

EDUARDO COSTA PINTO

---

**DEVELOPMENT AND HUMAN  
CAPABILITIES: CHALLENGES FOR THE  
BRIC**

Adjunct professor at the Economy Institute of the Federal University of Rio de Janeiro (UFRJ); former technical officer on planning and research at IPEA; PhD in Economy at UFRJ. E-mail: [eduardo.pinto@ie.ufrj.br](mailto:eduardo.pinto@ie.ufrj.br).



---

# DEVELOPMENT AND HUMAN CAPABILITIES: CHALLENGES FOR THE BRIC

EDUARDO COSTA PINTO

## 1. INTRODUCTION

The first decade of the 21<sup>st</sup> century was marked by a wide range of economic, political and social changes, ranging from changes in international geopolitics and the international division of production and labor, through the rise in international commodity prices, the fall in industrial products prices and the establishment of favorable terms of trade for developing countries (especially in Africa and Latin America) to the increase of mass consumption on a global scale, the reduction of absolute poverty and improvements in health and education in many developing countries.

Much of this transformation was due to the direct and indirect effects of social and economical dynamics of the emerging countries, notably Brazil, Russia, India and China. These four countries with large geographic and demographic dimensions, high economic potential and remarkable structural differences came to be known as BRIC, an acronym created in 2001 by the Goldman Sachs financial group to designate the countries destined to occupy increasingly relevant positions in the world economy.

The impressive economic growth of the BRIC countries in the 2000s, especially China and India – eleven years after Goldman Sachs' forecasts – leaves no doubt regarding the new leading role played by these countries in the international economy, especially after the international crisis of 2008, since the economies of the United States and Europe have been going through a long period of slow growth since then. Current signs

(in 2012) are far from encouraging for the core countries. Thus, BRIC will assume each day a greater participation in the global economy.

The recent economic boom in this group of countries, especially China, is undeniable. But has this economic growth reverted into human development?<sup>1</sup> In other words, has the advance of commodity production per capita in these countries worked as a means of improving the quality of people's lives?<sup>2</sup> Now, the intention here is not to answer this question in all its aspects because of the scope of this work, but it is important to make clear that economic growth is not necessarily accompanied by the advancement of human development.

Thus, this report aims to present broad outlines of economic and social dynamics (health, education, social infrastructure, income and poverty distribution, etc.) of BRIC countries throughout the 2000s in order to establish whether the economic growth observed work as a means for human development in these countries.

Besides this introduction, this paper is divided into 3 sections. The second one describes BRICs' economic and demographic trend throughout the 2000s, aiming at showing some particularities of the growth pattern in these countries as well as China's important role in the world economy producing structural changes. Section 3 attempts to discuss, in general terms, the evolution of the multiple dimensions (health, education, social infrastructure, and income and poverty distribution) of BRICs' human development early in the 21st century, noting that thousands of people got out of poverty. Finally, section 4 tries to tack some ideas as final

---

1 According to the UNDP (1990, p.10), human development "is a process of enlarging people's choices. In principle, these choices can be infinite and change over time. But at all levels of development, the three essential ones are for people to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living. If these essential choices are not available, many other opportunities remain inaccessible. But human development does not end there. Additional choices, highly valued by many people, range from political, economic and social freedom to opportunities for being creative and productive, and enjoying personal self-respect and guaranteed human rights".

2 Sen (1993, p. 03) states that the quality of human life "is itself a very complex issue". In his attempt to operationalize this concept, he uses the "capability approach [that] conceives human life as a set of 'activities' and 'ways of being' that we shall call 'efetivations. [Therefore, he] relates the judgment on the quality of life to the assessment of the ability to work or perform tasks". Thus, quality can only be achieved by building human capabilities.

considerations, in particular the main challenges that BRIC countries will have to face to build human capabilities.

Data and indicators used were extracted from the databases of the International Monetary Fund (IMF), the World Bank (WB) and the United Nations Development Programme (UNDP). For ease of explanation, we shall not present in the text all the data of the annual economic and social indicators of the BRIC countries in the 2000s. However, these can be observed in the statistical annex containing a detailed presentation of the annual evolution of the main economic and social statistics.

## **2. BRICs' DEMOGRAPHIC AND ECONOMIC DIMENSIONS: THE 2000s DYNAMICS**

BRICs' population accounted for 42.3% of the world population in 2011 (6,834,000,000 people), where Brazil, Russia, India and China had 195, 142, 1,207 and 1,348 million inhabitants, respectively.

Between 2000 and 2011, the proportion of the population aged 0-14 decreased significantly in Brazil, Russia, India and China (15.4%, 16%, 13% and 25%, respectively), whereas the proportions of the population grew in all countries of the BRIC for age cohorts of 15-64 years (4.5% in Brazil, 3.7% in Russia, 6.1% in India and 7.5% in China) and 65 years and over (29.5%, 2.8%, 18.1% and 19.5% in Brazil, Russia, India and China, respectively).

The evolution of these populations per age cohorts between 2000 and 2011 was the result of the decrease in BRIC fertility rate, with the exception of Russia (from 2.4 to 1.8 in Brazil, from 3.1 to 2.6 in India and from 1.7 to 1.6 in China), and the increase in life expectancy at birth (from 70.1 to 73.1 in Brazil, from 65.3 to 68.8 in Russia, from 61.6 to 65.1 in India and from 71.2 to 73.3 in China), since a fall in infant mortality was noted in all countries (44.6%, 50%, 23.1% and 42.1% for Brazil, Russia, India and China, respectively).

