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**LABOUR MARKETS IN THE BRICS (BRAZIL, THE RUSSIAN FEDERATION,  
INDIA AND CHINA)**

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## LABOUR MARKETS IN THE BRICS (BRAZIL, THE RUSSIAN FEDERATION, INDIA AND CHINA)

### Introduction

1. One of the most important recent developments in the world economy is the increasing economic integration of large non-OECD countries, in particular Brazil, China, India and the Russian Federation – the so-called BRICs. Already, the BRICs represent over one fourth of world GDP (measured in PPPs), up from 17% in 1990 (Figure 1.1, Panel A). And this is likely to rise further in coming years, if the ongoing strong economic performance currently enjoyed by most of these countries continues, as many commentators expect.

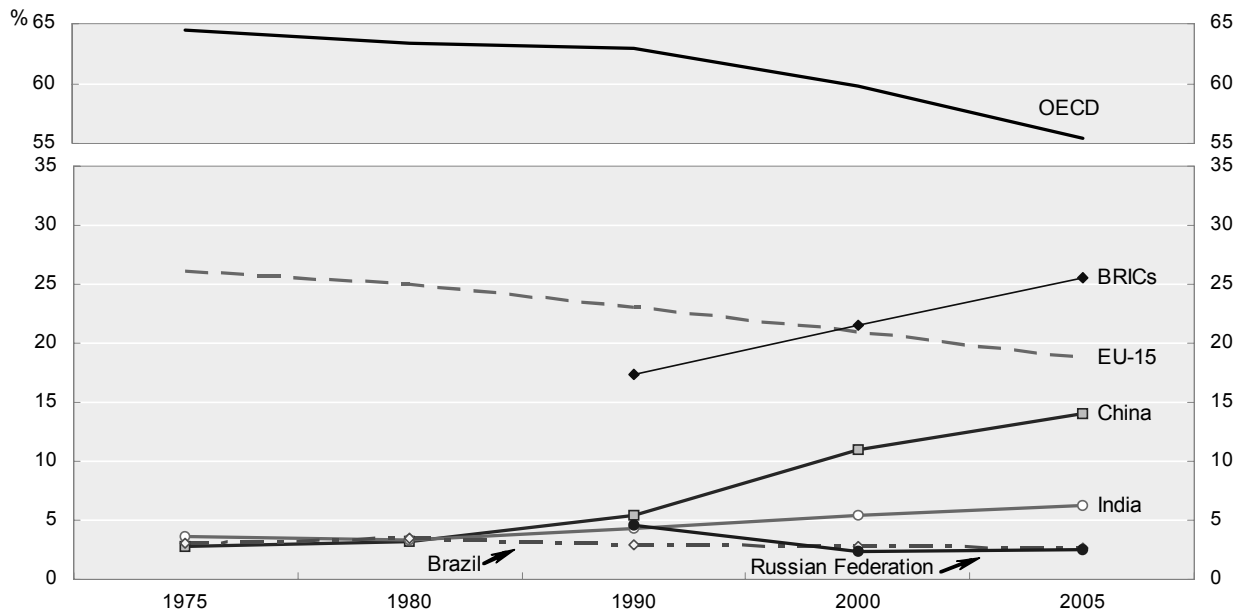
2. Increased prosperity in the BRICs is a major achievement for these countries, while also creating new growth opportunities for OECD economies. Indeed, the BRICs have become much more open to international trade and investment (Figure 1.1, Panel B). Total trade in goods and services represented in 2004 two thirds of GDP in China, 56% in the Russian Federation, 40% in India and 31% in Brazil – compared with 42%, on average, in the OECD. The BRICs also absorb a significant share of OECD foreign direct investment outflows.

3. Therefore, it has become crucial for OECD economies that the BRICs maintain a sustained growth path. Sound labour markets are of paramount importance in this respect. As discussed in Chapter 2, economic growth depends to a large extent on the functioning of the labour market, as well as improvements in job quality and productivity. But the labour markets in the BRICs have a number of distinguishing features from those of the OECD countries as well as significant differences between them. The purpose of this Section is to show how the labour markets in the BRICs compare with those of OECD countries.

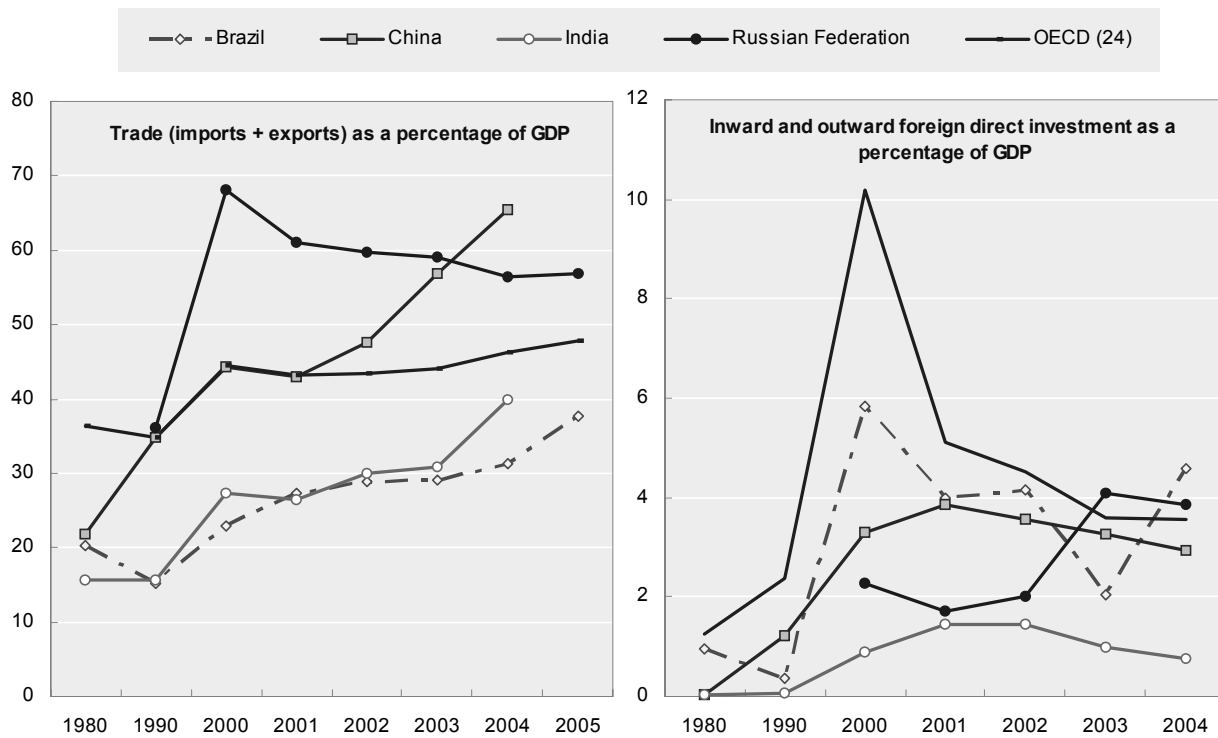
4. The Section starts by looking at how employment and unemployment rates in BRICs have responded to the recent economic record in these countries. It is notoriously difficult to assess the international comparability of employment data in the BRICs. Nevertheless, for the purposes of this chapter, comparable employment data have been estimated on the basis of both national and international sources. It then focuses on key qualitative aspects of employment – notably the incidence of employment informality and social security coverage – as well as trends in wages and incomes. The section then examines key labour supply developments.

Figure 1.1. World GDP shares and openness to foreign trade and investment in BRICs and selected OECD areas since 1980

Panel A - BRICs represent a growing share of world GDP



Panel B - BRIC countries have increased their international trade exposure ... while foreign direct investment has risen only in Brazil, China and the Russian Federation



GDP in USD PPPs.

Source: World Bank, World Development Indicators, 2006; and OECD Economic Outlook, No. 80.

## Main findings

- That the rapid recent economic expansion in the BRICs has led to significant employment gains in these countries. Over the 2000-05 period, the four countries taken together created over 21 million net new jobs, on average, per year. As a result, employment rates have risen in Brazil, India and the Russian Federation and remained high in China. Estimated employment rates in China, at 78%, are higher than in all OECD countries except Iceland and Switzerland. Estimated employment rates in Brazil and the Russian Federation are close to the OECD average, while they are below that average in India. These estimates are very similar to the employment rates estimated by either the World Bank or ILO, with the exception of China. For the latter country, the estimated employment rate is derived from the population census and is lower than the World Bank and ILO estimates – these are based on registration data, which reduces the scope for international comparability.
- Despite these achievements, there is still significant under-employment in all four countries. First, unemployment rates, at 8-9%, are relatively high in Brazil and the Russian Federation. In the absence of a benefit system for most jobseekers in China and India, the unemployment figures for these two countries are of limited relevance to assess the degree of labour market slack. Second, there is significant under-employment among women in Brazil and India and among older workers in the Russian Federation. Third, in the case of China, the rural sector is characterised by excess labour and remains large: despite significant rural-urban migration, almost two-thirds of Chinese workers are employed in rural areas. Also many laid-off workers from state enterprises are seeking jobs and should be counted as unemployed, although they not registered as such in Chinese statistics.
- Another major employment challenge in the BRICs lies in the significant incidence of employment informality in most of these countries. Employment in the informal sector represents about half of total employment in Brazil and China, and over 90% in India. Importantly, despite faster economic growth, the incidence of employment in the informal sector is on the rise in the three countries, which shows that the phenomenon reflects pervasive structural barriers to transitions to formal employment (defined as declared employment, which contributes to social security). Available estimates suggest that informal employment in the Russian Federation is much lower than in Brazil, China and India, coming closer to values observed in OECD Central and Eastern European countries.
- High employment growth has gone hand-in-hand with wider wage inequalities over the past decade in China and India and persistently high wage inequalities in Brazil and the Russian Federation. This suggests that, in contrast with predictions from standard trade theory, the international integration of Brazil, China and India (unskilled-labour abundant countries) has not been associated with higher relative wages of unskilled workers in these countries.
- Looking at medium-term challenges, the BRICs will undergo significant population ageing over the next two decades, reflecting both lower fertility rates and improved longevity. Over the next 15 years, and on the assumption of constant participation rates, labour force growth will slow somewhat in India. In Brazil, labour force growth over the next 15 years will be cut by half compared with the past 15 years. In China, it will practically stagnate and in the Russian Federation, the size of the labour force could even contract in the near future.
- Another key medium-term trend is the significant improvement in educational attainment in the BRICs. At present, workers in Brazil, China and India have much lower educational attainment than in the majority of OECD countries – while the opposite holds true in the Russian Federation, a country where educated labour is more abundant than in the average OECD country. However, educational attainment is improving rapidly in all three countries, especially in China.

## A. How do employment and unemployment rates compare?

### *BRICs have recorded significant net employment gains since 2000, reflecting their strong growth performance*

5. Over the period 2000-05, India generated 11.3 million net new jobs per year, on average. The figure was 7.3 million in China, close to 2 million in Brazil and 0.7 million jobs in the Russian Federation, compared with an average of 3.7 million net new jobs generated in the OECD area as a whole each year over the same period. Estimates made for the purposes of this chapter (see Box 1.1) suggest that employment rates have increased since 2000 in Brazil, India and the Russian Federation and they have stayed high in China (Figure 1.2; Table 1.A.1). It should be noted that data for Brazil and Russia are in principle more comparable to those for OECD countries than data for China and India.

#### Box 1.1. Are employment statistics in the BRICs comparable internationally?

This Box examines the conformity of the employment and unemployment estimates used in this chapter *vis-à-vis* ILO guidelines.

##### **Brazil and the Russian Federation**

Data for Brazil and the Russian Federation are from national household labour force surveys, which are designed to be consistent with ILO recommendations in this area.

##### **India**

Data reported in the tables and charts are from successive five-yearly rounds of the National Sample Survey – a country-wide large sample survey of households – covering the months of July to June, for the following years: 1987/88, 1993/94, 1999/2000 and 2004/05.

The survey allows estimating employment and unemployment figures according to three concepts:

Usual status is based on self-reported activity status during the year preceding the date of the survey. This takes into account the main activity as well as any “subsidiary” or occasional activity performed during the reference year. This concept takes into account the vast majority of seasonal employment generated by the agriculture sector. It also includes the abundant female casual and part-time employment. The concept is used in different official publications and by the Indian Economic Planning Commission to assess the evolution of employment and wages for different segments of the workforce. Employment estimates according to usual – principal and subsidiary – status are reported in Table 1.A.3.

Current weekly status is closer to ILO concepts and guidelines on employment and unemployment statistics and corresponds to the activity status of a person in the seven days preceding the survey date. According to this classification, a person’s working status is determined based on a criterion of one or more hours worked at least one day in the seven days of the reference week. This definition of employment allows for temporary absence from work due to sickness and other reasons. Further, persons not working who are seeking a job or are available to start working during the reference week are considered as unemployed. This definition considers that those actively seeking a job are available for work, while those available for work and not seeking work are also considered as unemployed. The latter category is a departure from the standard ILO definition of unemployment and would rather be categorised as discouraged workers. Thus, unemployment estimates according to currently weekly status are somewhat over-estimated. These estimates are used in Table 1.A.1 and 1.A.2 and Figures 1.2 and 1.2 bis.

Using activities according to usual status in combination with those on current weekly status underscores the amount of part-year work and hidden unemployment.

Current daily status is a time use approach to classify interviewed persons according to activities undertaken during each of the seven reference days preceding the date of the survey. Activities ranging from working to non-working are classified according to time intensity in quantitative terms each day of the reference week. The activity status in the reference week is determined on the basis of the major time criterion. Using current daily status in combination with current weekly status underlines the extent of underemployment.

