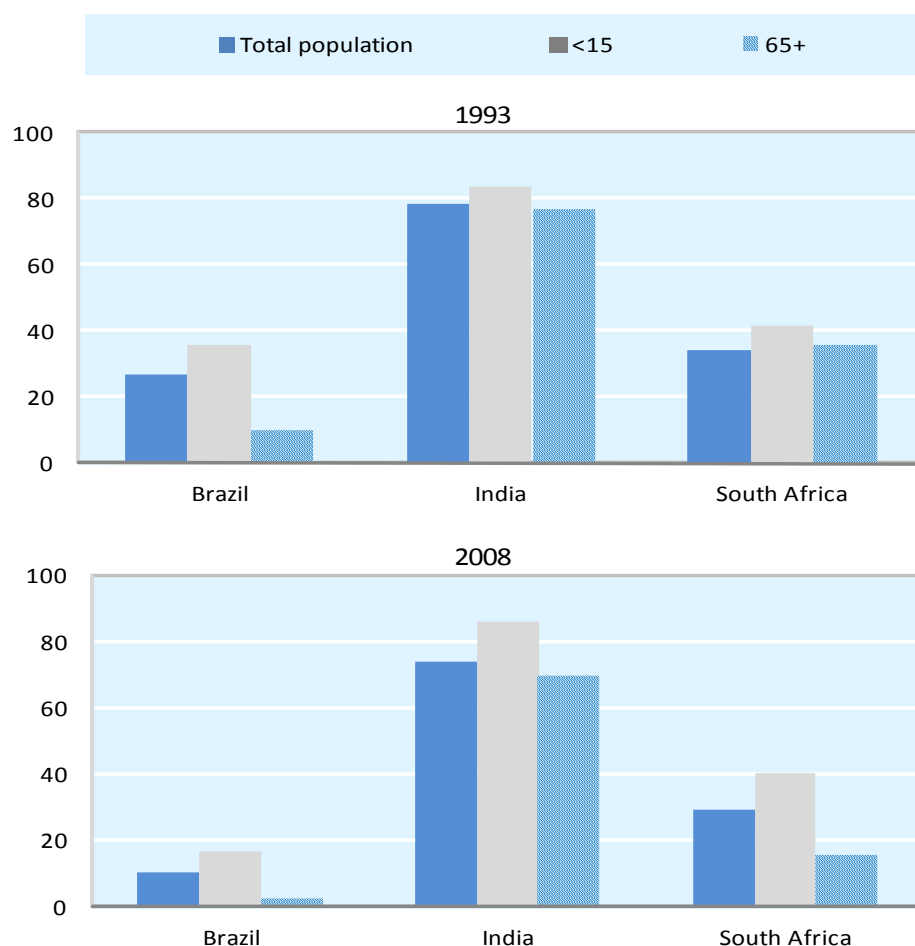Figure 7.  **Relative poverty in Brazil, India and South Africa, 1993-2008**



Note: For India data refer to median consumption expenditure. Data for 1993 refer to 1994 and data for 2008 refer to 2004/2005.

*Source*: National submissions.

Children remain at a higher risk of falling into poverty than any other age group in the BCIS countries (Figure 8). Between 1993 and 2008, the proportion of children below the 2 USD per day poverty line has decreased only in Brazil, and remained quite stagnant in India and South Africa. In contrast, old-age poverty has been reduced considerably in the three countries in the same period. Indeed, in relative terms, the poverty situation of children has worsened in the three countries compared with both the old-age population and the total population.

Figure 8. **Children are at higher risk of poverty, 1993 and 2008**

(Proportion of population below the 2 USD/day poverty line)



Note: For India data for 1993 refer to 1994 and data for 2008 refer to 2004/2005.

*Source*: National submissions.

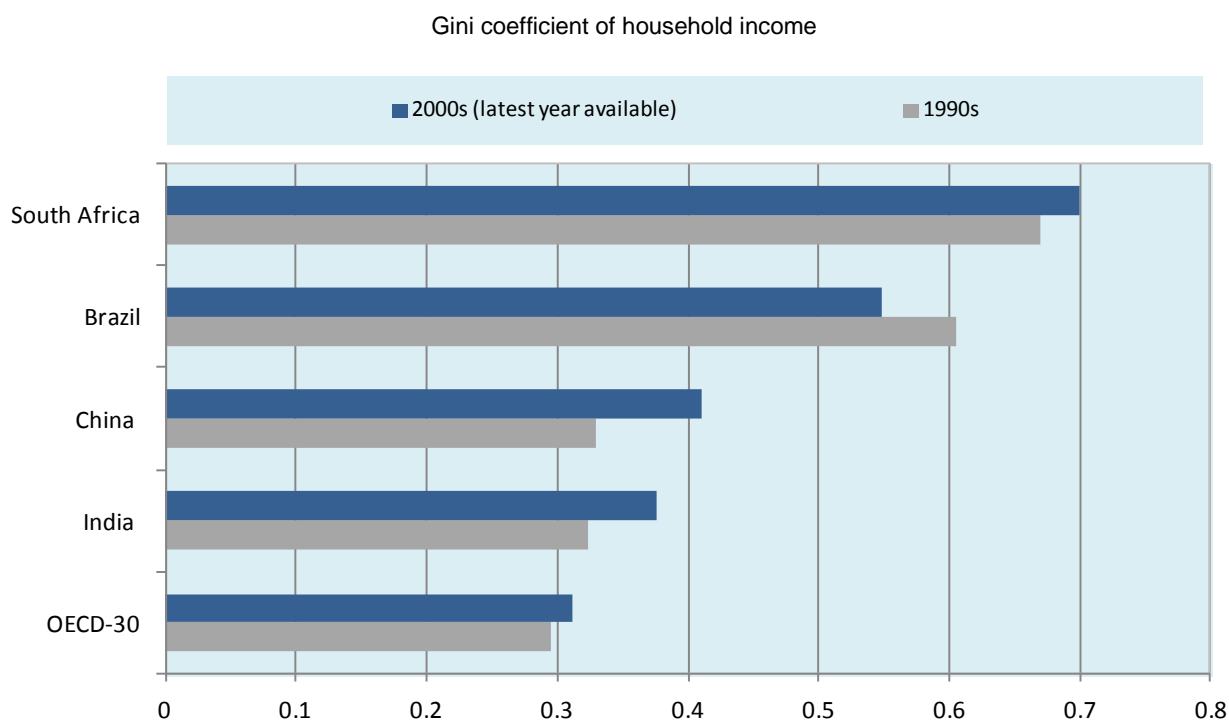## Inequality trends have been less positive, although uneven