This demographic dynamic of reducing the younger age group will, in the coming years, lead the BRIC to a lower demand for primary education, whereas the increase of the 15-64 years age group will mean greater

pressure on the labor market (need to generate new jobs), as well as an increased demand for mid-level and higher education schools. The growth of the 65 years and over age group will result in the need to increase appropriate services to meet the needs of the elderly, in particular, social security, health and leisure. It should be noted that this greater demand is already observed today in Russia, which has the largest proportion of people over the age of 65 years (12.8% in 2011) among BRIC countries.

The potentially productive age group (15-64 years) increased at a greater rate than the economically dependent population (0-14 years and 60 years and over) in the BRIC countries between 2000 and 2011, thereby causing reductions in dependency ratios<sup>3</sup> from 54 to 47.4 in Brazil, 44.1 to 38.9 in Russia, from 63.8 to 54.3 in India and 48.1 to 37.8 in China. This means that, in these countries, there was a decrease in the participation of the potentially inactive population that has to be taken care of by the potentially productive ones. This demographic situation is a bonus when unemployment rates are at low levels, because almost all the potentially active population is employed, generating more goods and income at a time when the proportion of dependent population is smaller.

In addition to demographic changes, between 2000 and 2010, BRIC's population has been increasingly living in cities – except for Russia – due to the fast urbanization process as a result of higher economic growth – urbanization rates increased from 81.2% to 86.5% in Brazil, from 27.7% to 30.1% in India and from 35.8% to 44.9% in China, whereas in Russia the rate fell from 73.4% to 72.8 %.

The increased urbanization in Brazil, India and especially China is linked to economic advances. Between 2000 and 2011, with the exception of Brazil, the other three BRIC countries had economic growths well above world GDP growth (3.7% p.a. on average between 2000 and 2011). This generated a greater share of their economies in world GDP, which climbed from 8% in 2000 to 19.1% in 2011.

The economic growth of these countries combined with the reduction of their population growth, due to a decrease in fertility, provided a

---

3 Ratio between the population aged 0-14 years plus the 65 years and over and the 15-64 years population. This measures the relative share of the potentially inactive population that must be taken care of by the potentially productive population.

significant increase in the GDP per capita between 2000 and 2011, from US\$ 3,762 to US\$ 12,789 in Brazil, US\$ 1,775 to US\$ 12,993 in Russia, US\$ 465 to US\$ 1,389 in India and US\$ 946 to US\$ 5,414 in China. It should be noted that international comparisons by GDP per capita (in US\$) do not necessarily express the differences in terms of material prosperity, since this procedure does not include the different income and cost of living of each country. Thus, in order to analyze the evolution of material prosperity, it is necessary to use the concept of GDP per capita based on purchasing power parity (PPP).

Between 2000 and 2011, GDP per capita based on PPP grew on average 5% p.a. in Brazil (from US\$ 7,207 to US\$ 11,769), 10% p.a. in Russia (from US\$ 7,661 to US\$ 16,736), 12% p.a. in India (from US\$ 1,534 to US\$ 3,694) and 21% p.a. in China (from US\$ 2,379 to US\$ 8,382). This has been causing changes in consumption patterns in these countries, generating an increase in energy consumption, durables and non-durables goods and food. Despite this growth, per capita consumption of these products in the BRIC countries is still far from the consumption standards of developed countries.

Let us now briefly consider the economic dynamics of each BRIC country, highlighting the role that China plays in the current transformations of the world economy.

Throughout the 2000s, China continued its process of economic growth set since 1978 (10% GDP growth between 1980 and 2010). The difference from the last decade is that China's<sup>4</sup> rise in the world scenario is clear. Between 2000 and 2011, China's GDP increased by 10.2% p.a., household consumption grew 7.7% p.a. and investment hiked 12.5% p.a., producing a growth of Gross Fixed Capital Formation (GFCF) as a percentage of GDP (from 34.1% to 44.4%) and maintaining unemployment rates at low levels (around 4% over the decade). Even with this strong growth, average inflation was only 2.3% p.a. for the period.

According to Castro (2011), this increasing importance of the Chinese economy in the first decade of the 21<sup>st</sup> century has caused long-term structural changes in the world economic system, namely: i) an increase

---

4 China's share of global GDP (in current US dollars) increased from 1.8% in 1990 to 9.3% in 2010, becoming the world's second-biggest economy.

(and maintenance at high levels in recent historical terms) in the international commodity prices; ii) a reduction and/or stabilization of world prices of industrial products resulting from the competitive pressure of China's industrial production; iii) a maintenance of favorable terms of trade for commodity-exporting developing countries; and iv) an increase of world mass consumption due to the change in the relative price between manufactured parts and wages that is enabling access to industrial products to segments of the world population that previously lived at subsistence levels.

These changes were due to the new double-pole role played by China. In the first pole, it has established itself as the leading global producer and exporter of information technology (IT) and labor-intensive and technology-intensive industrial consumer goods, becoming the "world's factory". On the other pole, it appears as a large consumer market for the world production of high technology machinery and equipment, notably from Germany, Japan and Korea, as well as for the production of commodities (oil, minerals, agricultural products, etc.), becoming a net importer from Asia, Africa and Latin American countries (MEDEIROS, 2006).

It should be noted that the conditions for China's growth in the last decade – but also in the 1980s and 1990s – were associated with external<sup>5</sup> and internal determinants led by a new national strategy, focused on economic growth, reforms and industrial modernization, which grew out of reforms that started in 1978 by its main proponent Deng Xiaoping (PINTO, 2011).

The Chinese reforms and opening strategies, which began in 1978 and were scaled-up in 1992, produced two articulated growth-driving axes in this country. On one hand, the export dynamics fostered by the establishment of special economic zones – which worked as export processing zones – and the exchange-rate policy (keeping the Yuan undervalued when compared to the dollar); and, on the other hand, the internal dyna-

---

5 The main external determinants of the economic miracle were: i) the approach between the United States and China initiated in 1978; ii) the U.S. trade offensive against Japan through the Plaza Accord in 1985; iii) the rise of China in the WTO in November 2001; and iv) the establishment of the Sino-American axis in the 2000s. For a detailed discussion, please see Pinto (2011).



mics driven by the growth of gross fixed capital formation, particularly public investment in infrastructure.