**Box 1.1. Are employment statistics in the BRICs comparable internationally? (cont.)**

**China**

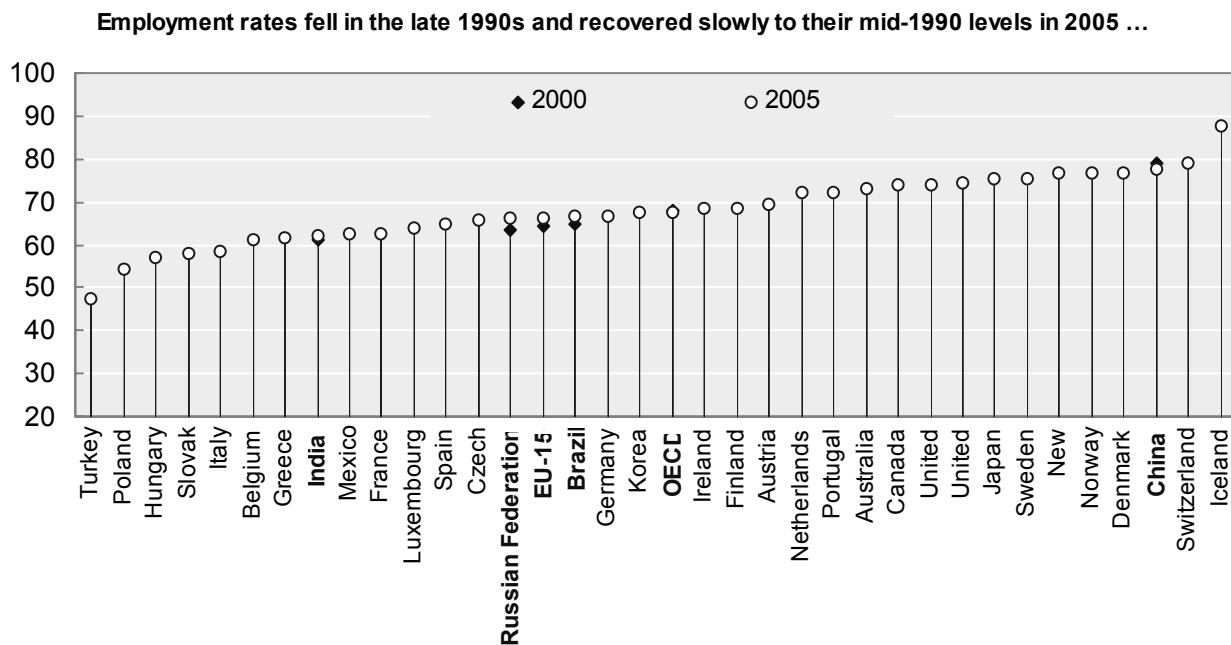
Data for China refer to mainland China, excluding the Special Administrative Regions (SARs) of Hong Kong and Macao. They are taken from the *China Statistical Yearbook* and from the World Bank, World Development Indicators (WDI) based on registration data. Employment data cover mainly registered enterprises according to different type of enterprise units: state-owned and collectively-owned units – the traditional formal sector –, private units, foreign-funded firms, self-employed in urban areas, town-village enterprises, private enterprises and self-employment in rural areas. Official statistics also report data on unknown sectors which are considered in this chapter to correspond to “irregular” employment. Irregular employment is composed of rural migrant workers who cannot work in registered enterprises (at least until recently) due to *the hukou* system of registration, but also of laid-off workers from state enterprises who take informal employment on a temporary basis while still remaining nominally attached to their previous work units for welfare benefits and re-employment opportunities.

As a result, registered employment data are likely to include laid-off workers from state enterprises as part of the labour retrenchment scheme (*i.e.* the *xiangang* scheme). These laid-off workers maintain their relationship with their previous employers who continue to pay them subsistence subsidies and ensure their social protection – housing, health coverage and old-age pension – until they are re-employed. The *xiangang* scheme introduced in 1993 to facilitate shedding of surplus labour from state enterprises has been phased out since 2004.

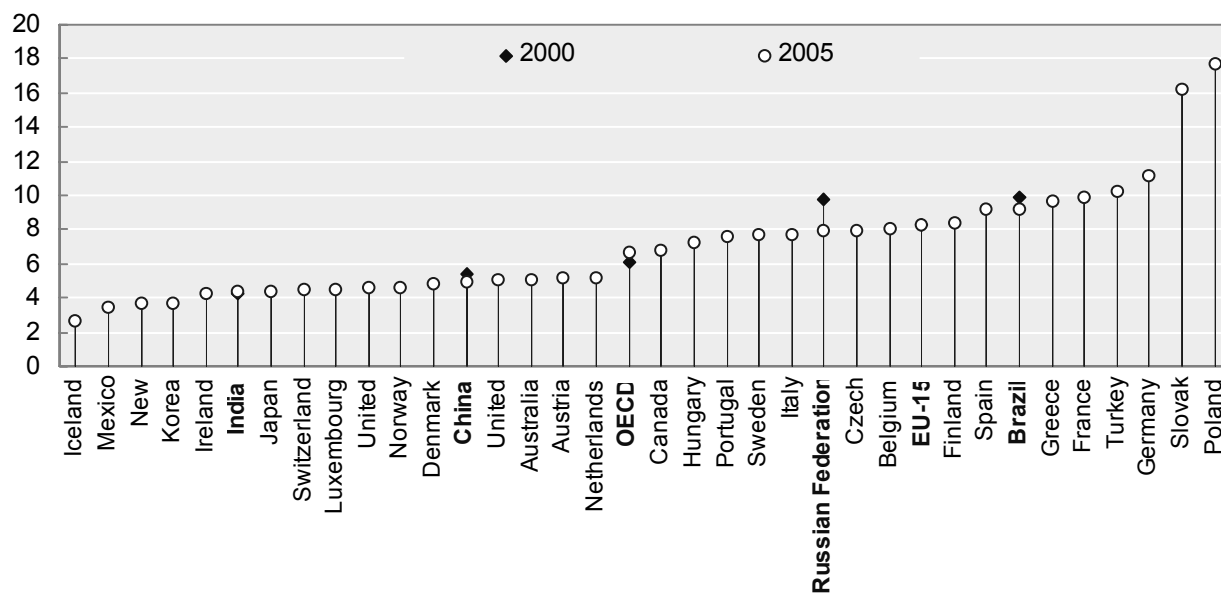
It can therefore be argued that unemployment is under-estimated (and employment over-estimated) because a large proportion of laid-off workers are in fact unemployed. Three other forms of non-registration are noteworthy. Some people forced into early retirement before the age of official retirement – 60 for men and 58 for women – may be seeking for work but are denied registration at public employment offices. Further, workers on fixed-term contracts, introduced in the mid-1980s, are allowed to register as unemployed at the end of their contracts only if their employment is covered by unemployment insurance. Rural migrants and school-leavers looking for jobs are not allowed to appear on unemployment registers (Knight *et al.*, 2003). This explains in general the low registered unemployment levels and rates.

This is why, for the purpose of this chapter, the 2000 population census (rather than registration data) is used to estimate employment and unemployment in line with ILO guidelines. Such data allow in particular a classification of laid-off workers as unemployed or inactive, based on job-search and work-availability criteria. The results from the latest census serve as a benchmark for the data reported in this chapter. Data for the longer period are obtained from applying annual growth rates from employment, labour force and population data from successive editions of the *China Statistical Yearbook*. Unemployment figures are derived as residuals from labour force and employment estimates.

Figure 1.2. Employment and unemployment rates in BRICs and selected OECD areas



**... while unemployment rates fell from high levels in Brazil and in the Russian Federation**



Source: See Table 1.A.1.

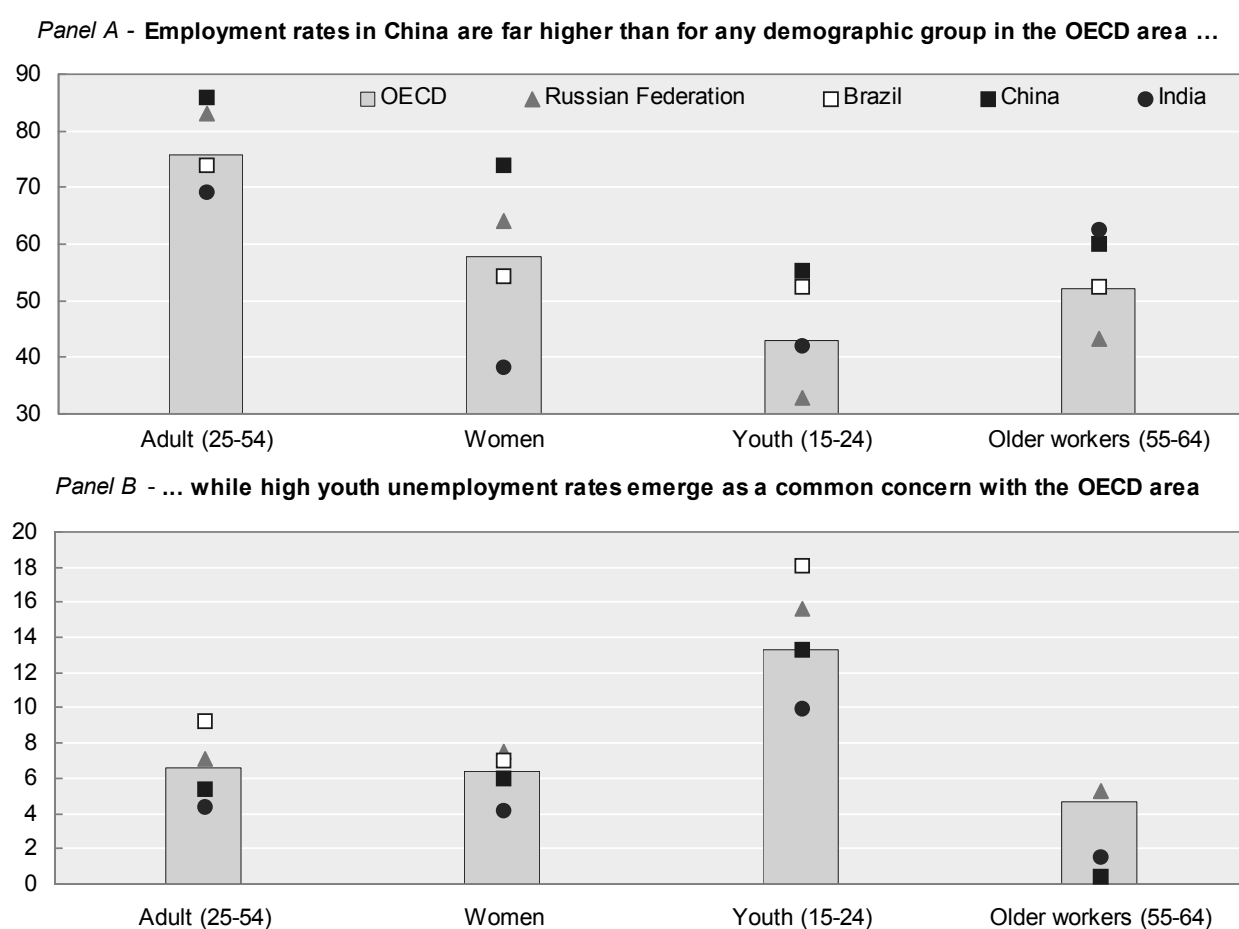
6. Employment rates of women have increased faster than for their male counterparts. This partly reflects the trend-increase in participation rates of women. In particular, in Brazil, labour force participation of women rose markedly during 1990-2005 (by 8 percentage points), while participation rates for men dropped over the same period. India and the Russian Federation also recorded greater female employment rates, albeit from low levels in the former country. Rising female participation in India is explained in part by a change in the population structure – the rising share of youth – and increased school enrolments of female children aged 5-19 years (Sundaram, 2004). In China, it seems that labour market

reforms<sup>1</sup> adopted in the 1990s to facilitate employment adjustment have not affected employment rates at the aggregate level.

***Employment rates are now very high in China, close to the OECD average in Brazil and the Russian Federation, and low in India***

7. In comparison with OECD, employment rates in China, at 78%, are very high. Indeed the employment rate in China is higher than in all OECD countries with the sole exceptions of Iceland and Switzerland (Figure 1.2). This remarkable performance reflects the high employment rate among Chinese women (Figure 1.2*bis*; Table 1.A.2). Employment rates in Brazil and the Russian Federation come close to the OECD average. And the employment rate of India remains below that average. Below OECD employment rates are visible for female workers in Brazil and India, youth and older workers in the Russian Federation.

Figure 1.2.*bis*. **Employment and unemployment rates for various demographic groups in BRICs and OECD**



Source: See Table 1.A.2.

1. In China, reforms to facilitate labour market adjustments were adopted gradually since the early 1990s, in particular the relaxation of the registration process of rural workers (the “hukou” system), facilitating labour migration from rural to urban areas, the possibility allowed to state and collective owned enterprises to shed excess labour and to go bankrupt, the introduction of fixed-term contracts, and the flexibility to fire and hire workers in private enterprises and foreign-funded joint ventures.

***There are large differences in unemployment rates among the BRICs, possibly due to differences in availability of benefits***

8. In 2005, unemployment rates were close to 9% in Brazil and 8% in the Russian Federation, two countries which have an unemployment benefit system (Figure 1.2; Table 1.A.1). According to official estimates, registered unemployment rates in China are around 4% in urban areas, where workers are entitled to a limited unemployment registration system since the mid-1990s. However, official estimates do not properly reflect unemployment of rural-urban migrants or workers laid-off<sup>2</sup> from state- and collectively-owned units<sup>3</sup> who are seeking work (Box 1.1). OECD estimates based on the 2000 population census suggest that the unemployment rate is probably higher than officially estimated – the estimated unemployment rate for 2005 is 5.4%, confirming other studies (Knight *et al.*, 2003 and Giles *et al.*, 2004). In India, the unemployment rate is estimated at 4% in 2004/05. This rate is the closest to the ILO definition<sup>4</sup> and its low level is explained by the absence of a compensation system for job loss, with the main exception of workers in the organised formal sector.

9. The Russian unemployment rates peaked at 10% in 2000 and has fallen by two percentage points since then. Since 1990, unemployment rates almost tripled in Brazil, more for women than for men, and have slightly declined since 2000. In China, unemployment rates rose in the late 1990s, while they increased somewhat for women in India.

- 
2. At the peak of state enterprises restructuring in the late 1990s, there were 11 million laid-off workers (not re-employed) in urban areas in 2000 against 6 million officially registered urban unemployed. Laid-off workers were mainly male workers aged 40 years and over with low educational attainment levels. However, the number of laid-off workers had fallen sharply by 2002 (around 3 million persons), while registered unemployment recorded a gain of 1.7 million job seekers announcing the end of transitional arrangements for the management of mass lay-offs in state enterprises.
  3. In the late 1990s, the Chinese government promoted transitional institutional arrangements to shift welfare benefit payments from state enterprises to sector-based Reemployment Service Centres (RSC) before phasing out RSCs from the end of 2004 onwards, to be replaced by an unemployment insurance system (Gu, 2003). The RSCs “trusteeship of laid-off workers” ensured the delivery of social protection and job-placement and job-training services over a three-years period after which laid-off workers would become unemployed. The RSCs were based on the success of the Shanghai RSCs “trusteeship of laid-off workers”, which enabled in 1996 the reemployment of more than 80% of laid-off workers in less than three years from job loss in the booming service and private sectors or in their original enterprises after restructuring. According to regulations from the Central government, it is compulsory for laid-off workers to join RSCs at the risk of losing their basic living allowances and other benefits. In addition, administrative restrictions do not allow registration of laid-off workers at employment offices.
  4. In India, the results of NSS large survey rounds allow the estimation of unemployment rates according to usual, current weekly and current daily status (Box 1.1). Unemployment rates according to current weekly status are closer to ILO guidelines and gives the average level of unemployment on a week of the survey year, while the current daily status unemployment rate (in persons-days) gives the average level of unemployment on a day of the survey year and is the most inclusive measure. Compared to usual unemployment rates, current weekly unemployment rates highlight the degree of hidden unemployment in the form of intermittent employment and part-year work, such as in seasonal employment in rural areas. On the other hand, current daily unemployment rates compared to weekly unemployment rates provide some insights on underemployment, in other words unemployed days of those employed on a weekly basis. Unemployment rates according to daily status are the highest, with 8.2% and 8.3% in rural and urban areas in 2004/05 compared to 4% and 6% according to current weekly status, and 1.7% and 4.5% according to usual status. These rates reveal a great deal of intermittent and part-week employment in both rural areas and urban areas. Daily unemployment rates are higher for women living in urban areas (11.6% against 8% in rural areas). In general, underemployment is pervasive among female workers.