*Overall levels and regional trends*

The relationship and the trade-offs between economic development and inequality is complex, and causality can go in both directions *(i.e.* Arjona *et al.,* 2002). That said, there are signs that the benefits from growth did not manage to trickle down to significant segments of the population. Despite the positive change in poverty reduction described above, economic growth has not always been accompanied by an improvement in the distribution of income in the BCIS countries, and inequality remains high in these countries.

Compared to the OECD countries, South Africa and Brazil have very high levels of inequality. In more recent years, the fall in poverty has been accompanied by a significant fall in inequality only in Brazil. Inequality levels in China and India are lower, but still exceed OECD average levels, and are on an

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increasing trend (Figure 9).[21] Indeed, between 1993 and 2008, the Gini coefficient of per capita income fell by 9% in Brazil, with the decline accelerating considerably after 2000. In contrast, it increased by 24% in China, by 16% in India and by 4.5% in South Africa, compared to 5.5% in the OECD countries.

Figure 9. **Change in inequality levels, 1990s versus 2000s a**

Gini coefficient of household income



a) Data for the 1990s refer to 1993 for the BCIS countries and to the mid-1980s for the OECD-30. Data for 2000s refer to mid-2000s, except for Brazil and South Africa, which is 2008.

b) Gini coefficients are based on equivalised incomes for OECD countries; per capita incomes for Brazil, China and South Africa; and per capita consumption for India.

*Source*: National submissions for Brazil, India and South Africa. WDI for China and OECD (2008c) for OECD countries.
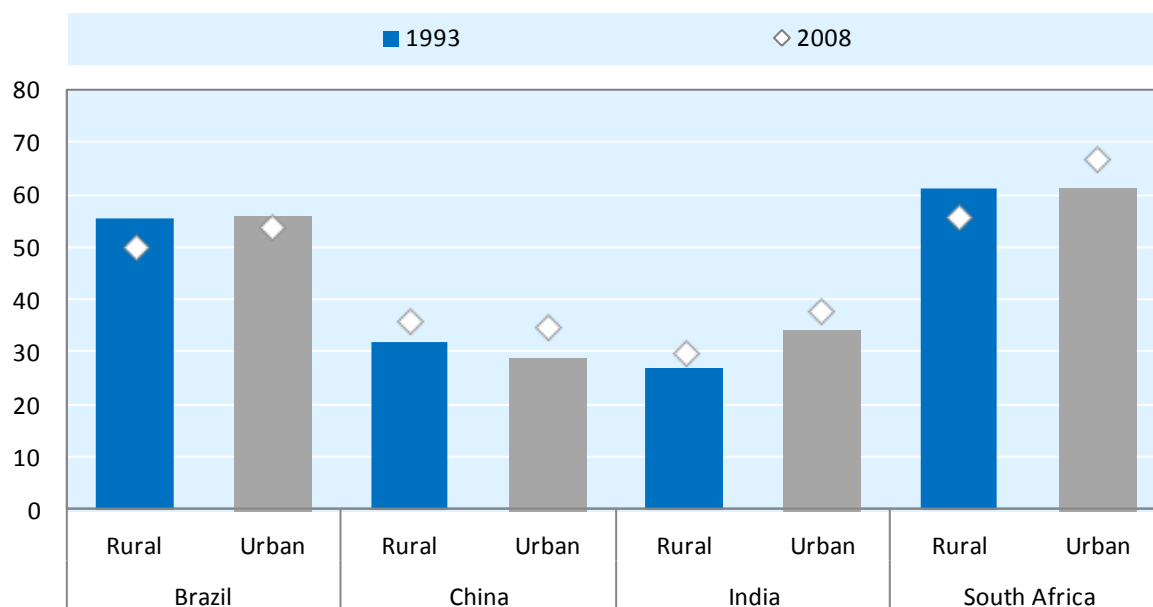
In China and India, income inequality has increased in urban and in rural areas, whereas in South Africa inequality increased in the first but decreased in the latter (Figure 10). In China, regional inequality consists basically of two dimensions: the east-central-west divide and the rural-urban divide.[22] Although, progressively nuanced, the generally accepted view was that the overall extent of inequality in China until the early 2000s resulted from inter-province differences (rather than intra-province differences), and policy-makers consequently emphasised the reduction of these inter-province imbalances (Box 6).