In the 2000s, Brazil went through its largest growth cycle of the past three decades. Between 2000 and 2011, GDP grew by 3.6% per year, almost twice the growth observed between 1980 and 1999, and household consumption and investment (GFCF) rose by 3.9% and 4.5% p. a. respectively, leading to an increased GFCF as a percentage of GDP (16.8% to 19.3%) and a sharp reduction in the unemployment rate (from 11.3% to 6.7%).

The macroeconomic results of the decade showed different dynamics between 2003-06 and 2007-10. In the first period, Brazilian growth was strongly boosted by external dynamics both directly (increase in goods and services exports – growth of 13.2% p.a. between 2000 and 2011) and indirectly (increase in the investments of export sectors). The reduction of external constraints and the GDP growth in the period were linked to favorable international changes (due to the “China effect”) which generated an extraordinary boom in the prices of commodities that Brazil exported and a reduction of the manufactured products and capital goods imported by the country (PINTO, 2010).

In the second period (2007-10), the favorable external dynamics adds up to the internal market growth, which resulted from the flexibilization of the economic policy’s contractionary orientation, thus creating an economic growth supported by investments and household consumption (average growth of 2007 and 2010 was 10.5% and 5.8%, respectively), which seems to have created, as from 2006, a mass consumption coordinating growth and income distribution. The real raise on minimum wage and the magnification of income transfer programs were the two main factors to the increase of Brazilian household consumption (PINTO, 2010).

In addition to income and distributive policies, the internal market expansion was driven by expansionary credit policies (credit expanded from 26.1% of GDP to 45.2% of GDP between December 2003 and December 2010) and measures to combat international crisis.

The 2000s in Russia were marked by the recovery of its State, which had been unstructured through Boris Yeltsin’s liberal reforms in the 1990s – leading to the destruction of State power and the emergence of large mafias and oligarchies –, and the affirmation of a nationalist project based

on the export of natural resources (primarily oil and gas) and the increase and internationalization of Russian domestic market. The institutional and economic recovery of Russia enabled a significant economic growth (MEDEIROS, 2011; NOZAKI et al., 2011). The Russian GDP grew on average 5.3% p.a. between 2000 and 2011 – despite the 7.8% sharp fall in 2009 due to the international crisis – and household consumption and investment (GFCF) hiked 10.1% and 9.6% p.a. on average, respectively. This dynamic led to an increase of GFCF as a percentage of GDP (from 16.9% to 23.1%) and a significant drop in the unemployment rate (from 10.6% to 7.4%).

The Russian economic expansion was primarily generated by the dynamics of the export sector (exports rose 6.1% p.a. between 2000 and 2011), mainly oil and gas, regarding their effects in reducing external vulnerability and the investments driven by companies in this energy sector. Medeiros (2011, p. 34) says that “the country’s greater control of oil revenues and of the financial system enabled the increase – albeit without essentially changing the growth pattern [primary exporter] – of the export sector’s boost for the whole economy”.

Like Brazil, Russia benefited from the international transformations arising from the “China effect”, which provided a strong rise in prices of oil and gas exported by the Russians and a fall in prices of imported manufactured products.

Despite advances, the international crisis of 2008, with its strong effects on the Russian economy, highlighted the difficulty to sustain increased income and consumption based on Russia’s current primary exporter standard and scaled-up government technological and industrial modernization initiatives (MEDEIROS, 2011; POMEROZ, 2011).

As in other BRIC countries, India also experienced a favorable economic performance over the 2000s. Between 2000 and 2011, Indian GDP grew 7.3% p.a. on average, household consumption rose 6.5% p.a. on average, inflation remained under control (roughly 6.3% on average) and unemployment rate was below 5%.

The Indian economic expansion was produced by increased investments (9.8% p.a. on average between 2000 and 2011) and exports of goods

and services (15% p.a. on average between 2000 and 2011), notably in services related to information technology.

The cause of this Indian economic performance is a matter of widespread controversy in the economic literature. On the one hand, it is argued that the recent course would be a result of the liberalizing reforms implemented in the 1990s, which would have created efficiency and competitiveness in exports. On the other hand, it is argued that such greater dynamism is the result of the reforms taken place in the 1980s and the increased presence of the State (PRATES; CINTRA, 2009; VIEIRA; VERISSIMO, 2009).

According to Vieira & Verissimo (2009), India's positive result stems from the following factors: "i) continuity of reforms initiated in the 1980s to provide increased productivity in the economy; ii) growth-oriented and job creation-oriented macroeconomic policy; and iii) a long-term strategic vision, keeping the State's planning and presence".

Economic data does not cast any doubts on the economic gains of BRIC countries, but have these countries progressed towards human development?

### **3. HUMAN DEVELOPMENT IN ITS MULTIPLE DIMENSIONS (EDUCATION, HEALTH, SOCIAL INFRASTRUCTURE, AND INCOME AND POVERTY DISTRIBUTION) IN THE BRIC COUNTRIES: THOUSANDS OF PEOPLE THAT OVERCAME MISERY**

In order to achieve human development, economic growth (measured by GDP growth per capita) should be a means to enrich people's lives by creating an environment of increased freedoms enabling people to enjoy long, healthy and creative lives. Thus, human development can only be measured and analyzed from a collection of information about the freedoms that people enjoy and the way people live (SEN, 1993; UNDP, 2010).