***Youth unemployment rates are a common concern in all four countries***

10. Figure 1.2*bis* shows that high youth unemployment is a common problem in all four countries and it is a feature that they share with many OECD countries. In Brazil, unemployment is particularly high among young women. In Brazil and India, youth are a group disproportionately affected by unemployment – in both countries there is no specific gender dimension in terms of unemployment (see also Table 1.A.2). In the Russian Federation, unemployment is high among both youth and older workers.

***The share of agricultural employment has declined in all four countries***

11. Over the past two decades, output and employment patterns experienced major transformations in the BRIC. The rise of the service sector is pervasive across all four countries and the rise in output share of this sector was spectacular in China, India and the Russian Federation, while in Brazil the service sector became the main contributor to GDP as from the early 1990s. At the same time, the output share of agriculture collapsed dramatically in China, India and the Russian Federation, while the output share of industry remained stable in China and India and declined somewhat in Brazil and the Russian Federation.

12. In general, agriculture and services are more labour-intensive than industry in BRIC countries. As a result, labour productivity, measured by output per worker, appears remarkably high in industry, except in India where this is also case in the service sector. According to World Bank figures (not shown), in Brazil and the Russian Federation, agriculture and services employed more workers than industry than their relative output shares, which suggest that labour productivity is higher in industry (*i.e.* manufacturing) than in the other two sectors. By contrast, in India agriculture absorbed 56% of total employment in 2005 and 45% in China, while services employed far less workers – 25% and 31% of workers, respectively. Since 1995, India recorded a significant fall of 10 percentage points in the share of agricultural employment counterbalanced by a rise of 6 percentage points in the employment share in industry (mainly construction) and of 5 percentage points in the share of service sector employment. The employment share in agriculture dropped more rapidly in China for the benefit of service sector employment, while industry's share remained stable. In both cases, labour-intensive agriculture is the major employer of low productivity and low-skilled jobs in subsistence farming and unpaid work.

**B. Is better economic performance improving the “quality” of employment, wages and incomes?**

13. The purpose of this section is to examine whether employment conditions, wages and incomes are moving in line with better economic performance. More specifically, this section examines trends in employment “informality”, social-security coverage, earnings and their distribution, and income developments.<sup>5</sup>

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5. Regional employment patterns will not be addressed in this section, while non-agricultural employment is concentrated in a few states and provinces in India and China, and higher income in just a few places in the Russian Federation, mainly oil and gas-producing and exporting regions. Around 50% of non-agricultural employment is concentrated mostly in the dynamic southern peninsula in India based on the 2004/05 61st NSS survey round. Likewise, half of the employment is concentrated in the municipalities of Beijing and Shanghai and the populated Guangdong province, “the growing export manufacturing centre in China” (Galbraith, 2004). In the Russian Federation, the latter study reports higher and rapidly rising above-average income in three places: Moscow and in two “lightly populated oil and gas West Siberian regions – Khanty-Mansy and Tiumen district”.

***The incidence of undeclared work and employment in the informal sector has tended to rise***

14. Despite the above-mentioned fall in agricultural employment (where the incidence of informality tends to be high), little progress has been made in reducing either the incidence of informal employment or employment in the informal sector (see also Table 1.A.3, and Box 1.2 for a discussion of these concepts).<sup>6</sup>

Table 1.1. **Informal employment and employment in the informal sector**

		Percentage of total employment			
		Total	Rural	Urban	Informal sector employment
<b>Brazil (urban)</b>	1990	26.0	..	..	40.6
	2003	30.8	..	..	44.6
<b>China</b>	1990	12.9	9.3	3.6	51.0
	2005	13.5	0.5	13.0	52.8
<b>India</b>	1993/94	86.3	73.1	13.2	92.7
	2004/05	85.6	72.2	13.4	94.1
<b>Russian Federation</b>	2001	13.0	5.6	6.9	..

.. Data not available.

Source: See Box Table 1.A.3 and national sources for informal employment in Brazil and the Russian Federation.

**Box 1.2. Informal employment**

Table 1.1 provides some estimates on informal employment and informal-sector employment for China, India and the Russian Federation and employment in urban informal sectors in Brazil.

Informal employment refers to informal jobs performed in formal and informal sector enterprises, and households. According to ILO guidelines, informal jobs can be defined broadly or narrowly depending on national circumstances from “non-compliance to national labour legislation, income taxation, social protection or non-entitlements to certain employment benefits (advance notice, severance pay, paid annual or sick leave, etc.)”.<sup>1</sup> For practical purposes, it is generally defined as workers not covered by social protection, while in the case of Brazil the data refer to workers not contributing to social protection – *i.e.* without a work card (*carteira de trabalho*) – because access to publicly-funded health-care services is universal. On the other hand, informal-sector employment covers employment in unregistered enterprises which are “private unincorporated enterprises (excluding quasi-corporations), producing and selling legal goods and services, employing up to five paid employees” (OECD, 2004). In practice, informal-sector employment includes a broader set of jobs located in small farms, with less than five or ten employees depending on countries, self-employed, unpaid family workers and domestic household workers irrespective of the registration statuses of enterprises. However, it should be noted that it is always difficult to produce a comprehensive estimate of informal employment from registers and survey instruments. OECD (2004) reminds that informal employment can take many other forms, such as hidden employment (*i.e.* enterprises under-declaring the number of employees), under-declared work (in terms of hours worked, work in second jobs), illegal work (by illegal immigrants, work in second jobs by government employees), etc.

6. According to the resolution adopted by the 15th ILO/International Conference of Labour Statisticians (ICLS, 1993), the informal-sector employment refers to own-account workers and employers and employees in firms with fewer than 5 (or 10) employees including (unpaid) family workers. Later refinements of the definition by the 17th ICLS include domestic workers engaged by households. Employment in the informal economy (or informal employment), defined by workers without social protection coverage for practical reasons, is mainly located in informal sectors, but also occurs in formal sectors (Box 1.2).

Box 1.2. **Informal employment (cont.)**

However, it was not possible to neatly organise the numbers shown in Table 1.A.3 into informal sector employment and informal employment. The summary Table 1.1 reveals that the informal sector in China employs more than 50% of workers and even more so if the estimated number of workers in the informal economy (13-14%) are considered to be working in the informal sector. However, the so-defined informal sector employment, based only on the size of enterprises, is likely to overstate the actual size of the informal sector as it does not take into account the legal statuses of enterprises, which cannot be considered due to data unavailability. In India, registrations of the public sector and firms employing 25 or more workers are compulsory for the organised sector, while registrations for enterprises employing 10-24 employees are on a voluntary basis. This contains a potential source of under-declaration of the organised sector employment as reported in the administrative data of the Directorate General of Employment and Training (DGE&T). Table 1.A.3 considers regular salaried workers reported in the NSS survey rounds among formal employment (*i.e.* employees covered by the Employee's provident fund regime<sup>2</sup>), which allows to overcome the deficiencies of administrative registers and may also include some workers in the informal sector. In contrast, casual and contract workers in the organised sector seldom benefit from social protection and should normally be excluded from formal job counts (Shaktivel *et al.*, 2006). In sum, the informal (sector) employment forms the bulk of the workforce largely concentrated in agriculture. In Brazil, it is very likely that the urban informal employment figure reported in Table 1.1 correspond to informal employment in the informal sector, while another 9% of informal workers may be working in the formal sector.

In India, the composition of workers engaged in the informal sector and the informal economy is dominated by females, mostly self-employed, according to a 2002 ILO report entitled « Women and Men in the informal economy: a statistical picture ». Female informal workers are concentrated in agricultural jobs which represented 75% of all female employment in 2000. Home-based workers, outworkers sub-contracted by formal units, domestic workers – maids, gardeners and security staff – and street vendors are the most prominent categories of informal employment representing 10 to 25% of workers in non-agricultural employment in developing countries.

It is often the case that lack of employment opportunities in the formal (manufacturing) sector explains the absorption of unskilled and semi-skilled labour in informal employment. In India, a 2001 report from the Planning Commission stated that sustained GDP growth (of 6.5%) in the 1990s did not bring employment opportunities in the formal sector because economic growth was capital and information intensive rather than labour intensive. It is alleged that more than the stringency of Employment Protection Legislation for the formal sector<sup>3</sup>, it is the high cost of employment due to a patchwork of existing labour laws which are responsible for the contraction of the organised sector workforce and expansion of the informal sector and the fall in the wage share OECD (2007).

In Brazil, informal jobs are of shorter-tenure – labour turnover is high – lower paid and more unstable than formal jobs, which are three times longer and a passage in informal jobs can be detrimental for subsequent formal employment prospect (OECD, 2004). Accumulation of human capital is lower, less than one-third is contributing to social security and one-third of informal workers earn less than the minimum wage. Informal workers have no rights to unemployment insurance (IMF, 2005).

Non-wage costs and employment protection regulation are considered to be the main factors behind sluggish growth in formal employment, in particular for less educated workers (OECD, 2006a; and IMF, 2005). The tax wedge between labour costs and take-home pay of workers – made of payroll taxes and social security contributions – is relatively high (over 60%, *i.e.* the same as in Germany). This is mainly due to high levels of mandated benefits which characterise the generosity of employment protection regulations (EPL) through a combination of three sources: 1) the withdrawal of severance fund balances (FGTS) in case of unfair dismissals<sup>4</sup>; 2) a fine payable by employers for unfair dismissals; and 3) the formal unemployment insurance benefits. The sum of mandated benefits can amount to one year's salary after dismissal.

FGTS balances can be withdrawn in case of unjustified dismissals in addition to a penalty of 50% for the employer – 40% for the employee and 10% penalty paid to the government since 2001 to prevent fake dismissals. In other forms of dismissals, FGTS balances can be withdrawn only upon retirement or death, except for first-home buyers, terminal illnesses and when an FGTS account remains inactive for a period of five years. In principle, the payment of FGTS severance balance should prevent dismissals and increase job tenure. But, the contrary is observed: workers often negotiate severance indemnity with their employers transforming voluntary quits into unfair dismissals to retrieve their FGTS balances remunerated at below-market rates of return.

In India and Brazil, existing and uneven enforcement of labour laws across states, EPL regimes and to a lesser extent social protection increase the cost of employment for employers. This helps explain the extent and growth of informal employment, hence labour market segmentation for unskilled workers. Informality might also stem from self-selection due to higher earnings expectations in informal jobs, in particular among higher earners (OECD, 2006)<sup>5</sup> Some recent studies revealed that mobility between formal/informal-sector jobs in Brazil is encouraged by low wages in formal employment, given that access to public health services is universal, as noted above.

## Box 1.2. Informal employment (cont.)

1. These definitions are based on the conceptual framework on informal employment statistics issued by the 17<sup>th</sup> International Conference of Labour Statisticians (ICLS) in 2003, which complements earlier resolution adopted by the 15<sup>th</sup> ICLS resolution on statistics of employment in the informal sector (1995) and the SNA 1993 definition of informal sectors. According to the 17<sup>th</sup> ICLS a distinction is made between employment in the informal sector, on the basis of registration statuses of work units, and informal employment, on the basis of undeclared jobs for legal, social contributions and tax purposes.
2. The Employee's provident scheme is one of the most common social security scheme in India and provides coverage for: pension, medical care, housing, education of children, life insurance policies. Employer's contributions depend on the size and legal status of firms and type of industries. The statutory contribution is 12% of earnings (*i.e.* basic wages and salaries plus other allowances) for establishments with 20 or more employees and in 180 industries (and 10% otherwise) of which 8.33% are deposited in pension funds. ([http://www.epfindia.com/for\\_employers.htm](http://www.epfindia.com/for_employers.htm)).
3. Plants with more than 100 workers covered by the Industrial Dispute Act (IDA) – Chapter V B have to obtain government permission to dismiss even one worker with regular (indefinite) contracts. According to OECD (2007, forthcoming), employer-initiated job separation for regular workers is also difficult in non-IDA plants given that the standard notification period, severance indemnity are high and court rulings often go in favour of the reinstatement of workers in cases of unfair dismissals. This is also the case for collective dismissals, while India's EPL regime on temporary and fixed-term contracts is more relaxed.
4. Since 1988, the major part of labour legislation is constitutionally mandated. Employer-employee relationships are defined by a standard labour contract, which is subject to mandated benefits and other labour laws. Mandated benefits cover severance fund and social security contributions, family and education allowances, contributions to training and other contributions, which contribute to increase wage costs by 40%. The severance fund, Fundo de Garantia por Tempo de Serviço (FGTS), was created by law in 1966 and represents 8.5% of wages per month (or one-month salary per year worked), with a guaranteed real rate of return of 3%.
5. In Brazil, reducing informality requires a major overhauling of the system of FGTS funds. OECD (2006a) and IMF (2005) recommend raising the rate of return of FGTS account balances to a market rate to promote formal employment, as it is currently fixed at below-market rates at 3% in real term. This would consequently increase employers' severance payments in particular in case of unfair dismissals as they are calculated on the basis of accumulated FGTS funds. OECD (2006a) and IMF (2005) recommend the phasing out of the separation penalty paid to workers, while diverting employers' penalty payments to increase FGTS funds or to assist unemployed individuals.

15. In Brazil, 85% of the population live in urban areas. Therefore, non-agricultural employment is the main driver of employment growth. The urban informal sector recorded major gains as its share rose from almost 41% in 1990 to nearly 45% in 2003. The period has seen a surge in the share of domestic service workers, mostly women, as well as self-employed (Table 1.A.3).

16. Over the past two decades, several reforms have led to a diversification in the forms of employment in China.<sup>7</sup> Since the mid-1990s, efforts have been made to reduce surplus labour in state- and collectively-owned enterprises (which have traditionally been major sources of stable employment). At the same time, it has become easier to set up private enterprises, in both urban and rural areas. This followed reforms adopted in the late 1980s which authorised enterprises to recruit labour on fixed-term contracts. And, as noted above, the rules on rural-urban migration have been relaxed.

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7. Following the methodology developed in Ghose (2005), workers are classified in regular employment if they are engaged in registered formal and informal sectors defined as follows. In urban areas, apart from the traditional formal state- and collectively-owned enterprises, a variety of formal enterprises have appeared: collective enterprises, joint ownership enterprises, limited liability corporations, shareholding corporations and foreign enterprises funded by residents of Hong-Kong, Macao and other foreign funds. In rural areas, the formal sector refers to township and village enterprises (TVE). The urban informal sector regroups registered small-scale private enterprises and self-employed individual businesses while the rural informal sector includes in addition small family farms under the "responsibility system". Workers engaged in those registered formal and informal sectors are considered as in regular employment. The difference between the official total employment figures and regular employment in urban and rural areas is considered here as irregular employment. The latter is assumed to be composed mainly by rural migrants and laid-off workers in urban state and collective enterprises and rural township village enterprises.