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21.    OECD (2004b) reported that these growing income disparities in China between different economic sectors, rural and urban areas and between coastal and east areas to central and western areas, were the result of unbalanced economic development, observed mainly in the 1990s.

22.    Since 2000, the change in the two Chinese surveys (the Rural and the Urban National Surveys) has complicated the interpretation of inequality indicators (OECD, 2010a).

Figure 10. **Inequality in the BCIS countries by region, 1993-2008 a,b**

Gini index of per capita household income or consumption



a) China data refer to 1993 and 2005; India data to1994 and 2005.

b) India data refer to household consumption.

*Source*: PNAD for Brazil, World Bank data for China, NSS for India, and for South Africa data from SALDRU 1993, IES 2000 and NIDS 2008.

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Box 6. **Inter-provincial inequalities in China**

There is no clear consensus on the magnitude of inter-provincial inequality in China or current trends due to the different ways of measuring it. For example, Rui and Zheng (2009) found that different income indicators give rise to different results on inequality trends: when using consumption-based measures, there is low inter-provincial inequality; when using GDP per worker, a strong upward trend is observed; but the largest fluctuations in inter-provincial inequality are found when using household income-based measures. In all cases, inequality between provinces is higher when measured by indicators un-weighted by population.

On the other hand, there is increased evidence that most inter-provincial inequality results from intra-provincial inequality, due in particular to the rural-urban divide inside each province. According to official statistics, household per capita incomes in urban areas were double those in rural areas in the early 1980s, but this ratio increased to more than triple in 2007.

However, these official estimates overstate the difference between rural and urban incomes, because they do not fully capture the migration flows registered from rural to urban areas. According to OECD (2010a), the underestimation of the prevalence of migrants is quite significant and tends to raise the gap between rural and urban incomes. Correcting for this bias and adjusting for spatial price differences, the ratio between urban and rural incomes is on the order of two, pointing to considerable stability in recent years. When making this adjustment, the inter-provincial influence on overall inequality decreases. A similar result was found by Sicular *et al.* (2007) using the Theil T-decomposition index of inequality and considering price differences: the influence of provinces on inequality falls from 45% to 31%, and then to 26% when the weight of migrants in urban areas is correctly measured. These authors estimate that the rural-urban divide is responsible for most Chinese inequality, having contributed 50%-70% to overall regional inequality.

In India, during the past decade, inequality increased significantly also due to the increase observed in urban areas. Other than focussing on this rural-urban divide, several studies analyzing inequality trends in India have shown the accentuation of regional imbalances.[23] Indeed, there is a growing concern in India that the benefits of growth have been concentrated in the already richer states, leaving the poorest and most populous states further behind (*i.e* Bihar, Madhya Pradesh, Uttar Pradesh and Kerala).[24] In richer states, high growth rates have led to a boom in commercial and service sector activities, whereas in most of the poorest states agriculture is the main way of life (even if it doesn't always offer adequate returns), and industry is almost absent, leading to limited trade and services. Moreover, most of the backward areas still lack basic amenities such as education, health care, housing, rural infrastructure and drinking water and electricity. All this contributes to maintain significant inequalities between regions.[25]

*Development of top incomes*

Another way to describe the increase in inequality is to compare the ratio of the highest to the lowest household incomes. During the period 1993-2008, for which comparable data are available, the ratio of the top quintile to the bottom quintile of real household income decreased in Brazil, remained roughly stable in South Africa, and increased in India, confirming the trends in income inequality already mentioned. This has resulted in different paths of growth of real household income by quintile. Whereas in Brazil, the highest change in real household income was observed in the bottom quintile, especially since 2000, in China and India both in the 1990s and 2000 and in South Africa in the more recent period the top quintile experienced the highest growth (Figure 11).

As a result, especially in the more recent period, per capita household income has become increasingly concentrated in the top quintile of the distribution, with its income share growing in China, India and South Africa. Whereas in China and India the top quintile share of total income reached 41% in 2008, similar to the share observed in the OECD countries in the mid-2000s, it is much higher in South Africa (75% in 2008). Although Brazil traditionally has a high concentration of income among the top quintile, it was the only country to experience a decrease in the share of the top quintile during the 2000s, mainly due to the progressive resurgence of the middle-class (Figure 12).