The main measure used to verify the level and evolution of countries' human development is the Human Development Index (HDI)<sup>6</sup>, calculated by the UNDP/United Nations, which is an indicator of the three basic dimensions of human development, namely: long and healthy life (life expectancy at birth), access to knowledge (average years of schooling and expected years of schooling) and an income level (GNI per capita in PPP \$, 2005) that enables a life of dignity.

In 2011, Russia was the highest-ranked country in the HDI ranking (66<sup>th</sup>; HDI = 0.718) among BRIC countries, followed by Brazil (84<sup>th</sup>; HDI = 0.755), China (101<sup>st</sup>; HDI = 0.678) and India (134<sup>th</sup>; HDI = 0.547). Despite Russia's best ranking, it was the only country among the BRIC that lost a position in the HDI ranking between 2000 and 2011 (from 65<sup>th</sup> to 66<sup>th</sup>) even with an annual average HDI growth of 0.81%. The HDI growth of Brazil (0.69%), India (1.56%) and China (1.43%) improved their HDI rankings between 2000 and 2011 (going from 87<sup>th</sup> to 84<sup>th</sup>, 135<sup>th</sup> to 134<sup>th</sup> and 106<sup>th</sup> to 101<sup>st</sup>, respectively), whereas Russia fell one spot from 65<sup>th</sup> to 66<sup>th</sup> (Table 1). One of the explanatory factors of the Russian decline was associated with the non-income HDI aspect.

**Table 1. HDI's trend in the BRIC – 2000-2011**

|               | Human Development in 2011 | IDH ranking |      | Human Development Index (HDI) (value) |       | HDI annual average growth (%) |
|---------------|---------------------------|-------------|------|---------------------------------------|-------|-------------------------------|
|               |                           | 2000        | 2011 | 2000                                  | 2011  | 2000-2011                     |
| <b>Brazil</b> | High                      | 87          | 84   | 0.665                                 | 0.718 | 0.69                          |
| <b>Russia</b> | High                      | 65          | 66   | 0.691                                 | 0.755 | 0.81                          |
| <b>India</b>  | Average                   | 135         | 134  | 0.461                                 | 0.547 | 1.56                          |
| <b>China</b>  | Average                   | 106         | 101  | 0.588                                 | 0.678 | 1.43                          |

Source: UNDP.

6 The index ranges from 0 (no human development) to 1 (full human development). Countries are divided into HDI groups: very high, high, medium and low, based on the HDI quartiles of the group of 187 countries. This HDI ranking of a country is given as follows: very high when HDI is in the top quartile; high when HDI is in the 51-75percentiles; medium when HDI is in the 26-50 percentiles; and low when HDI is in the bottom quartile. The ranking previously used absolute limits rather than relative ones (UNDP, 2010).

Despite Russia's drop, HDI's positive trend in BRIC countries shows an improvement in the quality of life of these populations. Other human development indicators, which are not HDI components, must also be presented to analyze more specifically the evolution of the quality of life of these people. Here are some indicators.

In education (access to knowledge), which is considered a basic training that affects development and increase of other training, Russia is the most advanced country in BRIC while India is the most backward one. The literacy percentage of the youth population (15-24 years) and the adults (15 years and above) increased in all of the BRIC countries over the 2000s<sup>7</sup>, and Russia was the country that almost had an illiterate-free situation at young people and adult levels.

Besides the reduction of illiteracy, there was a significant increase in access to pre-primary, secondary and university education on the part of the population of BRIC countries in the 2000's (see Table 3 attached). In Brazil and Russia, access to primary and secondary education was practically universalized. The difference is that access to pre-primary and higher education (89.9% and 75.9% of the population, respectively) in Russia is much higher than that observed in Brazil. In the case of India, only access to primary education was universalized, while access to other education (pre-primary, secondary and higher) is still very limited, below world average. In China, access to primary education was universalized and is growing fast to other educational levels (pre-primary, secondary and higher), especially in higher education, where the gross enrollment ratio rose from 8% in 2000 to 25.9% in 2010 (see Table 3 attached).

The increased access to education in BRIC countries was not necessarily accompanied by the improvement in the quality of local education. Brazil is the negative example, since the universalization of primary and secondary education occurred without implying a quality<sup>8</sup> improvement

---

7 The youth literacy rate rose from 94.2% in 2000 to 97.8% in 2008 in Brazil; remained at 99.7% in 2002 and 2009 in Russia; from 76.4% in 2001 to 81.1% in 2006 in India; and from 98.9% in 2000 to 99.4% in 2009 in China. The adult literacy rate has grown as follows: from 86.4% in 2000 to 90% in 2008 in Brazil; from 99.4% in 2002 to 99.6% in 2009 in Russia; from 61% in 2001 to 62.8% in 2006 in India; and from 90.9% in 2000 to 94% in 2009 in China.

8 In the last assessment in 2009 of the Programme for International Student Assessment (PISA) of OECD for students aged 15 years, Brazil ranked 53<sup>rd</sup> among the 65 participating countries.

and a reduction of obstacles in the transition between the different stages of education. This is evidenced by the high repetition rates of Brazilian primary and secondary education students in relation to the other BRIC countries (see Table 3 attached).

It is worth noting that Brazil had higher expenditure on education (% GDP) than Russia, that has an educational system of better quality than the Brazilian one according to international assessments – such as the Programme for International Student Assessment (PISA) of OECD,. The positive example comes from China, that has been able to increase access to education by expanding its quality, ranking in first place at PISA's assessment in 2009.

Regarding health, there have been significant improvements in the indicators selected for BRIC countries between 2000 and 2010. The rates of infant and maternal mortality dropped significantly, DPT immunization increased and the incidence of tuberculosis dropped in all countries of the group (see Table 4 attached). Moreover, life expectancy at birth in all BRIC countries rose between 2000 and 2010 (4.2% in Brazil, 5.3% in Russia, 5.7% in India and 2.9% in China).