17. As Table 1.A.3 shows, these reforms are reflected in a significant change in Chinese employment patterns:

- the share of urban employment climbed from 26% in 1990 to 36% in 2005 – growth in urban employment accelerated in the second half of the 1990s, following reforms relaxing restrictions on rural-urban migration;
- employment in the informal sector and “irregular” (*i.e.* informal) employment – mainly undeclared rural migrants and workers laid-off from urban state and collective enterprises – has risen significantly. By contrast, employment in state- and collectively-owned enterprises has declined by 4.2% per year since 1990. Overall irregular employment is estimated at 13-14% in 2005, while employment in the informal sector accounts for just over half of total employment.

18. Most of the jobs are so-called “irregular” in India. Irregular (or informal) employment represented 86% of total employment in 2004/05, just under 1 percentage point less than in 1993/94. The remaining 14% of workers are in regular salaried employment, among which 6% work in the formal organised<sup>8</sup> sector dominated by the public sector and the private sector with registered enterprises of 10 or more employees. Irregular employment is highly concentrated among self-employed businesses and among casual employment.<sup>9</sup> Economic expansion since 2000 has translated into employment growth only in the informal sector – in farming, in individual businesses and in private sector wage employment including casual employment – and not in the organised and protected public and private sector.<sup>10</sup>

19. In the Russian Federation, informal employment represented 13% of the workforce in 2001 according to national estimates, similar to that in many OECD countries. More than 90% of workers are in wage employment. Wage employment has posted faster-than-average growth after 2000, while the incidence of own-account work and employment in producer’s cooperatives has declined.

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8. Employment in the organised sector is reported by the Ministry of Labour (DGET) and includes all establishments in the public sector and non-agricultural establishments in the private sector with 10 or more employees (<http://labour.nic.in/ss/INFORMALSECTORININDIA-ApproachesforSocialSecurity.pdf>). The organised sector refers to enterprises whose activities and collection of data are regulated by legal provisions for which there is a national accounting. However, these numbers have been criticised (Sundaram, 2004 and Anant *et al.*, 2005) for their inability to correctly capture the rapidly growing organised private sector. The unorganised sector comprises unincorporated and partnership enterprises, cooperative societies, trust, private and limited companies, other individual businesses, subsistence farming, etc.

9. During 1994-2005, employment growth (2.1%) was mainly driven by self-employment growth in individual businesses (2.4%), which gathered momentum after 2000 (4.3%) (Table 1.A.3). This pattern is visible both in urban and rural areas. However, self-employment growth in rural areas first declined in the mid-to-late 1990s (-0.9%) before strengthening after 2000 (5.8%). Since 1994, regular salaried employment recorded an annual growth rate of 2.7%, which gathered pace after 2000, while sluggish growth in the organised sector employment (-0.1%) is due to a contraction in the public sector (-0.2%) and in the private sector (-1%) after 2000.

10. The forthcoming OECD Economic Survey of India (OECD, 2007) indicates that the strong employment growth over the 1998-2005 period is due to net employment gains in industries (5.4% per year) and services (4.1%) including manufacturing (4.6%), while the pace of job growth in agriculture has reduced dramatically (0.5%), which is an indication of workers moving to non-agriculture jobs. However, most employment gains have occurred in the least productive unorganised sector: unorganised manufacturing employment grew by 5.4% per year while manufacturing in the organised sector has recorded negative growth.

***High employment informality makes it difficult to expand social security coverage in BRICs***

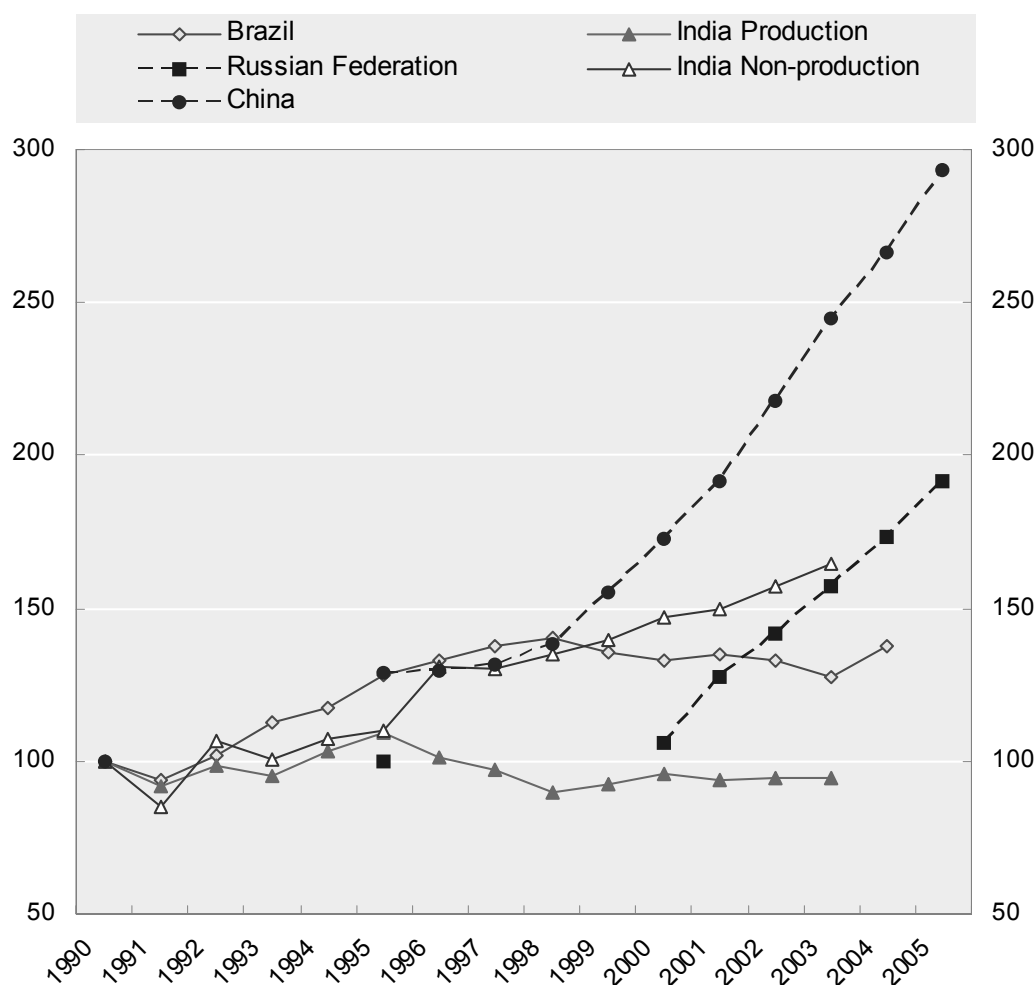
20. Social security coverage – health and pension coverage – is pervasive only in Brazil and the Russian Federation. In the former country, however, the coverage of social security is reportedly on the decline – according to ILO regional office estimates, in Brazil the overall coverage of wage and salaried workers has dropped from 74% in 1990 to 69% in 2003 due to a combined increase in wage employment in small establishments in the informal sector and lower coverage in those establishments over time, falling from 48% in 1990 to 36% in 2003. In China, since the 1990s, social security coverage is being extended from state-owned enterprises to all urban formal sector employees and, since 2003, rural migrants (Reutersward, 2005). In India, only workers in the organised sectors (6% of the total workforce) are covered. In general, low levels of coverage reflect the fact that the informal sector often has little incentive to cover its employees. But low wages also make it difficult for workers to pay for social protection – especially when the benefits to them from contributing to social protection are not visible enough.

***Wages have increased fast in recent years in China and the Russian Federation, but remain low by OECD standards***

21. The evolution of wages followed different paths in the BRICs. Real wage growth since the early to mid-1990s did not necessarily follow aggregate employment growth patterns in India and Brazil, while wage developments in China and the Russian Federation better reflect changes in employment patterns. It should be stressed, however, that questions have been raised about the reliability of wage data has been questioned in some of these countries.

22. In China, real urban manufacturing earnings have surged since 1990 (Figure 1.3). In 2005, they were three times higher than in 1990, with half of the gain made in the first ten years and the other half in just five years. This reflects huge productivity gains in the manufacturing sector which expanded rapidly driven by booming exports and inward foreign direct investment. In contrast, real wage growth stagnated for production workers in India and posted negative growth rates continuously since 1995, four years after trade liberalisation. In contrast, real manufacturing wages of non-production workers recorded strong growth in the second half of the 1990s and posted over 3% growth per year since 2000. This favourable wage growth is probably explained by changes in the skill content in operation in manufacturing industries. In the Russian Federation it grew by 1.2% on average per year from 1995 to 2000 and accelerated since then to record 12% annual rate of growth from 2000 to 2005. According to OECD (2006b), wage growth matched labour productivity since the mid-1990s.

Figure 1.3. Real wages growth in manufacturing industries in BRICs



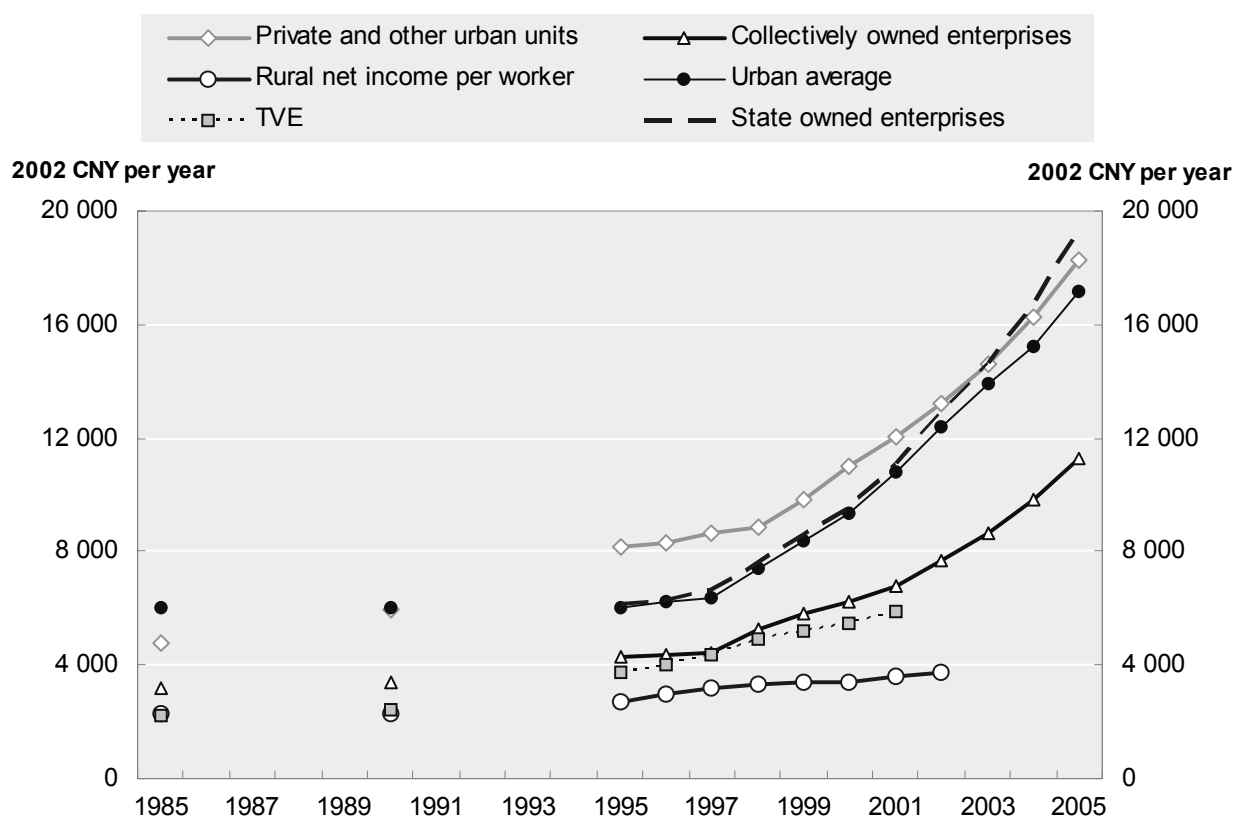
Source: ILO, 2005 *Labour Overview – Latin America and the Caribbean*; estimates based on National Household Sample Survey (PNAD), for Brazil; Annual Survey of Industries, for India; BLS/MLR, November 2006, and *China Yearbook of Statistics, 2006*, for China; and National Accounts for the Russian Federation.

### *Wage inequalities remained high or tended to increase*

23. In Brazil, wages relative to the per capita poverty line deteriorated for all categories of workers by occupation – including professionals –, except for domestic workers, which explains the relative stability of the Gini coefficient of hourly wages from 0.366 in 1992 to 0.369 in 1999. The steady increase in the real minimum wage, which was 60% higher in 2003 than in 1990, also contributed to the relative stability of the Gini coefficient (Berg *et al.*, 2006).

24. Figure 1.4 presents real wage growth in China since 1985 for workers in different enterprise units. Urban real annual earnings have sharply increased, especially since 2000 (11.6% per year), driven by higher wage growth in state-owned enterprises and private enterprises, including foreign-funded units. In contrast, wages in village enterprises have grown moderately, while rural net income has hardly increased. The sharp wage rise in state owned-units has happened at the same time as these units laid-off surplus labour, which is indicative of an upward skill shift in the job content of these enterprises, which are competing internally with other well-paying privately funded enterprises.

Figure 1.4. Real values of wages and rural income in China



Source: Reutersward (2005), and *China Yearbook of Statistics*, 2006.

25. In India, the real hourly wages have fallen since the recent decade for all categories of workers – regular and casual workers –, with the exception of rural male workers (Table 1.A.4). This is in stark contrast with wage developments in the mid-1990s, which witnessed rising real hourly wages for all deciles groups of workers, in urban and rural areas, the top two deciles in urban areas recording the highest rewards, as did urban workers with college educational levels or above. As a result, the Gini coefficient of average hourly wages increased between the 1993/94 and 1999/2000 survey rounds. According to the 2004/2005 large survey results, only urban college educated workers and casual workers in rural areas managed to increase their wages (Anant *et al.*, 2006 and Secretariat updates).

26. Wage inequalities have remained high in the Russian Federation. This may be partly related to the significant reduction of the minimum wage as a per cent of the average wage (see Box 1.3).