This higher increase in income at the top of the distribution in India and South Africa is confirmed in the literature. For example, using time-series data on income tax over the period until 2000, Banerjee and Piketty (2005) found that in India the income share of the top 1% of the distribution increased gradually to 9-10% in the late 1990s, with a similar trend observed in the narrower group of the top 0.1%. Also in South Africa, Leibbrandt *et al.*(2010) found that the richest 10% of the income distribution accounted for 58% of total income in 2008 compared to 54% in 1993.
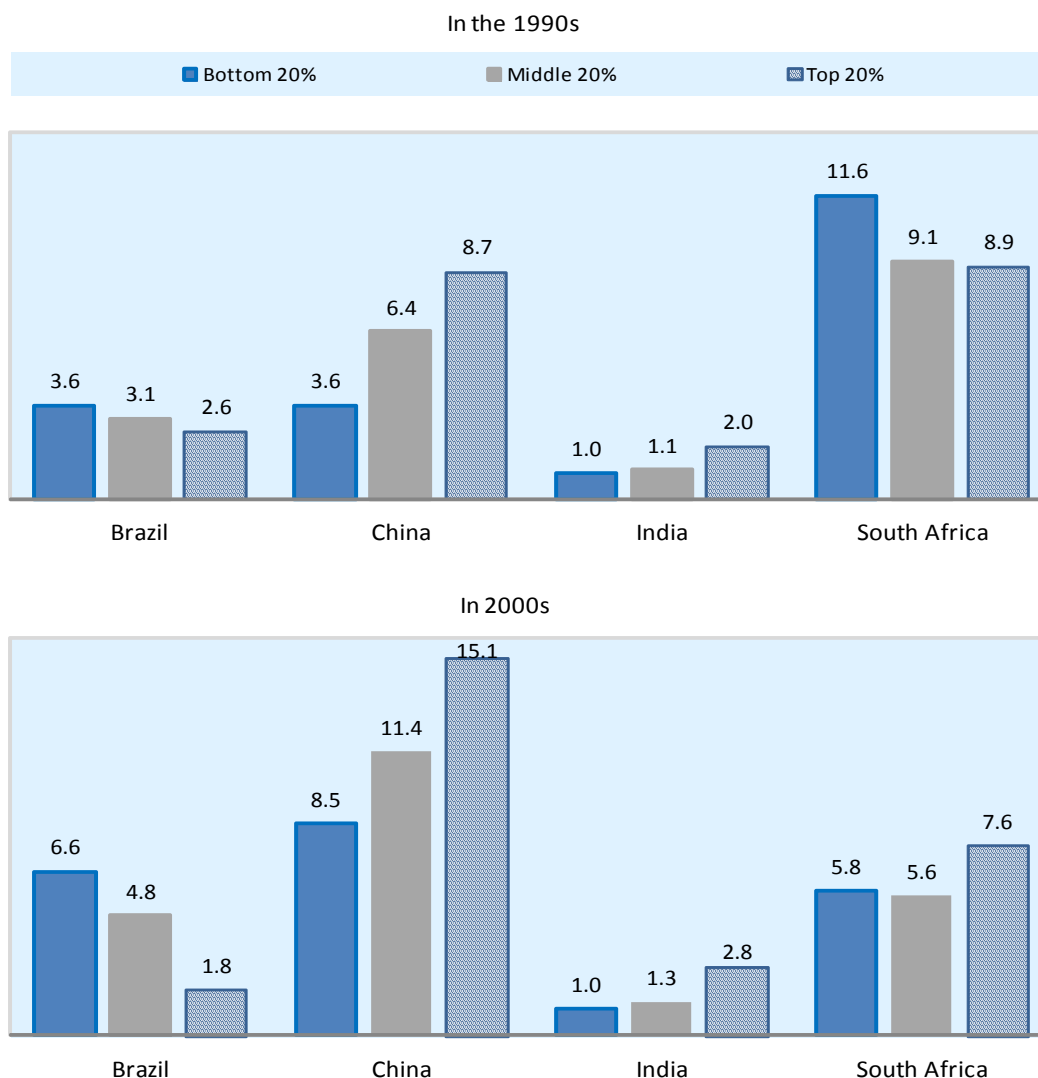
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23.     Ahmad *et al.* (2008) and Planning Commission (2008).

24.     This means that the richer and faster-growing states have experienced lower volatility in economic growth compared to poor states. They also have been more successful in creating jobs in the private sector and have generally been more effective in reducing poverty (Purfield, 2006).

25.     According to Ravallion (2009), inequality in India may be higher than what the Gini index shows, as other dimensions of inequality, not captured in that index, are very important in that country (*i.e.* mainly inequalities associated with gender or caste, as well as inequalities in access to education and health care).

Figure 11. **Change in real household income by quintile in the BCIS countriesa,b,c**

Average annual growth (in %)