The social infrastructure of the BRIC countries has also expanded significantly in the 2000s. However, it should be noted that the proportion of India's population with access to infrastructure is still very low. In 2009, almost 100% of the Brazilian and Chinese population had access to electricity, while only 66.3% of India's population had electricity. As regards to access to drinking water, 90% of the BRIC population had access to this benefit in 2010. The access of the BRIC population to sanitary facilities rose between 2000 and 2010, with the exception of Russia (from 74% to 79% in Brazil, from 72% to 70% in Russia, from 25% to 34% in India and from 44% to 64% in China) (see Table 5 attached).

Income distribution showed different patterns throughout the 2000s in the BRIC countries. Brazil improved its income distribution between 1999 and 2009 but still maintains high levels of concentration<sup>9</sup>.

---

9 The income of the richest 10% compared to the poorest 10% was 87.1 times higher in 1999 and fell to 55.5 times in 2009, while the average income of the richest 20% compared to the poorest 20% was 29 times higher in 1999 and was reduced to 20.6 times in 2009.

Russia stabilized its income distribution between 1999 and 2009<sup>10</sup> and had lower levels of income concentration. India's available data do not allow to check the evolution of income distribution over the 2000s, however income details of the 10% and 20% richest and poorest in India in 2005 enables us to infer that this country has the highest level of income distribution among the BRIC countries. In China, income distribution worsened between 1999 and 2005, however low levels of income concentration<sup>11</sup> are still noted.

The reduction of income poverty observed within the BRIC<sup>12</sup> was quite impressive in the 2000s, especially in China. Between 2000 and 2009, the percentage of the Brazilian population earning less than US\$ 2 a day (PPP) fell from 21.3% to 10.8%, meaning that 15.6 million people now earn more than this. In India, the share of the population earning less than US\$ 2 a day (PPP) between 2005 and 2010 fell from 75.6% to 68.7%, meaning that 22.1 million Indians went on to earn over US\$ 2 a day (PPP). Despite the improvement, the level of income poverty in India is still very high (almost 70% of the population in 2010). Between 2000 and 2008, the share of the Chinese population earning less than US\$ 2 a day (PPP) fell from 61.4% to 29.8% and so 381.1 million Chinese were out of poverty. This equates to double the Brazilian population leaving the condition of poverty in just eight years. This is an impressive positive situation.

#### 4. FINAL CONSIDERATIONS

The general lines of economic and social evolution of the BRIC countries over the 2000s presented in this report showed that the economic growth in this group worked as an important element to improve the quality of life of these populations, since both the HDI as other selec-

---

10 The average income of the richest 10% was 11.3 times greater than that of the poorest 10% in 1999 and rose to 11.5 times in 2009, while the income of the richest 20% was 7.1 times greater than the poorest 20% and increased to 7.3 times in 2009.

11 The average income of the richest 10% compared to the poorest 10% was 10.9 times greater in 1999 and rose to 17.9 times in 2005, while the average income of the richest 20% compared to the poorest 20% was 7.2 times greater in 1999 and increased to 9.6 times in 2009.

12 The available databases had no information about the reduction of income poverty in Russia.

ted indicators showed an improvement in human development in these countries.

The improvement of BRIC's education indicators (reduction of illiteracy, gross enrollment ratio increase, etc.) enhances the increase of one of the basic capabilities of their population: access to knowledge, which in itself has an intrinsic value and also enables the development of other capabilities. Beyond this dimension, the population's health positive evolution, as evidenced by the information presented, also provides the majority of the population with a longer and healthier life, increasing its ability to work and perform duties.

The fact that nearly 418.8 million people overcame absolute poverty (who earned less than US\$ 2 a day (PPP)) in Brazil, India and China was one of the most important advances in human development in these countries, because poverty, as stated by Sen (1993), is the deprivation of capabilities that impedes equal opportunities, highly hindering the establishment of the substantive freedom that people should have to pursue their goals.

It should be noted that many of the advances observed in this group of countries are still confined to the basic workings of the quality of life of people – or in a schematic language of capabilities “[...] to the vector of commodities, where are found the means of achieving ” (BARDEN, 2009, p. 42) –, and thus it is necessary to advance much more with respect to the working vector of capabilities, which signifies the spaces (public and private freedom spaces) where freedoms to accomplish or perform tasks in order to obtain the achievements (vector of accomplished functionings) are located (BARDEN, 2009).

China, for instance, was the BRIC country that advanced more in terms of basic operations; however, it was the country that increased less public and private freedoms spaces by virtue of its institutional structure of power marked by hierarchical chains of single party and prohibitions of any kind of expression (cultural, political, artistic, etc.) that might go against the order established by the Chinese Communist Party (CCP).

In India – which is the largest liberal democracy on the planet in terms of population –, the population still faces enormous basic depriva-



tions that are even associated with the rigid social hierarchy of caste which creates inferior human beings.

Russian population is undoubtedly the one with the highest level of basic capabilities because of their advances in education, health and income distribution – still part of the heritage of the former Soviet Union –, but still presents difficulties in building free public and private spaces. This difficulty can be evidenced by two recent events in Russian history: i) the full private appropriation of public spaces during the liberal reforms of the 1990s; and ii) the sharp reduction of free private spaces from the restructuring of the Russian State in the 2000s during the government of Vladimir Putin.

The Brazilian population is perhaps the one that has the largest space (public and private) of freedoms among the BRIC countries; however it still has profound basic deficits, despite recent advances in income distribution, in the issue of the quality of the education and access to quality healthcare.

The challenges BRIC will have to face to advance human development are enormous. Some steps have already been taken, but the road is long and full of hairpin bends. It is necessary to move forward in the analysis of complex connections between economic growth and human development of each BRIC country. This was not possible here due to the scope of this work.