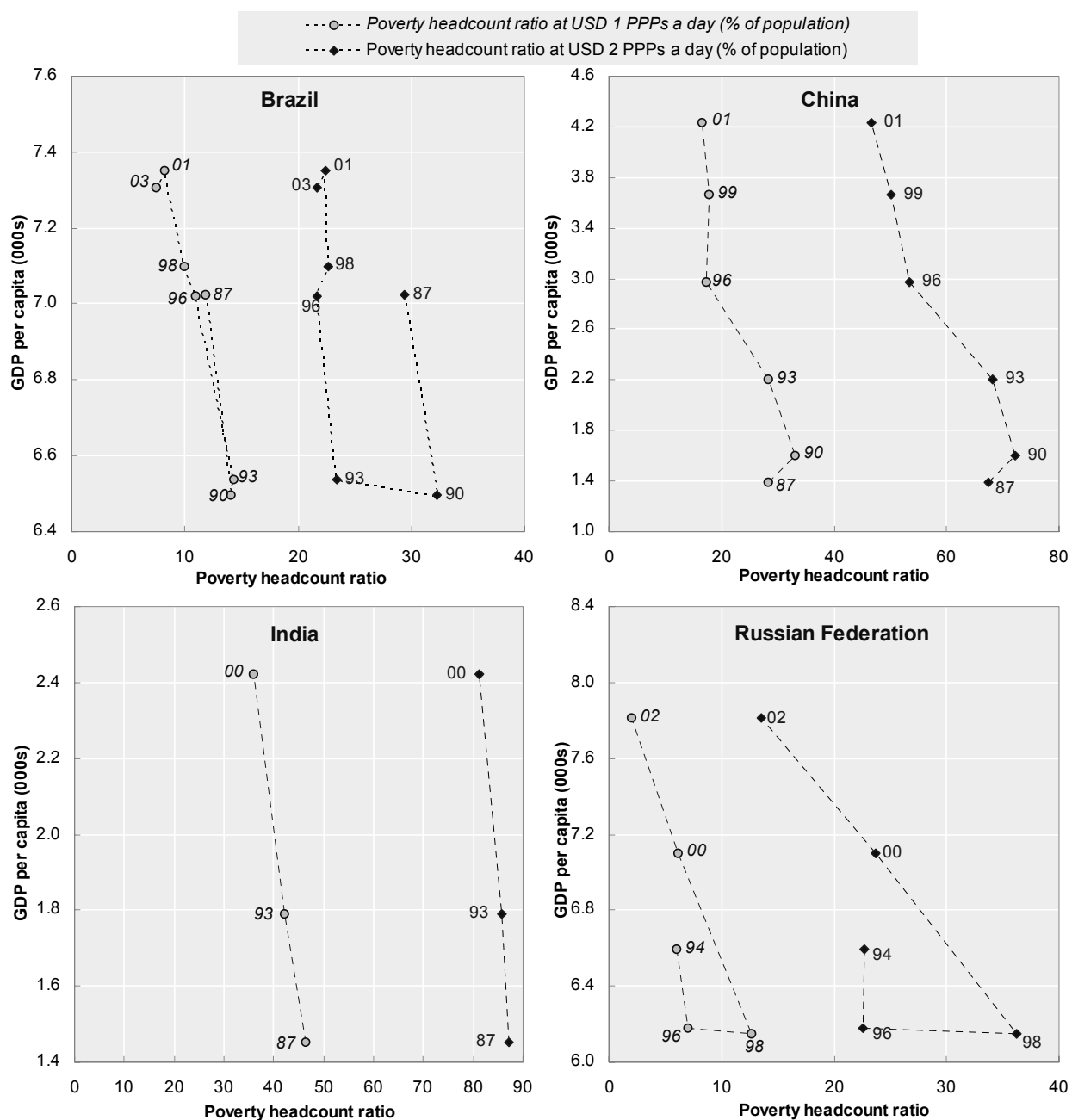
### **Poverty rates have fallen somewhat**

27. Poverty has been reduced quite markedly in China, but also in Brazil and in the Russian Federation, while the reduction has been less pronounced in India.

28. Figure 1.5 examines whether there is an association between the evolution in the levels of GDP per capita and two international poverty measures defined by the percentage of people living with income below USD 1 and USD 2 a day in Purchasing Power Parities (PPPs). The chart reveals two distinct patterns. In Brazil and the Russian Federation, the reduction in poverty, according to the two measures, happened without a substantial rise in per capita income. In Brazil, the percentage of poor people dropped

by 10% and 15% according to the USD 1 and USD 2 a day income measures, while the reduction was more dramatic in the Russian Federation, 10% and 30%. In contrast, income per capita started from low levels in China in the late 1980s and tripled in the next 15 years, while poverty reduction was less pronounced in comparison. In India, income per capita grew only half as much as in China and poverty reduction was even more moderate.

Figure 1.5. GDP per capita<sup>a</sup> and poverty headcount ratio, 1987 to 2003



a) At 2000 constant prices, in USD PPPs.

Source: World Bank, World Development Indicators, 2006.

### Box 1.3. Minimum wages in BRIC countries

Statutory minimum wage rates are in place since the 1940s in Brazil (1940) and India (1948) and since the early 1990s in the Russian Federation (1993) and China<sup>1</sup> (1994).<sup>2</sup>

There are differences among BRICs regarding how minimum wages are set. In Brazil and the Russian Federation. The national minimum wage rate is set by law by the Federal government, with the possibility allowed in the Russian Federation for State governments to fix regional rates at higher levels following tripartite consultations. In Brazil minimum wage floors for occupational categories are negotiated through collective agreements.

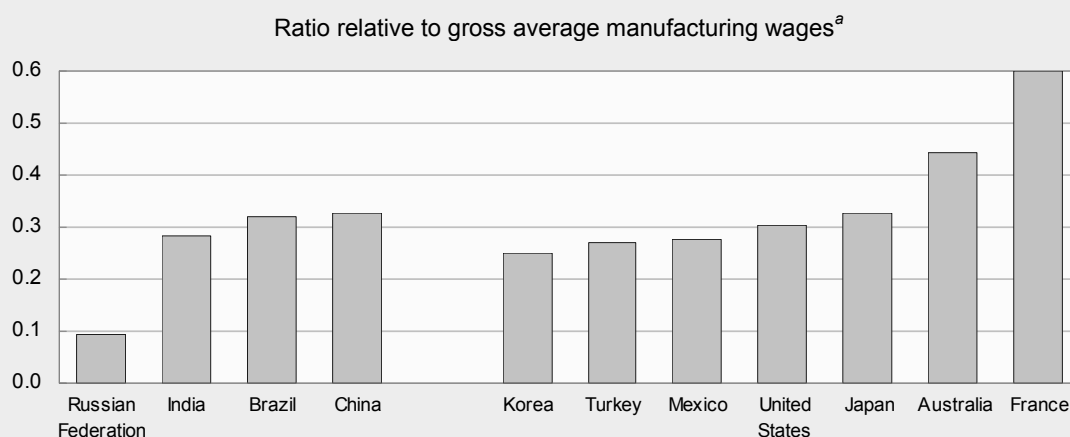
In China, minimum wage rates – monthly and hourly rates – are issued by the Ministry of Labour and Social Affairs (MOLSS) for 31 provinces, autonomous regions and municipalities, which may vary by geographical location and industries. Minimum wage rates are proposed by local governments after tripartite consultation for approval by the State Council. The rates apply to all work units and worker categories including piece-rate, part-time and temporary workers in traditional and non-traditional industries.<sup>3</sup>

In India, minimum wage rates are set through a dual system. They are set by the central and state governments for a list of unorganised<sup>4</sup> occupations requiring wage protection and by collective agreements for workers in the organised sector. Currently, the central government determines minimum wage rates for 45 occupations and state governments for 1 232 occupations (including piece-rate workers and excluding family workers) in rural and urban areas – the list of occupations is subject to circumstantial revision by central and state governments. Minimum wages are fixed following recommendations from an advisory board, composed by employer and worker organisations, and proposals from central and local governments. Since 1991, there is, however, a National Floor Level of Minimum Wages fixed by the Ministry of Labour which was set at INR 66 per day since February 2004.<sup>5</sup> Specific minimum wage rates apply for youth under 18 years and trainees.

Minimum wages are revised on a regular basis in Brazil (every year in May since 1995) and China (every two years) while they are revised occasionally in India (based on state-level cost-of-living index) and the Russian Federation.<sup>6</sup> The revisions take into account the cost of living and social security benefits in Brazil and a set of parameters in China such as local prices, wages, economy, labour productivity, social premiums and housing funds.

Figure 1.A.1 shows minimum wages relative to average manufacturing wages and a comparison with selected OECD countries. In Brazil, this ratio increased significantly since January 2000 from 0.19 to 0.32 in May 2005, putting it at the same level as the ratio in China. This ratio in India is somewhat lower at 0.28 in 2004, while minimum wages in the Russian Federation represented around 10% of average manufacturing wages in 2005 and only 30% of the subsistence minimum level.<sup>7</sup> Figure 1.A.1 shows that relative minimum wages in Brazil, China and India are roughly similar to those in Japan, Mexico, and the United States, while they are below 28% of average manufacturing wages in Korea and Turkey.

Figure 1.A.1. Relative gross minimum wages in BRIC and selected OECD countries, 2005



a) Relative minimum wages are expressed as a proportion of average nominal wages in Brazil and average manufacturing wages in China and the Russian Federation, while they are relative to manufacturing wages for production workers in India and for selected OECD countries.

Source: National sources for BRIC countries and OECD minimum wage and average wage database. Annual average manufacturing wages are from *China Yearbook of Statistics, 2006*, and from National Accounts for Russian Federation. For India, average manufacturing wages are daily wages for production workers taken from the Annual Survey of Industries in the organised sector, while, for Brazil, wages are nominal average wages from the Monthly Employment Survey (PME).

**Box 1.3. Minimum wages in BRIC countries (cont.)**

1. China introduced a revised regulation on minimum wages in July 2004, which proposes a new method of calculation taking into account local living expenses, local cost of living, and social premium payments to the new social security system set up by the government. Coverage is extended to temporary workers in non-traditional businesses.
2. Social benefits are dependent on the level of minimum wages (Brazil and the Russian Federation), while minimum wages also serve as a benchmark for the overall wage structure in Brazil.
3. In general, in all three countries hourly minimum rates apply to part-time employees, daily minimum to piece-rate workers and monthly minimum wages to full-time employees within statutory working hours limit.
4. Unorganised workers are non-unionised workers or with limited bargaining power.
5. National Floor Levels of Minimum Wages were INR 35 per day in 1996, INR 45 in 1998, INR 50 in December 2002 and INR 66 in February 2004. (See Minimum Wage Act 1948, <http://labour.nic.in/wagecell/welcome.html>).
6. In Brazil, monthly minimum wage rates were BRL 260 from May 2004 to April 2005 and BRL 300 from May 2005 to April 2006. In China, monthly minimum wages rates varied in 2006 from CNY 270 in Jianxi province to CNY 810 in Shenzhen city in Guangdong province. In India, daily minimum wages varied from INR 39.87 in Arunachal Pradesh to INR 203.86 in West Bengal, while in the Russian Federation monthly minimum wages were RUB 720 prior to September 2005, RUB 800 until March 2006 then RUB 1 100 since April 2006.
7. The subsistence minimum level is defined in accordance with a Federal decree and approved method of calculation for the consumption of a basket of goods and services, including payments and dues, which are deemed necessary for minimal living conditions.

**C. Key supply changes: a trend towards an older and better qualified workforce**

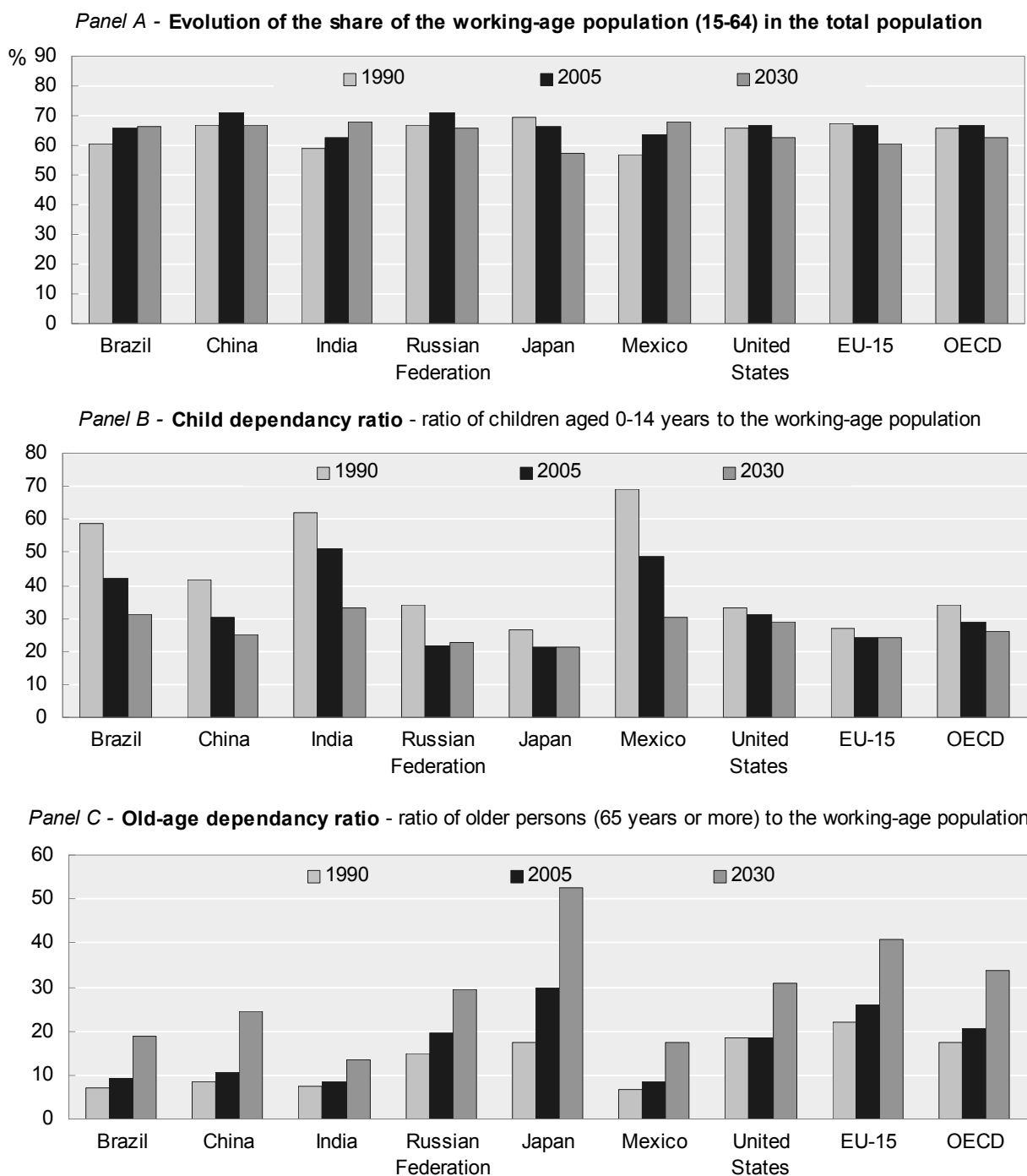
29. Beyond the dynamics created by the ongoing strong economic performance, the labour markets of the BRICs will be strongly shaped in coming years by two major developments, namely population ageing and improved education attainment.