In the 1990s



In 2000s



a) For Brazil the average annual change refers to 1993-2001 and 2001-2008; for India to 1993/94-1999/00 and 1999/00-2004/05 and for South Africa to 1993-2000 and 2000-2008.
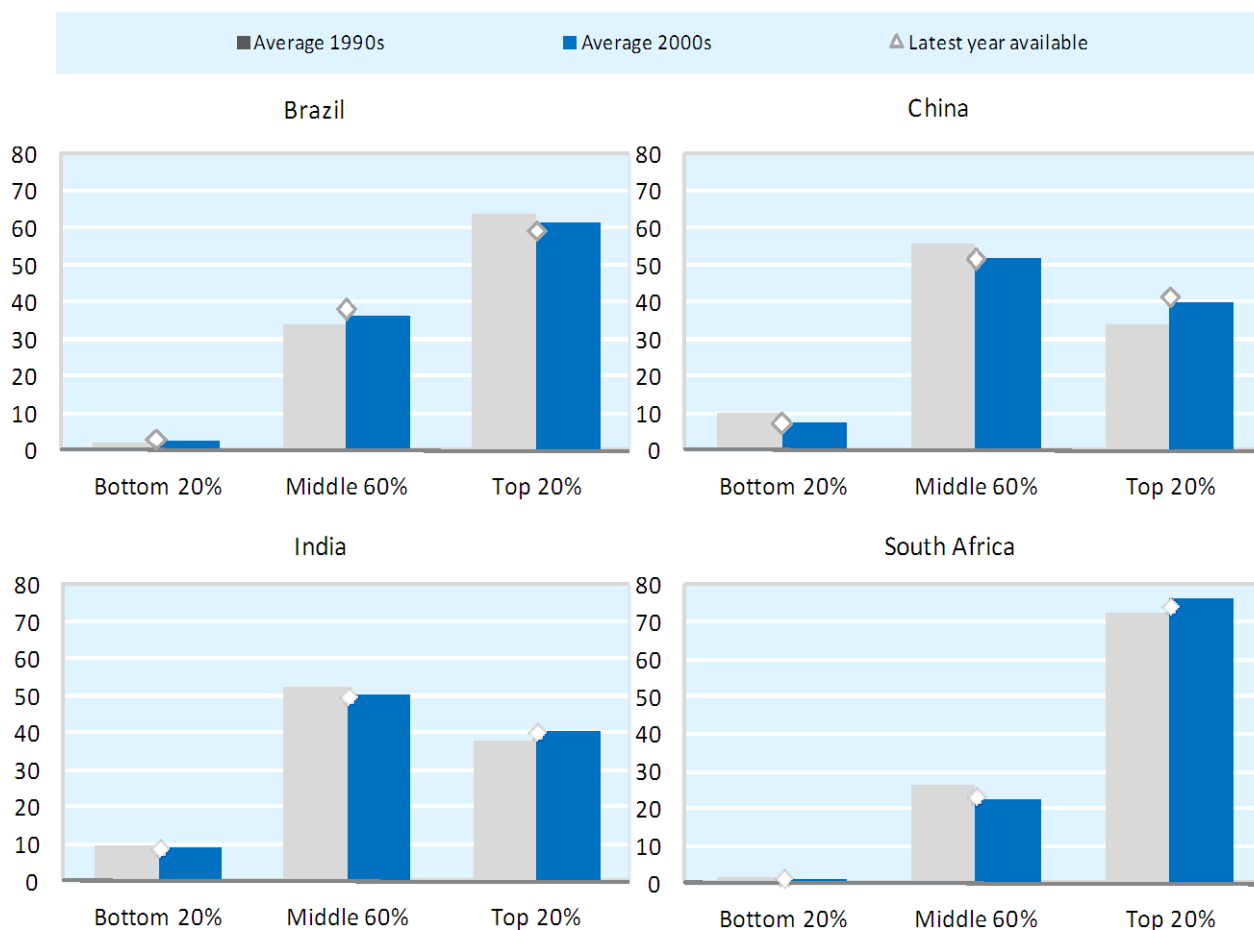
b) For China data refer to urban areas only and for the periods 1997-2000 and 2000-2008.

c) Data for India refer to real household consumption.

*Source*: National submissions based on PNAD for Brazil, NSS for India and SALDRU 1993, IES 2000 and NIDS 2008 for South Africa. For China data come from B. Milanovic database.

Figure 12. **Per capita income shares by quintile in the BCIS countries**

(in percentage)



*Source*: National submissions based on PNAD for Brazil, NSS for India and SALDRU 1993, IES 2000 and NIDS 2008 for South Africa. For China data come from B. Milanovic database.

*Drivers of inequality changes*

Developments in market incomes, in particular labour earnings, are the key drivers of household income inequality in the OECD countries (OECD 2008c). As work is the main asset for the majority of the population, labour market performance appears to be crucial to an explanation of trends in inequality. The same holds for the BCIS countries. Empirical studies on emerging economies have found that rural-urban migration patterns, steeper returns to education and a deterioration of the labour markets (higher unemployment and informal employment) increase inequality, while reductions in the wage gap between men and women and in fertility rates often reduce inequality.

In Brazil and South Africa, as in OECD countries, labour income represents 75%-80% of total income.[26] In Brazil, labour income has progressively increased, registering average annual growth of 5% since 2003, whereas in South Africa it has slightly decreased since 1993.
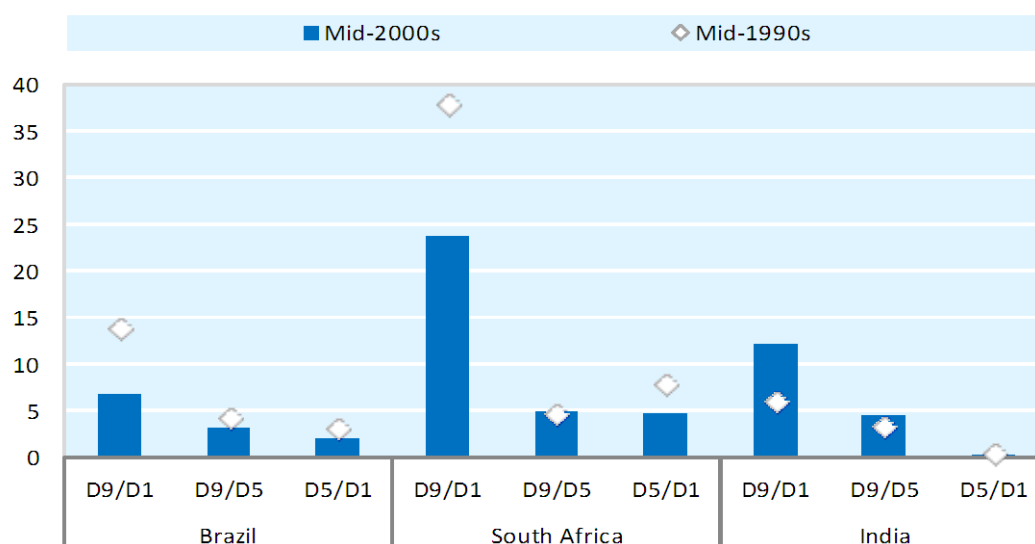
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26. No data is available on the breakdown of income for China and India.