## BIBLIOGRAPHY

BARDEN, J. **Indicador social para o Rio Grande do Sul: uma análise a partir da abordagem das capacidades**. 2010. Tese (Doutorado em Economia) - Programa de Pós-Graduação em Economia (PPGE), Universidade Federal do Rio Grande do Sul, Rio Grande do Sul.

MEDEIROS, C. A China como um duplo pólo na economia mundial e a recentralização da economia asiática. **Revista de Economia Política**, São Paulo, v. 26, n. 3, p. 577-594, jul./set. 2006.

MEDEIROS, C. A economia política da transição na Rússia. In: ALVES, A. **Uma longa transição: vinte anos de transformação na Rússia**. Brasília: Ipea, 2011.

NOZAKI, W.; LEÃO, R.; MARTINS, A. A ascensão chinesa e a nova geopolítica e geoeconomia das relações sino-russas. In: LEÃO, R.; PINTO, E.; ACIOLY, L. (Orgs.) **A China na nova configuração global**. Brasília: Ipea, 2011.

PINTO, E. **Bloco no Poder e Governo Lula: grupos econômicos, política econômica e novo eixo sino-americano**. 2010. Tese (Doutorado em Economia) - Instituto de Economia, Universidade Federal do Rio de Janeiro, Rio de Janeiro.

\_\_\_\_\_. O eixo sino-americano e as transformações do sistema mundial: tensões e complementaridades comerciais, produtivas e financeiras. In: LEÃO, R.; PINTO, E.; ACIOLY, L. (Orgs.). **A China na nova configuração global**. Brasília: Ipea, 2011.

POMERANZ, L. Rússia: mudanças na estratégia de desenvolvimento. In: ALVES, A. **Uma longa transição: vinte anos de transformação na Rússia**. Brasília: Ipea, 2011.

PRATES, D.; CINTRA, M. Índia: a estratégia de desenvolvimento – da independência aos dilemas da primeira década do século XXI. In: CARDOSO, J.; ACIOLY, L.; MATIJASCIC, M. (Orgs.) **Trajetórias recentes de desenvolvimentos**. Brasília: Ipea, 2009.

PROGRAMA DAS NAÇÕES UNIDAS PARA O DESENVOLVIMENTO HUMANO - (PNUD). **Relatório de Desenvolvimento Humano 2010: Edição do 20º Aniversário**. New York: Oxford University, 2011.

SEN, A. O desenvolvimento como expansão de capacidades. São Paulo: Lua Nova, 1993.

UNITED NATIONS FOR DEVELOPMENT PROGRAM – UNDP. **Human Development Report 1990**. New York: Oxford University, 1991.

VIEIRA, F.; VERISSIMO, M. Crescimento econômico em economias emergentes selecionadas: Brasil, Rússia, Índia, China (BRIC) e África do Sul. **Economia e Sociedade**, Campinas, v. 18, n. 3, dez. 2009.

## ATTACHMENTS

**Table 1. Gross Domestic Product (GDP) and Demography – BRIC and world**

| Variables  | Countries | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   |
|--|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| GDP Variation (%)  | Brazil    | 4.3    | 1.3    | 2.7    | 1.1    | 5.7    | 3.2    | 4.0    | 6.1    | 5.2    | -0,3   | 7.5    | 2.7    |
|  | Russia    | 10.0   | 5.1    | 4.7    | 7.3    | 7.2    | 6.4    | 8.2    | 8.5    | 5.2    | -7,8   | 4.3    | 4.3    |
|  | India     | 5.2    | 3.9    | 4.6    | 6.9    | 7.6    | 9.0    | 9.5    | 10.0   | 6.2    | 6.6    | 10.6   | 7.2    |
|  | China     | 8.4    | 8.3    | 9.1    | 10.0   | 10.1   | 11.3   | 12.7   | 14.2   | 9.6    | 9.2    | 10.4   | 9.2    |
|  | World     | 4.7    | 2.4    | 2.9    | 3.7    | 4.9    | 4.5    | 5.2    | 5.4    | 2.8    | -0,6   | 5.3    | 3.9    |
| GDP per Capita (US\$)  | Brazil    | 3,762  | 3,190  | 2,867  | 3,085  | 3,654  | 4,787  | 5,869  | 7,281  | 8,704  | 8,472  | 11,089 | 12,789 |
|  | Russia    | 1,775  | 2,106  | 2,380  | 2,984  | 4,120  | 5,348  | 6,962  | 9,153  | 11,704 | 8,617  | 10,408 | 12,993 |
|  | India     | 465    | 467    | 481    | 549    | 630    | 729    | 807    | 1,009  | 1,081  | 1,068  | 1,342  | 1,389  |
|  | China     | 946    | 1,038  | 1,132  | 1,270  | 1,486  | 1,726  | 2,064  | 2,645  | 3,404  | 3,739  | 4,421  | 5,414  |
|  | World     | 5,410  | 5,307  | 5,448  | 6,047  | 6,716  | 7,138  | 7,637  | 8,513  | 9,239  | 8,615  | 9,296  | 10,193 |
| GDP per capita based on purchasing power parity (billion US\$) | Brazil    | 1,234  | 1,279  | 1,334  | 1,378  | 1,495  | 1,585  | 1,701  | 1,857  | 1,996  | 2,010  | 2,187  | 2,294  |
|  | Russia    | 1,121  | 1,205  | 1,282  | 1,404  | 1,547  | 1,697  | 1,894  | 2,116  | 2,276  | 2,121  | 2,237  | 2,383  |
|  | India     | 1,571  | 1,669  | 1,774  | 1,935  | 2,157  | 2,431  | 2,749  | 3,111  | 3,377  | 3,637  | 4,070  | 4,458  |
|  | China     | 3,015  | 3,339  | 3,701  | 4,158  | 4,698  | 5,364  | 6,240  | 7,330  | 8,214  | 9,066  | 10,128 | 11,300 |
|  | World     | 42,293 | 44,235 | 46,215 | 48,876 | 52,658 | 56,794 | 61,638 | 66,755 | 70,030 | 70,139 | 74,604 | 78,897 |
| GDP per capita based on purchasing power parity (US\$)         | Brazil    | 7,207  | 7,358  | 7,563  | 7,698  | 8,231  | 8,603  | 9,164  | 9,894  | 10,526 | 10,498 | 11,314 | 11,769 |
|  | Russia    | 7,661  | 8,273  | 8,842  | 9,737  | 10,779 | 11,882 | 13,322 | 14,899 | 16,040 | 14,945 | 15,657 | 16,736 |
|  | India     | 1,534  | 1,599  | 1,673  | 1,798  | 1,973  | 2,190  | 2,441  | 2,724  | 2,916  | 3,098  | 3,419  | 3,694  |
|  | China     | 2,379  | 2,616  | 2,881  | 3,217  | 3,614  | 4,102  | 4,747  | 5,548  | 6,185  | 6,792  | 7,550  | 8,382  |
|  | World     | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      |
| Population (millions)  | Brazil    | 171    | 174    | 176    | 179    | 182    | 184    | 186    | 188    | 190    | 191    | 193    | 195    |
|  | Russia    | 146    | 146    | 145    | 144    | 144    | 143    | 142    | 142    | 142    | 142    | 143    | 142    |
|  | India     | 1,024  | 1,044  | 1,060  | 1,076  | 1,093  | 1,110  | 1,126  | 1,142  | 1,158  | 1,174  | 1,191  | 1,207  |
|  | China     | 1,267  | 1,276  | 1,285  | 1,292  | 1,300  | 1,308  | 1,314  | 1,321  | 1,328  | 1,335  | 1,341  | 1,348  |
|  | World     | 5,971  | 6,047  | 6,123  | 6,199  | 6,274  | 6,384  | 6,461  | 6,541  | 6,620  | 6,705  | 6,785  | 6,834  |