***The labour force in the BRICs is over twice as large as the labour force in the OECD area as a whole...***

30. In 2005, the BRICs hosted 42% of world population and represented 45% of world labour force, while corresponding shares in the OECD area were 19% for both population and labour force.

31. There are major differences regarding the demographic situation among the BRICs (Figure 1.6). Brazil and India have much younger populations than is the case in both China and Russian Federation and the majority of OECD countries. In Brazil and, especially, India, the child dependency ratio (children aged less than 14 as a proportion of working-age population) is well above the OECD average. Conversely, the old-age dependency ratio, at around 10%, is almost half that of the OECD average. In China, the child dependency ratio is close to the OECD average, while the old-age dependency ratio is still relatively low. The Russian Federation combines a low child dependency ratio with a high old-age dependency ratio.

Figure 1.6. Population structure in BRICs and selected OECD areas, 1990 to 2030



Source: World Bank, World Development Indicators, 2006.

***...but labour supply growth in the BRICs is falling significantly as a result of population ageing***

32. Despite these differences, the four countries will undergo significant population ageing over the next two decades, reflecting both lower fertility rates and improved longevity. In Brazil and India, child dependency ratios are projected to fall and could drop by 2030 to levels presently observed in

OECD countries (Figure 1.6). In China, the child dependency ratio could continue to fall to reach the OECD average projected for 2030, and the Russian Federation could keep below-OECD child dependency ratios over the projection period.

33. Importantly, all four countries are projected to experience a dramatic increase in old-age dependency ratios. This is especially the case in China, which, by 2030, could account for one fourth of the world population of individuals over age 65, compared with one fifth today (Table 1.A.5).

34. These trends will have a significant repercussion on projected labour force growth (Table 1.A.6). Over the next 15 years, and on the assumption of constant participation rates, labour force growth will slow down somewhat in India. In Brazil, labour force growth over the next 15 years will be cut by half compared with the past 15 years. In China, it will practically stagnate and in the Russian Federation, the size of the labour force could even contract.

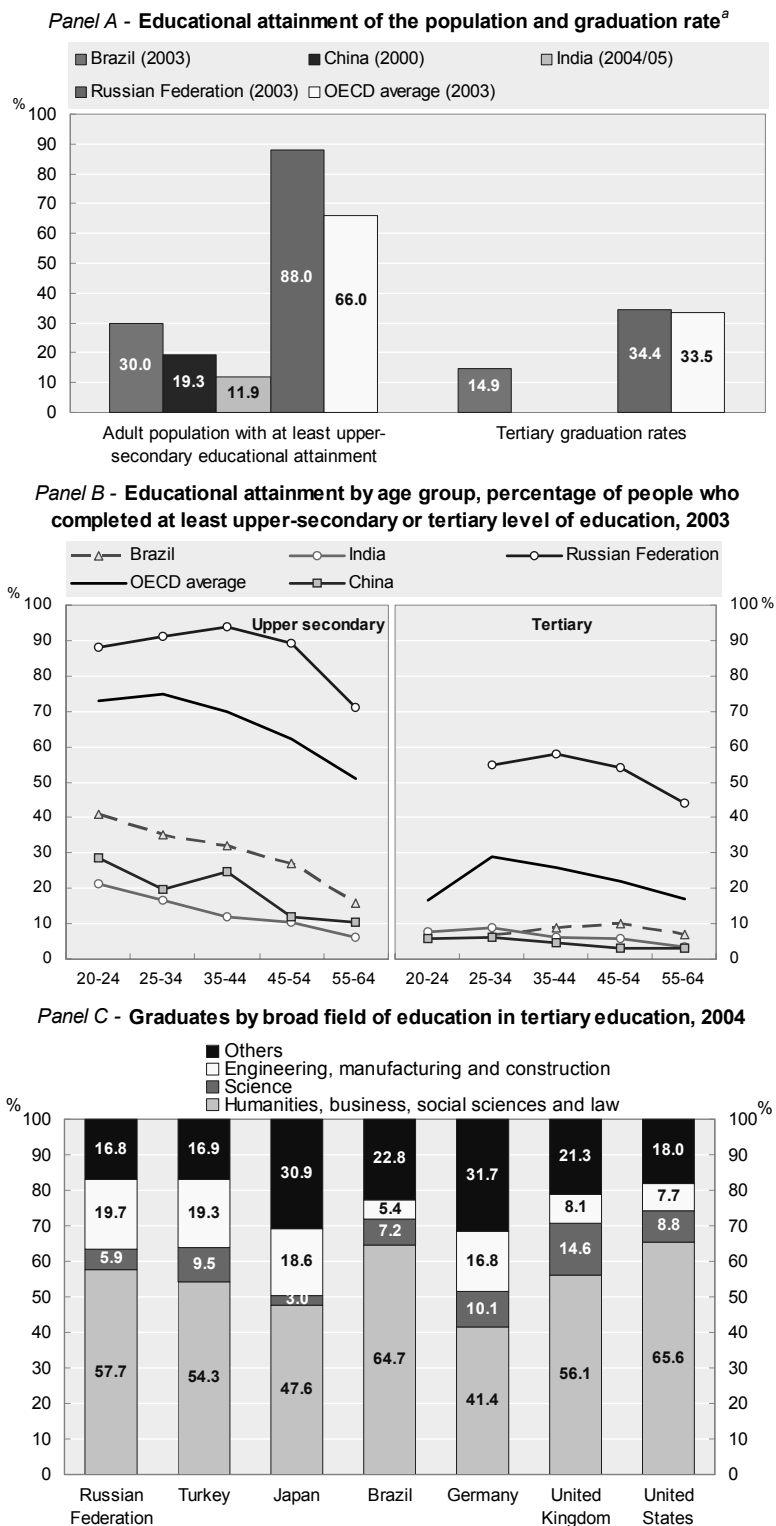
***Workers in Brazil, China and India are less skilled on average than their OECD counterparts and the opposite holds true in the Russian Federation***

35. The educational attainment of the working-age population of Brazil, China and India is, on average, much lower than in OECD countries (Figure 1.7, Panel A). In Brazil, most of the effort is placed in youth completing upper-secondary education – 41% of youth aged 20-24 years in 2003 – when they leave school to enter the job market. By contrast, only 7% of youth aged 25-34 completed tertiary-level education, a virtually identical share to that of the adult population aged 25-64 years at 8%. In sharp contrast, the bulk of young Indians do not seem to progress beyond primary education, while there are 6% of youngsters completing a tertiary level of education and more so in urban areas, as a result of greater emphasis put on tertiary education by successive Indian governments. Indeed, in 2000 per student expenditure in tertiary education as a share of GDP per capita is 60 percentage points higher than that for primary education, while these spending ratios are more or less equally distributed in China<sup>11</sup> (Kochhar *et al.*, 2006). In China, nearly one third of youth of a typical age graduate from upper-secondary education, but only 5% graduate from tertiary colleges and universities.

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11. “India spent 86% of per capita GDP on each student in tertiary education in 2000 while it spent 14% of per capita GDP per student in primary education. By contrast, China spent 10.7% and 12.1% respectively, of per capita GDP per student in tertiary and primary education” (Kochhar *et al.*, 2006). According to World Education Indicators, in 2003 these numbers for India were 77% for tertiary education and 13% for primary education respectively, while the spending imbalance was even more pronounced in Brazil where the corresponding figures were 127% and 11%.

Figure 1.7. Skill developments in BRICs and selected OECD countries



a) Data refer to 2000 for China, 2003 for Brazil, the Russian Federation and OECD, and 2004/05 for India. Educational attainment is reported for population aged 25-64 in Brazil, the Russian Federation and OECD, 15 years and over in China, and 25 years and over in India. Source: Data are taken from the UNESCO World Education Indicators database for Brazil, the Russian Federation and OECD; *China Yearbook of Statistics, 2005* for China; and the 61<sup>st</sup> NSS Round for India.

36. By contrast, the Russian Federation out-performs the OECD average in terms of educational attainment of the working-age population. More than 90% of youth have completed at least upper-secondary education in 2003 compared to an OECD average of 68% (Figure 1.7, Panel B), of which 25% had completed tertiary level of education.

***Educational attainment is improving much faster in Brazil, China and India than in OECD countries***

37. In all four countries, the average level of educational attainment is increasing and given the share of youth population, in particular in Brazil and India, this will likely transform the skill content of the future adult population. Panel B shows the percentage of different age cohorts having completed upper-secondary and tertiary levels of education. In 2003, it appears that, with the exception of the Russian Federation, young cohorts aged 20-24 and 25-34 years are better educated than their older counterparts. This is particularly true in India, where a catching up effect with OECD countries, having better educated population, seems to be in operation.

38. Graduation rates in tertiary education by broad field of study indicate that the bulk of tertiary education degrees is in humanities, business, social science and law, which together accounted in 2004 for 65% of certification and diplomas in Brazil, 58% in the Russian Federation and 66% in the United States (Figure 1.7, Panel C). On the other hand, science and engineering graduates accounted for 13% of all graduates in Brazil, 26% in the Russian Federation and 17% in the United States. Engineering graduates are, however, mixed together with manufacturing and construction engineers, most probably at technician level. They represent 20% of tertiary graduates in the Russian Federation – *i.e.* 190 thousand graduates in 2004 – similar to Germany (17%), Japan and Turkey (19%), while this share is 5% in Brazil and 8% in the United States. A recent study, which compared the number of graduates in engineering, computer science and information technology in China, India and the United States (Gereffi *et al.*, 2005), provided comparable estimates of the yearly production of engineers, defined as dynamic engineers with four-year engineering degrees from national accredited institutions and capable “of abstract thinking and high-level problem solving using scientific knowledge”. These engineers are typically those giving a competitive edge to the companies and firms where they work. Gereffi (2005) found that, in 2004, 112 thousand engineers graduated from India, 352 thousand from China, and 137 thousand engineers from the United States. The Chinese numbers are, however, suspected to be overestimated as they may include three-year course engineering degrees, degrees from other fields of study – like motor mechanics and industrial technicians. The report concludes that the United States still have a competitive edge on the ground that the production of “dynamic” engineers per million of inhabitant is higher: 500 engineers in China, 200 in India, and 750 in the United States.

## ANNEX TABLES

Table 1.A.1. Labour force participation, employment, unemployment rates in BRIC countries and selected OECD areas, 1990 to 2005

	Both sexes				Men				Women			
	1990	1994	2000	2005	1990	1994	2000	2005	1990	1994	2000	2005
<b>Labour force participation rates (%)</b>												
Brazil	69.3	74.3	73.9	74.2	91.1	91.1	88.4	86.9	48.0	58.1	59.9	61.9
China	83.9	82.6	83.4	81.8	87.9	89.1	89.1	87.8	77.5	77.9	77.3	75.7
India <sup>a</sup>	66.8	65.1	63.6	65.1	90.4	89.9	88.6	89.1	41.4	38.5	36.9	40.3
Russian Federation	77.7	73.4	69.9	72.3	82.8	78.6	74.9	76.2	72.9	68.5	65.3	68.0
Euro area	65.3	66.1	68.3	70.7	79.0	77.9	78.3	79.2	51.7	54.3	58.3	62.1
EU-15	68.0	68.3	70.1	72.1	80.7	79.4	79.6	80.2	55.2	57.1	60.7	64.0
OECD	71.9	71.5	72.2	72.3	84.4	83.9	83.7	83.2	59.5	59.3	60.9	62.1
<b>Employment (15 years and over)/population (15-64 years) ratios (%)</b>												
Brazil	66.7	67.2	64.6	66.4	87.7	83.7	78.8	79.3	46.3	51.6	51.3	54.3
China	80.8	79.4	78.9	77.8	..	..	83.8	..	..	..	73.8	..
India <sup>a</sup>	..	62.9	61.2	62.2	..	86.6	84.7	85.4	..	37.0	35.4	38.3
Russian Federation	..	67.5	63.2	66.0	..	72.1	67.3	69.8	..	63.1	59.2	62.5
Euro area	68.2	67.5	70.1	70.2	79.2	77.2	79.1	78.1	56.3	57.2	60.9	62.1
EU-15	62.3	60.7	64.4	65.7	75.4	71.5	74.0	73.8	49.3	49.9	54.8	57.5
OECD	67.5	66.0	67.8	67.4	79.7	77.8	79.0	77.6	55.4	54.4	56.8	57.3
<b>Unemployment rates</b>												
Brazil	3.7	6.2	9.9	9.2	3.8	5.4	8.1	7.0	3.5	7.5	12.4	11.9
China	3.7	3.8	5.4	4.9	..	..	6.0	..	..	..	4.6	..
India <sup>a</sup>	..	3.7	4.3	4.4	..	3.6	4.4	4.2	..	3.9	4.1	5.0
Russian Federation	..	8.1	9.8	7.9	..	8.3	10.2	7.8	..	7.9	9.4	8.0
Euro area	6.2	7.6	5.9	6.4	5.5	7.2	5.5	6.2	7.0	8.1	6.4	6.6
EU-15	8.3	11.1	8.2	8.3	6.6	9.9	7.1	7.5	10.8	12.6	9.7	9.2
OECD	6.2	7.7	6.1	6.8	5.6	7.3	5.7	6.6	7.0	8.3	6.7	7.1

.. Data not available.

a) For India, estimates are according to current weekly status.

Source: World Bank, World Development Indicators, 2006; ILO Laborsta database and national estimates for Brazil, India and the Russian Federation (see Table 1.A.2). For China, Secretariat estimates benchmarked on the 5<sup>th</sup> population census of China, 2000; and OECD Labour Force Statistics database, for EU-15 and OECD areas.