When looking at workers' earnings between the mid-1990s and the mid-2000s, a compression on earnings is observed in both Brazil and South Africa, although increased inequality is registered in India (Figure 13). It is interesting to note that whereas in Brazil, both the ratio between the top decile and the medium decile (D9/D5) and between the medium and the lower decile (D5/D1) experienced a similar decrease, in South Africa the decrease in wage inequality has been due to the compression of the lower-wage part (D5/D1).

However, although in Brazil earnings of the top decile of the distribution have halved since 1993, they are still seven times higher than earnings for the population at the bottom. In South Africa, although this ratio also halved between 1993 and 2008, it decreased very fast until 1997, but increased slightly since then.[27]

In contrast, in India the ratio of the top decile to the bottom decile of the earnings distribution almost doubled from 1993/94 to 2004/2005. However, among Indian wage earners, it is important to distinguish between regular workers, who get contractual employment over a period of time, and casual workers, who are employed on a day-to-day basis. Wage inequality is much higher amongst the regular wage earners and has been increasing dramatically in the past decade, while inequality in the casual wage sector has remained more stable.

Figure 13. **Earnings inequality by decile ratios, 1993-2008a,b**



a) In India the weekly earnings distribution has been calculated irrespective of how many days in a week workers have actually worked.
b) The age group for wage calculations is 15-64 for Brazil and South Africa and 15-59 for India.
*Source*: National submissions.

Gender and race discrimination in the labour market are important dimensions that generally have a significant impact on earnings inequality. As in the OECD countries, women tend to earn significantly less than men in the BCIS countries. For example, in Brazil real wages for full-time women were half those of men in 1993, but the gap has progressively decreased since then, and in 2008, Brazilian women earn two-thirds of men's real wages. In South Africa this gap has fluctuated significantly depending on the year

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27. Leibbrandt *et al.* (2010) report that the increased earnings inequality observed in South Africa since 1997 was largely fuelled by the fact that only the two highest deciles experienced growth in real wages, whereas all other deciles fell.

considered, but in both 1993 and 2008 women were earning 60% of men's wages, in real terms. As for the breakdown of wage inequality by race, some improvement has been observed since 1993 in South Africa, with Africans earning on average around four times less than Whites measured by real wages in 2008, compared to five times less in 1993. However, household income inequality is clearly racially biased in South Africa, with Africans occupying the lower deciles of the income distribution (Leibbrandt *et al.*, 2010).

When looking at sources of household income other than earnings, public transfers have to be looked at in detail, as they have the potential to reduce inequality. Indeed, they have played an important role in the recent evolution of income inequality, although their impact has differed, depending on the country.[28] Whereas in South Africa the importance of public transfers as a share of total income has increased (from 5.4% in 1993 to 7.9% in 2008), compensating the loss in remittances observed mainly since 2000, it does not seem that they have had a major impact on inequality. Leibbrandt *et al.* (2010) show that South African state transfers make up less than one percent of the overall Gini coefficient of per capita household income.

In Brazil, in contrast, public transfers, in the form of social grants, have been increasingly responsible for the decrease in income inequality, especially after 2000. Indeed, influenced by the expansion of the *Bolsa Familia* conditional cash transfer programme to poor households, income from social programs increased between 2003 and 2008 at a rapid rate. This was followed by pension income, which is linked to the minimum wage. Even if income from work explains 70% of the reduction in inequality in Brazil between 2001 and 2008, social programs are the second factor, followed by old-age pensions (accounting for 17% and 15.7%, respectively). The remaining incomes explain only 1% of the inequality reduction.

*Inequality is not always linked to informality*

The links between informality and inequality are complex, and an increase (or decrease) in the former does not translate automatically into higher (or lower) inequality. For example, in Brazil, both informality and inequality have decreased in the past decade, but most research does not find that the decrease in informality is the main explanation behind the improvements in income redistribution. Indeed, most empirical studies show that it is not informality that has had the most significant impact on inequality reduction in Brazil, but education. Indeed, there is agreement that education is the main factor behind income inequality reduction in the country (Box 7).

In China, Cai *et al.* (2009) used data from the Chinese Urban Labour Survey (CULS) of 2001 and 2005 to break down inequality by different factors and found that the effects of informality on income inequality are mixed. On one hand, working in the informal sector favours an increase in income, mainly for those at the bottom of the distribution, reducing overall inequality via the employment effect. On the other hand, as wages in the informal sector grow below those in the formal sector, they contribute negatively to overall inequality via the income effect. The result of these two opposing forces was different in 2001 and 2005. In 2001, the employment effect dominated, whereas in 2005 the income effect was stronger than the employment effect. In both cases, however, the contribution of informality seems to have been very low, compared to other factors. Indeed, the differences in human capital, followed by the rural-urban divide, explain much of overall inequality at the two times. However, more than half of overall inequality could not be explained, as shown by the importance of the residuals in their estimation. Labour market discrimination, as an unobserved variable, may explain part of these residuals.

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28.    The social programs in place in each country are described in the country chapters.

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<center>Box 7. **Explaining inequality reduction in Brazil**</center>

The causes of the very high level of income inequality in Brazil have been hugely debated. Different authors have put forward different explanations: Hoffmann (1995) and Camargo and Neri (1999) examined the influence of inflation; Bonelli and Ramos (1995) studied the impact of economic cycles; Henriques (2001) discussed the role of labour market discrimination; and Scorzafave and Menezes-Filho (2005) discussed the role of increasing female labour force participation. Other researchers have emphasised access to land and capital property as well as government policy as predictors of Brazilian inequality. Some authors have tried to explain recent trends: for example, Firpo and Reis (2006) found that the evolution of the minimum wage accounted for 36% of the decline in inequality as measured by the Gini index between 2001 and 2005. However, they point that although real increases in the minimum wage have contributed to diminishing wage inequality since 1990, it is expected that this kind of policy will gradually become less efficient as it is continued.