| Variables  | Countries | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| Urban population (as a % of total)   | Brazil    | 81.2 | -    | -    | -    | -    | 84.2 | -    | -    | -    | -    | 86.5 | -    |
|  | Russia    | 73.4 | -    | -    | -    | -    | 72.9 | -    | -    | -    | -    | 72.8 | -    |
|  | India     | 27.7 | -    | -    | -    | -    | 28.7 | -    | -    | -    | -    | 30.1 | -    |
|  | China     | 35.8 | -    | -    | -    | -    | 40.4 | -    | -    | -    | -    | 44.9 | -    |
|  | World     | 46.6 | 47.0 | 47.4 | 47.8 | 48.2 | 48.6 | 49.0 | 49.4 | 49.9 | 50.3 | 50.7 | -    |
| Population aged 0-14 years (as a % of total)                                 | Brazil    | 29.5 | 29.1 | 28.7 | 28.3 | 27.9 | 27.5 | 27.1 | 26.7 | 26.3 | 25.9 | 25.5 | 25.0 |
|  | Russia    | 18.2 | 17.5 | 16.8 | 16.1 | 15.5 | 15.1 | 14.8 | 14.7 | 14.7 | 14.9 | 15.0 | 15.3 |
|  | India     | 34.7 | 34.3 | 33.9 | 33.4 | 33.0 | 32.6 | 32.2 | 31.8 | 31.4 | 31.0 | 30.6 | 30.2 |
|  | China     | 25.5 | 24.8 | 24.1 | 23.3 | 22.5 | 21.9 | 21.3 | 20.7 | 20.3 | 19.9 | 19.5 | 19.1 |
|  | World     | 30.2 | 29.8 | 29.4 | 29.0 | 28.6 | 28.2 | 27.9 | 27.6 | 27.3 | 27.1 | 26.8 | 26.6 |
| Population aged 15-64 years (as a % of total)                                | Brazil    | 64.9 | 65.3 | 65.5 | 65.8 | 66.0 | 66.2 | 66.5 | 66.7 | 67.0 | 67.3 | 67.5 | 67.8 |
|  | Russia    | 69.4 | 69.9 | 70.3 | 70.6 | 70.9 | 71.2 | 71.5 | 71.8 | 72.0 | 72.2 | 72.2 | 72.0 |
|  | India     | 61.1 | 61.4 | 61.8 | 62.1 | 62.5 | 62.8 | 63.2 | 63.5 | 63.9 | 64.2 | 64.5 | 64.8 |
|  | China     | 67.5 | 68.0 | 68.7 | 69.3 | 70.0 | 70.6 | 71.1 | 71.5 | 71.8 | 72.1 | 72.4 | 72.6 |
|  | World     | 62.9 | 63.2 | 63.5 | 63.9 | 64.2 | 64.5 | 64.8 | 65.0 | 65.2 | 65.4 | 65.6 | 65.7 |
| Population aged 65 years and over (as a % of total)                          | Brazil    | 5.6  | 5.7  | 5.8  | 6.0  | 6.1  | 6.3  | 6.4  | 6.5  | 6.7  | 6.8  | 7.0  | 7.2  |
|  | Russia    | 12.4 | 12.7 | 13.0 | 13.3 | 13.6 | 13.8 | 13.7 | 13.5 | 13.2 | 13.0 | 12.8 | 12.8 |
|  | India     | 4.2  | 4.3  | 4.4  | 4.4  | 4.5  | 4.6  | 4.7  | 4.7  | 4.8  | 4.9  | 4.9  | 5.0  |
|  | China     | 7.0  | 7.1  | 7.2  | 7.4  | 7.5  | 7.6  | 7.7  | 7.8  | 7.9  | 8.0  | 8.2  | 8.4  |
|  | World     | 6.9  | 7.0  | 7.0  | 7.1  | 7.2  | 7.3  | 7.3  | 7.4  | 7.5  | 7.5  | 7.6  | 7.7  |
| Dependency ratio (pop. 0-14 years plus 65 years and over / pop. 15-64 years) | Brazil    | 54.0 | 53.3 | 52.6 | 52.1 | 51.6 | 51.0 | 50.4 | 49.9 | 49.3 | 48.7 | 48.0 | 47.4 |
|  | Russia    | 44.1 | 43.1 | 42.3 | 41.7 | 41.1 | 40.5 | 39.9 | 39.3 | 38.8 | 38.5 | 38.6 | 38.9 |
|  | India     | 63.8 | 62.8 | 61.9 | 61.0 | 60.6 | 59.1 | 58.3 | 57.4 | 56.6 | 55.8 | 55.1 | 54.3 |
|  | China     | 48.1 | 47.0 | 45.6 | 44.2 | 42.9 | 41.7 | 40.7 | 39.9 | 39.2 | 38.7 | 38.2 | 37.8 |
|  | World     | 60.3 | 59.5 | 58.7 | 57.9 | 57.1 | 56.4 | 55.8 | 55.2 | 54.7 | 54.2 | 53.8 | 53.5 |