Table 1.A.2. Labour force participation, employment, unemployment rates by age groups<sup>a</sup> and gender in BRIC countries and selected areas, latest year available<sup>b</sup>

## Percentages

	Both sexes						Men						Women					
	Brazil	China	India <sup>c</sup>	Russian Federation	EU-15	OECD	Brazil	China	India <sup>c</sup>	Russian Federation	EU-15	OECD	Brazil	China	India <sup>c</sup>	Russian Federation	EU-15	OECD
<b>Labour force participation rates</b>																		
15-19	50.7	46.1	36.3	16.5	28.7	31.4	59.4	45.4	47.0	18.5	31.2	34.4	41.7	46.7	23.7	14.5	26.0	28.3
20-24	77.7	82.8	58.3	60.5	64.9	66.2	88.5	84.7	84.1	65.2	69.3	72.6	67.2	80.8	32.5	55.7	60.4	59.8
25-29	82.1	89.1	67.9	85.0	82.1	79.4	94.2	94.6	96.6	90.8	88.3	90.3	70.6	83.3	39.5	79.1	75.7	68.5
30-34	83.4	91.2	70.5	87.2	85.1	80.4	95.4	95.6	98.1	91.2	94.1	94.2	72.4	86.5	45.4	83.2	76.0	66.7
35-39	..	92.7	74.2	91.3	85.6	81.7	..	96.5	98.3	93.8	94.8	94.6	..	88.6	50.2	88.9	76.3	69.1
40-44	80.2	92.2	73.7	98.0	86.0	82.9	93.0	96.7	97.7	99.1	94.3	93.8	68.4	87.4	48.1	96.9	77.7	72.2
45-49	..	89.3	73.2	87.1	84.5	81.7	..	96.6	97.1	87.8	93.0	91.5	..	81.6	46.6	86.6	76.1	72.1
50-54	66.3	80.6	69.6	81.1	79.1	76.9	82.3	91.6	94.6	84.5	89.0	87.4	52.2	68.8	42.4	78.3	69.4	66.7
55-59	..	69.2	63.9	50.7	62.4	65.2	..	81.5	88.7	61.4	72.4	76.9	..	56.0	38.7	42.4	52.5	54.1
60-64	..	50.2	63.0	35.5	30.0	41.1	..	60.5	53.1	46.7	38.9	51.6	..	39.0	12.0	27.9	21.5	31.4
65+	30.5	25.4	23.6	11.8	3.8	11.3	45.0	34.1	30.7	15.8	6.0	16.6	19.2	17.5	16.6	9.5	2.3	7.4
15-24	63.9	63.6	46.7	39.1	47.7	49.5	73.5	64.1	63.9	42.3	51.1	54.0	54.4	63.1	28.1	35.7	44.2	44.9
25-54	78.9	89.8	71.5	88.2	83.9	80.6	92.0	95.4	97.3	91.2	92.4	92.1	67.0	83.7	45.4	85.5	75.3	69.3
55-64	..	60.2	63.5	45.5	47.6	54.5	..	71.6	95.7	56.7	57.2	65.7	..	47.9	31.7	37.3	38.3	43.9
15-64	<b>72.1</b>	<b>80.8</b>	<b>63.3</b>	<b>71.0</b>	<b>71.1</b>	<b>70.2</b>	<b>84.1</b>	<b>85.9</b>	<b>86.8</b>	<b>75.0</b>	<b>78.9</b>	<b>80.3</b>	<b>60.6</b>	<b>75.4</b>	<b>39.0</b>	<b>67.4</b>	<b>63.3</b>	<b>60.3</b>
15+	<b>74.2</b>	<b>83.4</b>	<b>65.1</b>	<b>72.3</b>	<b>72.1</b>	<b>72.5</b>	<b>86.9</b>	<b>89.1</b>	<b>89.1</b>	<b>76.2</b>	<b>80.2</b>	<b>83.2</b>	<b>61.9</b>	<b>77.3</b>	<b>40.3</b>	<b>68.6</b>	<b>64.0</b>	<b>62.1</b>
<b>Employment/population ratios</b>																		
15-19	39.4	37.9	32.8	11.9	23.2	26.6	48.9	36.8	42.1	13.7	25.3	29.0	29.6	39.2	21.8	10.0	20.9	24.0
20-24	65.9	73.9	52.4	53.0	54.8	58.0	78.1	74.9	76.2	56.5	58.6	63.3	54.1	72.9	28.6	49.4	50.8	52.7
25-29	74.3	82.7	64.0	78.8	73.4	72.7	88.2	86.3	91.7	84.3	79.6	83.0	61.2	78.8	36.5	73.3	67.1	62.3
30-34	77.9	86.8	68.0	81.4	78.4	75.3	91.1	89.9	95.3	84.9	87.6	88.8	65.7	83.5	43.3	78.0	69.1	61.9
35-39	..	89.0	72.4	86.0	79.5	77.2	..	92.0	96.3	88.3	89.1	89.9	..	85.9	48.6	83.8	69.8	64.6
40-44	76.2	89.0	72.4	92.6	80.4	78.6	89.5	93.0	96.1	92.9	89.0	89.4	64.0	84.7	47.1	92.4	71.8	68.1
45-49	..	87.6	71.8	82.1	79.4	77.6	..	94.5	95.3	82.4	87.8	87.2	..	80.2	45.6	81.9	71.0	68.3
50-54	63.8	79.7	68.3	76.7	74.1	73.1	79.3	90.1	92.8	79.8	83.7	83.1	50.1	68.5	41.6	74.2	64.7	63.4
55-59	..	68.9	62.9	48.5	58.1	62.1	..	80.8	87.5	58.3	67.5	72.9	..	55.9	37.9	40.9	48.9	51.7
60-64	..	50.1	62.1	32.7	28.2	39.3	..	60.4	52.3	43.4	36.5	49.1	..	38.9	11.9	25.3	20.4	30.3
65+	29.9	25.3	23.2	11.8	3.8	11.1	43.9	34.1	30.3	15.8	5.9	16.2	18.8	17.4	16.3	9.5	2.2	7.3
15-24	52.4	55.2	42.1	33.0	39.8	42.9	63.0	54.9	57.6	35.6	42.8	46.6	41.7	55.4	25.2	30.3	36.7	39.1
25-54	74.0	86.0	69.3	82.9	77.7	75.8	87.9	90.7	94.6	85.4	86.4	87.0	61.3	81.1	43.6	80.6	69.1	64.8
55-64	..	60.0	62.6	43.1	44.5	52.0	..	71.2	94.3	53.5	53.4	62.5	..	47.9	31.1	35.4	35.8	42.0
15-64	<b>66.4</b>	<b>76.4</b>	<b>60.4</b>	<b>65.9</b>	<b>65.2</b>	<b>65.5</b>	<b>79.3</b>	<b>80.6</b>	<b>83.1</b>	<b>69.3</b>	<b>72.9</b>	<b>75.0</b>	<b>54.3</b>	<b>71.9</b>	<b>37.0</b>	<b>62.8</b>	<b>58.2</b>	<b>56.1</b>
15+	<b>66.4</b>	<b>78.9</b>	<b>62.2</b>	<b>67.1</b>	<b>66.1</b>	<b>67.7</b>	<b>79.3</b>	<b>83.8</b>	<b>85.4</b>	<b>70.5</b>	<b>74.1</b>	<b>77.9</b>	<b>54.3</b>	<b>73.8</b>	<b>38.3</b>	<b>64.0</b>	<b>57.5</b>	<b>57.8</b>
<b>Unemployment rates</b>																		
15-19	22.3	17.6	9.7	28.0	19.1	15.5	17.6	19.1	10.5	25.9	18.7	15.8	29.2	16.2	8.0	30.9	19.8	15.2
20-24	15.2	10.7	10.1	12.4	15.6	12.4	11.8	11.6	9.4	13.4	15.3	12.8	19.6	9.8	12.0	11.3	15.9	11.9
25-29	9.5	7.2	5.8	7.2	10.5	8.5	6.4	8.7	5.1	7.1	9.9	8.1	13.4	5.4	7.6	7.4	11.4	8.9
30-34	6.6	4.8	3.5	6.6	7.9	6.3	4.4	6.0	2.9	6.9	6.9	5.7	9.2	3.4	4.6	6.2	9.1	7.2
35-39	..	3.9	2.4	5.8	7.1	5.6	..	4.7	2.0	5.8	6.0	5.0	..	3.1	3.2	5.7	8.5	6.5
40-44	5.0	3.5	1.8	5.4	6.5	5.1	3.8	3.9	1.6	6.3	5.6	4.7	6.4	3.0	2.1	4.6	7.6	5.7
45-49	..	2.0	1.9	5.8	6.1	5.0	..	2.2	1.9	6.1	5.6	4.7	..	1.7	2.1	5.5	6.8	5.3
50-54	3.8	1.1	1.9	5.4	6.3	4.9	3.6	1.6	1.9	5.6	5.9	4.9	4.0	0.4	1.9	5.3	6.8	5.0
55-59	..	0.5	1.6	4.3	6.8	4.8	..	0.8	1.4	5.0	6.8	5.1	..	0.2	2.1	3.5	6.9	4.5
60-64	..	0.1	1.4	8.0	5.8	4.2	..	0.2	1.5	7.1	6.2	4.7	..	0.2	1.3	9.2	5.1	3.5
65+	2.1	0.2	1.6	0.0	1.1	2.1	2.4	0.2	1.4	0.0	1.0	2.3	1.7	0.5	1.8	0.0	1.2	1.8
15-24	18.1	13.3	10.0	15.6	16.6	13.3	14.2	14.4	9.9	16.0	16.3	13.7	23.3	12.2	10.3	15.1	17.0	12.8
25-54	6.2	4.2	3.1	6.0	7.4	5.9	4.5	5.0	2.7	6.3	6.6	5.5	8.4	3.2	3.9	5.7	8.3	6.4
55-64	..	0.4	1.5	5.3	6.5	4.6	..	0.6	1.4	5.5	6.6	5.0	..	0.2	1.8	5.0	6.4	4.2
15-64	<b>7.9</b>	<b>5.5</b>	<b>4.5</b>	<b>7.2</b>	<b>8.4</b>	<b>6.8</b>	<b>5.7</b>	<b>6.2</b>	<b>4.2</b>	<b>7.6</b>	<b>7.7</b>	<b>6.5</b>	<b>10.4</b>	<b>4.7</b>	<b>5.1</b>	<b>6.8</b>	<b>9.2</b>	<b>7.1</b>
15+	<b>9.2</b>	<b>5.4</b>	<b>4.4</b>	<b>7.1</b>	<b>8.3</b>	<b>6.6</b>	<b>7.0</b>	<b>6.0</b>	<b>4.2</b>	<b>7.5</b>	<b>7.6</b>	<b>6.4</b>	<b>11.9</b>	<b>4.6</b>	<b>5.0</b>	<b>6.7</b>	<b>9.1</b>	<b>6.9</b>

.. Data not available.

a) For Brazil, 25-54 refers to 25-59, 30-34 to 30-39, 40-44 to 40-49, 50-54 to 50-59, and 65+ to 60 and over. For China, 15-19 refers to 16-19, 15-24 to 16-24, 15-64 to 16-64 and 15+ to 16 and over; and for the Russian Federation, 65+ refers to 60-72.

b) Data refer to 2004 for Brazil, to 2000 for China, to 2004/05 for India, and to 2005 for the Russian Federation, EU-15 and OECD.

Source: National Household Survey – Pesquisa Nacional por Amostra de Domicílios (PNAD), for Brazil. For China, Secretariat estimates based on the 5<sup>th</sup> population census of China, 2000. National Sample (large) Survey (NSS) 61<sup>st</sup> Round, 2004/05, for India. Federal Service for State Statistics (Goskomstat), for the Russian Federation. ILO Laborsta; and OECD, Labour Force Statistics database, for EU-15 and OECD areas.

Table 1.A.3. Employment levels and growth by type of employment, 1990 to 2005

	Panel A - China								
	Employment (millions)			Average annual growth (%)					
	1990	2000	2005	1990-2005	1990-2000	2000-2005	1990	2000	2005
<b>Urban and rural employment</b>	<b>647.5</b>	<b>720.9</b>	<b>756.3</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Rural employment</b>	<b>477.1</b>	<b>489.3</b>	<b>484.9</b>	<b>0.1</b>	<b>0.3</b>	<b>-0.2</b>	<b>73.7</b>	<b>67.9</b>	<b>64.0</b>
Regular employment	416.7	480.0	481.0	1.0	1.4	0.0	64.4	66.6	63.4
<i>Formal sector</i>	92.7	128.2	142.7	2.9	3.3	2.2	14.3	17.8	18.8
Township and village enterprises (TVEs)	92.7	128.2	142.7	2.9	3.3	2.2	14.3	17.8	18.8
<i>Informal sector</i>	324.0	351.8	338.3	0.3	0.8	-0.8	50.0	48.8	44.6
Registered private enterprises	1.1	11.4	23.7	22.5	26.0	15.8	0.2	1.6	3.1
Self-employed - individual businesses	14.9	29.3	21.2	2.4	7.0	-6.3	2.3	4.1	2.8
Small farms	308.0	311.1	293.4	-0.3	0.1	-1.2	47.6	43.2	38.7
Irregular employment	60.4	9.3	3.9	-16.7	-17.0	-16.0	9.3	1.3	0.5
<b>Urban employment</b>	<b>170.4</b>	<b>231.5</b>	<b>273.3</b>	<b>3.2</b>	<b>3.1</b>	<b>3.4</b>	<b>26.3</b>	<b>32.1</b>	<b>36.0</b>
Regular employment	147.3	149.9	174.6	1.1	0.2	3.1	22.7	20.8	23.0
<i>Formal sector</i>	140.6	115.9	112.3	-1.5	-1.9	-0.6	21.7	16.1	14.8
Traditional formal employment <sup>a</sup>	139.0	96.0	73.0	-4.2	-3.6	-5.3	21.5	13.3	9.6
Emerging formal enterprises <sup>b</sup>	1.6	19.8	39.3	23.7	28.5	14.6	0.3	2.8	5.2
<i>Informal sector</i>	6.7	34.0	62.4	16.0	17.6	12.9	1.0	4.7	8.2
Registered private enterprises	0.6	12.7	34.6	31.5	36.4	22.2	0.1	1.8	4.6
Self-employed - individual businesses	6.1	21.4	27.8	10.6	13.3	5.4	0.9	3.0	3.7
Irregular employment	23.1	81.6	98.7	10.2	13.4	3.9	3.6	11.3	13.0

	Panel B - India <sup>c</sup>									
	Levels (millions)			Average annual growth (%)						
	1993/94	1999/2000	2004/2005	1983-94	1994-2005	1994-2000	2000-2005	1993/94	1999/2000	2004/2005
<b>Population</b>	<b>895.1</b>	<b>1 004.1</b>	<b>1 087.2</b>	<b>2.0</b>	<b>1.8</b>	<b>1.9</b>	<b>1.6</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Labour force</b>	<b>391.9</b>	<b>406.1</b>	<b>467.4</b>	<b>2.2</b>	<b>1.6</b>	<b>0.6</b>	<b>2.9</b>	<b>13.1</b>	<b>13.9</b>	<b>14.4</b>
<b>Total employment</b>	<b>374.5</b>	<b>397.0</b>	<b>456.7</b>	<b>2.0</b>	<b>1.8</b>	<b>1.0</b>	<b>2.8</b>	<b>86.8</b>	<b>86.1</b>	<b>85.6</b>
Regular salaried	49.0	55.0	65.7	1.4	2.7	1.9	3.6	54.7	52.9	56.7
Irregular employment	325.0	342.0	391.0	2.0	1.7	0.9	2.7	32.0	33.2	28.9
Self-employed	205.0	210.0	259.1	1.5	2.2	0.4	4.3	7.3	7.1	5.9
Casual workers	120.0	132.0	131.8	3.0	0.9	1.6	0.0	5.1	4.8	4.1
Organised sector employment	27.4	28.1	27.1	1.2	-0.1	0.4	-0.7	2.1	2.3	1.9
Public sector	19.0	19.0	18.6	1.6	-0.2	0.0	-0.5	78.1	76.5	77.8
Private sector	8.0	9.0	8.6	0.0	0.6	2.0	-1.0	5.0	5.3	5.5
<b>Rural employment</b>	<b>292.5</b>	<b>303.6</b>	<b>355.5</b>	<b>1.7</b>	<b>1.8</b>	<b>0.6</b>	<b>3.2</b>	<b>73.1</b>	<b>69.4</b>	<b>72.2</b>
Regular salaried	18.9	21.0	25.3	0.2	2.7	1.8	3.8	45.3	40.5	46.7
Irregular employment	273.6	275.5	329.9	1.8	1.7	0.1	3.7	27.8	28.9	25.5
Self-employed	169.6	160.9	213.3	1.2	2.1	-0.9	5.8	21.8	23.6	22.2
Casual workers	104.0	114.6	116.6	2.8	1.0	1.6	0.4	8.6	9.4	8.8
<b>Urban employment</b>	<b>81.8</b>	<b>93.6</b>	<b>101.2</b>	<b>3.0</b>	<b>2.0</b>	<b>2.3</b>	<b>1.6</b>	13.2	14.2	13.4
Regular salaried	32.2	37.4	40.4	2.9	2.1	2.5	1.5	9.2	9.9	10.0
Irregular employment	49.5	56.2	61.0	3.1	1.9	2.2	3.1	4.0	4.3	3.3
Self-employed	34.6	39.3	45.8	3.1	2.6	2.2	3.1			
Casual workers	15.0	16.9	15.2	3.2	0.2	2.1	-2.1			

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 Table 1.A.3. Employment levels and growth by type of employment, 1990 to 2005 (cont.)