**Informality:** Some papers have investigated the impact of labour market segmentation between formal and informal labour. In an effort to disentangle the various sources explaining wage inequality in Brazil, Barros and Mendonça (1995) found that if wage differentials between formal and informal workers were eliminated, *ceteris paribus*, wage inequality in Brazil would be reduced by seven percentage points. Though this is not negligible, they nevertheless found that educational differentials are the most important factor behind wage inequality. Ulyssea (2006b) and Barros *et al.* (2006) used decomposition techniques and concluded that although informality rates are decreasing in Brazil, the earnings differentials between the two sectors are increasing, and this is contributing to an attenuation in the decline in inequality. Barros *et al.* (2006) reached the same conclusions, using a different decomposition technique. Machado *et al.* (2006) examined the impact of the formal-informal segmentation between 2002 and 2005 using quantile regressions. They showed that, for workers below the income median, there was an increase in the controlled wage gap between formal and informal workers, and a decline in the gap for those above the median, and this contributed to an increase in inequality in the period.

**Education:** Reis and Barros (1991), for example found that education explains about 40% of wage inequality in Brazil, whereas Menezes-Filho (2001) argued that education explains about 26% of Brazilian household income inequality and about 40% of earnings inequality. Lemos and Scorzafave (2006) studied the breakdown of inequality by population sub-group and found that education is undoubtedly the most important factor explaining income inequality and htat it accounted for about 25%, according to the Theil-T. However, the role of education has been declining since 1998. Ramos (2006) showed that between 1995 and 2005 education was the most important element explaining the decline in wage inequality in Brazil. The author identified a reduction in educational inequality between workers and also a significant drop in returns to education. Tavares and Menezes-Filho (2007) reached the same conclusion, that is, that a fall in returns to education is the main factor explaining the reduction of inequality in Brazil.

Soares *et al.* (2006) examined discrimination and the evolution of educational and earnings differentials between white and non-white workers in Brazil. The authors showed that the educational gap between these groups is being reduced over time and that this fact is contributing to the reduction of the racial wage gap. The authors also found a reduction in discrimination in the Brazilian labour market, which also explained part of the fall in the wage gap.

**Public transfers:** Many studies have sought to understand the impact of public transfers on inequality, as their weight in household income has been increasing. For example, Ferreira (2006) showed that labour income made up about 85% of total family income in 1985, but decreased to 77% in 2001. In the same period, income from retirement increased from 10% to 18% of family income. Barros *et al.* (2006) argued that about one-third of the fall in inequality in the last decade was due to public transfers. Soares *et al.* (2007) argued that *Bolsa-Família,* the Brazilian conditional cash-transfer program, explained about 21% of the fall in the Brazilian Gini index between 1995 and 2004.

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# 4. CONCLUSIONS

During the two decades until 2008, the BCIS countries have all experienced sustained economic growth, with real GDP growing at above the OECD average. This was particularly the case in China and India, which had annual growth rates approaching and exceeding two-digit levels in the years prior to the current economic crisis, and to a lesser extent in Brazil and South Africa, which experienced more volatile economic growth in the past decade. As a result, real GDP per capita is gradually catching up with the OECD countries, mainly in China and India, although it remains below 20% of the OECD average in these two countries and around 25-30% in Brazil and South Africa.

These developments were favoured by major macro-economic policy reforms, which started in the 1980s in China, in the mid-1980s in India, and in the early 1990s in Brazil and South Africa, and which consolidated in the 1990s with the countries' rapid integration into the world economy. Trade and investment flows grew as never before, spurring significant trade and capital integration and increasing the countries' weights in the world economy.

However, while strong economic growth has helped to reduce extreme poverty, measured by both the 1.25 USD/day and the 2 USD/day poverty lines, significantly in China, India and Brazil, and to a lesser extent in South Africa, the overall benefits of economic integration have not been shared equally. Indeed, except in Brazil, income (and consumption) inequalities increased in the 2000s from the 1990s. However, the patterns of economic growth, poverty reduction and inequality outcomes vary between countries, with few characteristics in common. The following four chapters analyse the country-specific patterns in detail.

National poverty estimates provide some insight into differences in the composition of poverty (and poverty reduction paths) in each of the four countries. This concerns in particular regional and urban/rural differences as well as differences in poverty incidence among different population groups. In Brazil, the poverty rate remains higher in rural areas and is regionally unbalanced, with the North-eastern regions having triple the poverty rates of the South-eastern areas, even if the former experienced sharper decreases than the latter. In China, even if rural poverty reduction has been impressive, there is still a significant poverty divide between rural and urban areas, even larger than the regional divide. In India, poverty rates, and particularly poverty depth, decreased faster in rural areas than in urban areas, and by the mid-200s had equalised the proportions of poor population in the two. Finally, in South Africa, poverty incidence also remains geographically concentrated, which is an inheritance from its recent history.

In all four countries poverty incidence is higher amongst those with lower educational levels. Children face a higher poverty risk than adults and the elderly. In addition, in South Africa, poverty incidence is mainly racially biased, with the African population accounting for the bulk of poverty, with poverty headcount rates being 30 times higher than for the White population.

With respect to income inequality, the levels in the 2000s remained higher in the BCIS countries than in the OECD countries, with Gini coefficients ranging from 0.3 in India to 0.7 in South Africa. Apart from a noticeable reduction in inequality in Brazil in recent years, income inequality increased in China, India and South Africa, although along different paths. In these three countries, income inequality has mainly increased due to the faster growth of income inequality in urban areas. In South Africa, the increased inequality also results from the increased inequality observed among the African population.

Looking separately at development among different income classes, Brazil was an exception, as it experienced an overall inequality reduction that largely benefited the lowest income classes. In the other three countries income has become increasingly concentrated in the top quintiles of the distribution, favouring an increase in high earners' share of total income.

As income from work represents the largest share of household income, the evolution of the labour market also matters in explaining trends in poverty and inequality. While being unemployed is a clear marker of poverty and perpetuates income inequalities in all countries, the mere presence of an earner in a household does not always offer a living income for some groups of the population. Indeed, being unemployed is generally unaffordable for the majority of the population in the BCIS countries, and to make ends meet many workers are obliged to take any job available, even if it is in the informal sector of the economy. In terms of earnings, this basically means being paid less and having less social protection than in the formal sector, perpetuating the low income / low productivity poverty trap.

The links between informality and inequality are, however, complex, and an increase (or decrease) in the former does not automatically translate into an increase (decrease) in the latter. Behind informality, educational outcomes and returns to education in the labour market play a more determinant role. Low-educated and low-skilled workers have a greater chance of being in the informal sector and also have less well-paid jobs, and if no training or upgrading of their skills is proposed, they have a greater chance of remaining in this situation for a while.

On the other hand, income from sources other than work (*i.e* public transfers, remittances, etc.), although representing a low share of total household income in these countries, have played a non-negligible role in reducing poverty and inequality. This is clearly the case in Brazil, where the development of social policies through the provision of cash transfers to households has played a very important role in the reduction of poverty, although to a lesser extent on inequality. The role played by income support measures in tackling both poverty and inequality, within both the labour market and the social policy domain, will be examined in more detail in the OECD Secretariat paper on the role of policy in tackling inequality.

**ANNEX**


The main national sources used for the BCIS countries in this report are the following:

*a) Brazil:*

In addition to the population Census conducted every 10 years (the last in 2000), there are two main sources that can be used to evaluate the evolution of poverty and per capita income distribution in Brazil: the Pesquisa per Amostra de Domicilios (PNAD) and the Pesquisa Mensal d'Emprego (PME). While the PNAD covers different sources of income at national level, the PME covers only labour earnings in the six main metropolitan regions. The PNAD offers an annual picture of Brazilian households' situation, whereas the PME gives a picture of individuals. Due to its monthly periodicity, the PME has the advantage of giving a more updated picture than the PNAD, but it is less detailed. The PNAD survey was revised significantly in 1992, hindering comparisons with previous years, which is why data used here will cover only the period 1992-2008 (excluding the years 1994 and 2000, when the survey was not comparable or not published).

*b) China:*

The measurement of inequality in China is subject to a number of biases, including sampling bias, the exclusion of certain categories of income, the classification of rural and urban areas, and the difficulty of capturing rural migrants in urban areas, as well as differences in the cost of living (Park, 2008). Indeed, the Chinese National Bureau of Statistics (NBS) does not present data for the national distribution of income, but separately calculates income distribution in urban and rural areas.

The NBS produces two surveys (the Rural Household Survey and the Urban Household Survey) used to analyse income inequality in China. However, these surveys do not capture the internal migration phenomenon well. The rural survey captures the income of those members of the rural household who live and work outside their village of registration. Since 2002, the urban survey has included a direct estimate of the household income of unregistered rural migrants, but it captures only a small fraction of this population. This has led to an increase in measured inequality in urban areas and double-counting at the national level. Indeed, the missing income of long-term migrant households makes for insufficient information and a distortion of actual income in urban areas. The RHS and UHS tend to be biased in two ways: on the one hand, long-term migrants who earn high income in rural areas are excluded in the RHS; on the other, they are not effectively included in the UHS, which, on average, may bias the urban residents' income estimation upwards. To better include migrants, other surveys conducted by the Chinese Academy of Social Science (CASS) have also been used, such as the Chinese Household Income Project conducted in 1995 and 2002 and the more recent China Urban Labour Survey (CULS), conducted in 2001 and 2005.

*c) India:*

The National Sample Survey is conducted every five years and is used to measure poverty, inequality and employment in India. The Rounds used here are the 50th, 55th and 61th, which correspond to the years 1993/94, 1999/00 and 2004/05. The poverty and inequality measures derived from this source are based on average consumption expenditures (instead of income) at the household level. There is thus a need for caution when comparing the data for India to other countries. Generally, consumption inequality tends to

be lower than income inequality, due to consumption smoothing by households, as low incomes can be supplemented by savings or borrowings.

*d) South Africa:*

Three different datasets have been used here to measure poverty and inequality since the fall of Apartheid in South Africa: a) data from the Project on Living Standards and Development (PLSD) for 1993; b) data from the Income and Expenditure Survey for 2000; and c) data from the National Dynamics Study (NIDS) for 2008. Although comparing changes over time through different cross-sectional datasets presents some problems, these can be solved, as is explained in detail in Leibbrandt *et al.* (2010).

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