	Panel C - Brazil <sup>d</sup>							
	Levels (millions)				Percentage of total employment			
	2001	2002	2003	2004	2001	2002	2003	2004
<b>Employment by status (millions)</b>	<b>76.1</b>	<b>79.0</b>	<b>80.2</b>	<b>84.6</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Wage earners	41.3	42.8	43.6	46.7	54.3	54.3	54.4	55.2
Domestic workers	5.9	6.1	6.2	6.5	7.8	7.7	7.7	7.7
Own account workers	17.0	17.6	17.9	18.6	22.3	22.3	22.3	22.0
Employers	3.2	3.4	3.4	3.5	4.2	4.2	4.2	4.1
Unpaid family workers	5.6	5.8	5.7	5.9	7.4	7.4	7.1	7.0
Others	3.1	3.3	3.5	3.5	4.0	4.1	4.3	4.1
<b>Urban employment by type of employment (%)</b>	<b>Total</b>				<b>Women</b>			
	1990	2003	1990	2003	1990	2003	1990	2003
<i>Informal sector</i>	40.6	44.6	36.1	40.5	47.6	49.8	47.6	49.8
Self-employed	20.3	21.0	19.6	22.7	21.3	18.8	21.3	18.8
Domestic service	6.9	9.3	0.5	0.9	16.7	20.1	16.7	20.1
Micro enterprise	13.5	14.3	16.0	16.9	9.6	10.9	9.6	10.9
<i>Formal sector</i>	59.4	55.4	63.9	59.5	52.4	50.2	52.4	50.2
Public sector	11.0	13.8	..	11.0	..	17.3	..	17.3
Firms with more than five employees	48.4	41.7	..	48.5	..	32.9	..	32.9

Table 1.A.3. Employment levels and growth by type of employment, 1990 to 2005 (cont.)

	Panel D - Russian Federation								
	Millions			Average annual growth (%)					
	1994	2000	2004	1994-2004	1994-2000	2000-2004			
				Both sexes			1994	2000	2004
<b>Total employment</b>	<b>64.8</b>	<b>64.5</b>	<b>67.1</b>	<b>0.4</b>	<b>-0.1</b>	<b>1.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Wage and salaried workers (employees)	60.4	58.5	62.6	0.4	-0.5	1.7	93.2	90.7	93.2
Self-employed (a + b + c)	4.3	5.9	4.5	0.4	5.4	-6.6	6.6	9.2	6.7
Employers (a)	0.2	0.5	0.9	14.4	14.6	14.0	0.4	0.8	1.4
Own-account workers (b)	1.0	4.6	3.4	13.4	30.0	-7.6	1.5	7.1	5.0
Members of producer's cooperatives (c)	3.1	0.8	0.2	-23.7	-20.9	-27.7	4.8	1.2	0.3
Contributing family workers	0.1	0.1	0.1	-3.9	-0.9	-8.3	0.1	0.1	0.1
	<b>Men</b>								
<b>Total employment</b>	<b>34.1</b>	<b>33.4</b>	<b>34.2</b>	<b>0.0</b>	<b>-0.4</b>	<b>0.6</b>	<b>34.1</b>	<b>33.4</b>	<b>34.2</b>
Wage and salaried workers (employees)	31.4	30.1	31.6	0.0	-0.7	1.2	31.4	30.1	31.6
Self-employed (a + b + c)	2.6	3.2	2.6	-0.2	3.2	-5.2	2.6	3.2	2.6
Employers (a)	0.2	0.4	0.6	11.5	12.9	9.4	0.2	0.4	0.6
Own-account workers (b)	0.6	2.3	1.9	11.1	23.6	-5.2	0.6	2.3	1.9
Members of producer's cooperatives (c)	1.8	0.5	0.1	-23.0	-19.9	-27.4	1.8	0.5	0.1
Contributing family workers	0.0	0.0	0.0	-1.6	0.0	-4.0	0.0	0.0	0.0
	<b>Women</b>								
<b>Total employment</b>	<b>30.7</b>	<b>31.1</b>	<b>33.0</b>	<b>0.7</b>	<b>0.2</b>	<b>1.5</b>	<b>30.7</b>	<b>31.1</b>	<b>33.0</b>
Wage and salaried workers (employees)	29.0	28.3	31.0	0.7	-0.4	2.3	29.0	28.3	31.0
Self-employed (a + b + c)	1.7	2.7	1.9	1.4	8.5	-8.4	1.7	2.7	1.9
Employers (a)	0.0	0.1	0.3	22.1	20.4	24.6	0.0	0.1	0.3
Own-account workers (b)	0.3	2.3	1.5	17.3	40.1	-10.1	0.3	2.3	1.5
Members of producer's cooperatives (c)	1.3	0.3	0.1	-24.7	-22.4	-28.1	1.3	0.3	0.1
Contributing family workers	0.0	0.0	0.0	-8.8	-2.4	-17.6	0.0	0.0	0.0

.. Data not available.

- a) State-owned and collective-owned enterprise units.  
b) Cooperative enterprises, joint-ownership enterprises, limited liability corporations and foreign-funded enterprises including those funded by residents of Hong Kong, Macao.  
c) Employment and unemployment figures are according to usual principal and subsidiary status, and include workers aged five years or more as reported in official statistics.  
d) Employment and unemployment figures cover persons aged ten years or more.

Source: *China Yearbook of Statistics, 2006*; and A.K. Ghose (2005), for China. Planning Commission (2001); K. Sundaram (2004) and Secretariat estimates for 2004/05, for India. ILO Regional Database for Latin America and the Caribbean for urban employment by types of employment; and National Household Sample Survey (PNAD) for employment by status, for Brazil. ILO Key Indicators of the Labour Market, 2005; and Sample Survey on Employment from the Federal State Statistics Service (Goskomstat), for the Russian Federation.

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Table 1.A.4. Wage developments in India, 1990 to latest year available

Wage developments by earnings deciles<sup>a</sup>, gender, type of employment, broad sectors and occupation, selected years  
2000 constant Indian Rupees (INR)

	Rural				Urban				
	1983	1993/94	1999/2000	2004/2005	1983	1987/88	1993/94	1999/2000	2004/2005
<b>Average hourly real wages</b>									
10th percentile	3.4	4.4	6.7	5.9	9.3	10.7	11.8	16.3	15.7
20th percentile	1.2	1.6	2.5	..	2.4	2.6	2.9	3.8	..
80th percentile	1.6	2.0	3.1	..	3.4	3.6	4.0	5.3	..
90th percentile	4.3	5.1	7.7	..	13.6	16.0	18.3	24.8	..
<b>Gender</b>									
Male	4.0	5.1	7.8	7.3	10.1	11.5	12.6	17.1	16.9
Female	2.2	2.8	4.2	2.6	5.6	7.1	8.3	12.4	11.2
<b>Type</b>									
Regular	6.0	8.9	14.6	12.8	11.1	12.8	14.4	19.9	19.3
Casual	2.7	3.4	5.0	5.7	4.6	4.8	5.6	7.4	7.2
<b>Education</b>									
Illiterate	2.6	3.2	4.6	3.7	5.0	5.3	6.0	7.3	6.2
Below primary	3.4	4.1	6.0	..	6.8	7.3	7.7	9.7	..
Primary school	4.0	4.7	6.6	..	7.2	7.9	7.9	10.1	..
Middle school	510.0	5.6	7.8	5.9	8.4	9.4	9.5	11.7	10.0
Secondary school	8.4	9.2	13.3	11.2	12.6	14.2	14.4	18.7	16.6
College	12.4	14.9	23.2	22.7	19.0	21.6	23.0	32.5	33.9
<b>Sector</b>									
Agriculture	2.6	3.2	4.7	4.0	3.8	3.9	4.7	6.1	3.6
Industry	4.6	5.7	8.6	9.3	8.9	10.0	10.8	13.8	13.3
Services	6.8	9.3	14.6	12.5	10.5	12.4	13.6	19.0	18.0
<b>Occupation</b>									
Professionals and technical	8.9	14.9	21.5	..	18.9	21.8	22.8	34.0	..
Administrative, executive, managerial	12.4	17.7	24.9	..	24.9	29.9	31.5	45.6	..
Clerical	8.0	10.8	17.4	..	12.7	14.9	16.6	23.5	..
Service workers	3.8	5.4	10.7	..	6.7	7.6	8.6	11.9	..
Agriculture workers	2.6	3.2	4.6	..	3.9	4.2	5.0	6.7	..
Production and transportation workers	4.6	5.8	8.5	..	7.8	8.5	9.2	11.6	..
<b>Gini coefficient of Hourly Real Wages</b>	0.4	0.4	0.4	..	0.4	0.4	0.4	0.5	..

.. Data not available.

a) Real hourly wages of wage and salary workers are according to usual principal and subsidiary status and include workers aged 5 years or more as reported in official statistics. Source: Anant T. et al. (2006); and Secretariat estimates for 2004/05 based on the results of the 61<sup>st</sup> NSS large sample survey Round, for India.

Table 1.A.5. World population shares of BRICs and selected OECD areas, selected years since 1980 and 2030 projections

Percentages

	1980	1990	2000	2005	2030
<b>Share of 0-14 years in total population</b>					
Brazil	38.1	35.3	29.6	27.9	20.9
China	35.5	27.7	24.8	21.4	16.9
India	38.5	36.6	34.1	32.1	22.6
Russian Federation	21.6	23.0	18.2	15.3	15.1
Euro area	21.9	17.9	16.2	15.5	14.0
EU-15	21.7	18.1	16.7	16.0	14.7
OECD	25.3	22.5	20.4	19.4	16.4
World	35.1	32.4	30.0	28.2	23.0
<b>Share of 15-64 years in total population</b>					
Brazil	57.8	60.3	64.9	66.0	66.6
China	59.7	66.7	68.4	71.0	66.8
India	57.4	59.1	61.0	62.7	68.1
Russian Federation	68.1	67.0	69.4	70.9	65.7
Euro area	64.6	67.6	67.3	66.8	60.5
EU-15	64.5	67.1	66.9	66.7	60.6
OECD	63.9	66.0	66.5	66.9	62.6
World	58.9	61.4	63.0	64.5	65.2
<b>Share of 65 years and over in total population</b>					
Brazil	4.1	4.4	5.4	6.1	12.5
China	4.7	5.6	6.8	7.6	16.3
India	4.0	4.3	4.9	5.3	9.3
Russian Federation	10.2	10.0	12.3	13.8	19.3
Euro area	13.5	14.4	16.5	17.7	25.5
EU-15	13.9	14.7	16.4	17.4	24.7
OECD	10.8	11.6	13.0	13.7	21.1
World	5.9	6.2	6.9	7.4	11.8

Source: World Bank, World Development Indicators, 2006; and UN population projections, Revisions 2004.

Table 1.A.6. Labour supply growth by gender in BRICs and selected OECD areas, 1980 to 2020

	1980	1990	2000	2005	2020	1980-1990	1990-2000	2000-2005	2005-2020
	Share in World labour force (%)					Labour force growth (%)			
Both sexes									
Brazil	2.4	2.6	3.0	3.0	3.0	3.0	2.9	1.8	1.2
China	26.6	27.5	26.5	25.7	22.4	2.6	1.2	1.0	0.3
India	13.6	13.7	14.1	14.4	15.4	2.3	1.9	2.0	1.7
Russian Federation	3.9	3.2	2.5	2.4	1.8	0.2	-0.8	0.5	-0.8
Euro area	6.3	5.4	5.0	4.8	3.9	0.8	0.7	0.7	-0.1
EU-15	8.0	7.0	6.3	6.0	5.0	0.8	0.6	0.7	0.0
OECD	22.6	20.6	19.3	18.6	16.4	1.3	0.9	0.8	0.4
World (000s)	1 929 556	2 405 619	2 818 456	3 050 420	3 651 283	2.2	1.6	1.6	1.2
Men									
Brazil	2.7	2.8	2.9	2.9	2.7	2.4	1.9	1.3	0.8
China	24.5	25.2	24.3	23.8	21.3	2.3	1.2	1.1	0.4
India	15.9	16.2	16.9	17.2	18.4	2.2	2.0	1.8	1.6
Russian Federation	3.2	2.8	2.2	2.0	1.5	0.4	-0.8	0.3	-0.8
Euro area	6.5	5.5	4.8	4.5	3.6	0.3	0.2	0.3	-0.3
EU-15	8.1	6.9	6.0	5.6	4.5	0.3	0.2	0.3	-0.3
OECD	22.5	20.2	18.6	17.7	15.3	0.9	0.7	0.6	0.2
World (000s)	1 184 611	1 448 673	1 695 371	1 828 376	2 175 855	2.0	1.6	1.5	1.2
Women									
Brazil	1.9	2.3	3.1	3.2	3.4	4.3	4.6	2.6	1.7
China	29.8	31.0	29.7	28.5	24.1	2.9	1.2	0.9	0.1
India	9.9	9.9	9.9	10.2	11.1	2.5	1.6	2.2	1.8
Russian Federation	5.0	3.9	3.1	2.9	2.2	0.0	-0.8	0.8	-0.7
Euro area	5.9	5.4	5.3	5.2	4.5	1.6	1.4	1.3	0.3
EU-15	7.9	7.1	6.8	6.6	5.7	1.5	1.2	1.2	0.3
OECD	22.7	21.2	20.5	19.9	18.1	1.8	1.2	1.2	0.6
World (000s)	744 945	956 946	1 123 085	1 222 044	1 475 428	2.5	1.6	1.7	1.3

Source: ILO Economically active population estimates and projections (<http://laborsta.ilo.org/>).

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