Source: IMF and World Bank.

**Table 2. Macroeconomic data – BRIC and world**

| Variables                                  | Countries     | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009  | 2010 | 2011 |
|--|---------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| <b>GDP Variation (%)</b>                   | <b>Brazil</b> | 4.3  | 1.3  | 2.7  | 1.1  | 5.7  | 3.2  | 4.0  | 6.1  | 5.2  | -0,3  | 7.5  | 2.7  |
|  | <b>Russia</b> | 10.0 | 5.1  | 4.7  | 7.3  | 7.2  | 6.4  | 8.2  | 8.5  | 5.2  | -7,8  | 4.3  | 4.3  |
|  | <b>India</b>  | 5.2  | 3.9  | 4.6  | 6.9  | 7.6  | 9.0  | 9.5  | 10.0 | 6.2  | 6.6   | 10.6 | 7.2  |
|  | <b>China</b>  | 8.4  | 8.3  | 9.1  | 10.0 | 10.1 | 11.3 | 12.7 | 14.2 | 9.6  | 9.2   | 10.4 | 9.2  |
|  | <b>World</b>  | 4.7  | 2.4  | 2.9  | 3.7  | 4.9  | 4.5  | 5.2  | 5.4  | 2.8  | -0,6  | 5.3  | 3.9  |
| <b>Consumer inflation (%)</b>              | <b>Brazil</b> | 7.0  | 6.8  | 8.5  | 14.7 | 6.6  | 6.9  | 4.2  | 3.6  | 5.7  | 4.9   | 5.0  | 6.0  |
|  | <b>Russia</b> | 20.8 | 21.5 | 15.8 | 13.7 | 10.9 | 12.7 | 9.7  | 9.0  | 14.1 | 11.7  | 6.9  | 8.4  |
|  | <b>India</b>  | 3.9  | 3.7  | 4.5  | 3.7  | 3.9  | 4.0  | 6.3  | 6.4  | 8.3  | 10.9  | 12.0 | 8.6  |
|  | <b>China</b>  | 0.4  | 0.7  | -0,8 | 1.2  | 3.9  | 1.8  | 1.5  | 4.8  | 5.9  | -0,7  | 3.3  | 5.4  |
|  | <b>World</b>  | 4.5  | 4.2  | 3.5  | 3.7  | 3.6  | 3.7  | 3.7  | 4.0  | 6.0  | 2.5   | 3.7  | 4.8  |
| <b>Investment variation (GFCF) (%)</b>     | <b>Brazil</b> | 5.0  | 0.4  | -5,2 | -4,6 | 9.1  | 3.6  | 9.8  | 13.9 | 13.6 | -6,7  | 21.3 | 4.7  |
|  | <b>Russia</b> | 18.1 | 10.3 | 2.8  | 13.9 | 12.6 | 10.6 | 18.0 | 21.0 | 10.6 | -14,4 | 6.1  | 5.3  |
|  | <b>India</b>  | -1,4 | 15.3 | -0,4 | 10.6 | 24.0 | 16.2 | 13.8 | 16.2 | 3.5  | 6.8   | 7.5  | 5.5  |
|  | <b>China</b>  | 10.0 | 9.1  | 13.2 | 16.4 | 11.6 | 11.6 | 12.4 | 13.1 | 9.7  | 22.5  | 11.4 | 9.2  |
| <b>Investment (GFCF) (% of GDP)</b>        | <b>Brazil</b> | 16.8 | 17.0 | 16.4 | 15.3 | 16.1 | 15.9 | 16.4 | 17.4 | 19.1 | 18.1  | 19.5 | 19.3 |
|  | <b>Russia</b> | 16.9 | 18.9 | 17.9 | 18.4 | 18.4 | 17.8 | 18.5 | 21.0 | 22.3 | 22.0  | 21.8 | 23.1 |
|  | <b>India</b>  | 22.8 | 25.1 | 23.8 | 24.6 | 28.7 | 30.3 | 31.3 | 32.9 | 32.3 | 31.6  | 30.4 | 29.5 |
|  | <b>China</b>  | 34.1 | 34.4 | 36.3 | 39.4 | 40.7 | 40.1 | 40.7 | 39.1 | 40.8 | 46.0  | 45.4 | 44.4 |
| <b>Household consumption variation (%)</b> | <b>Brazil</b> | 4.0  | 4.0  | 0.7  | 1.9  | -0,8 | 3.8  | 4.5  | 8.5  | 4.4  | 4.4   | 6.9  | 4.1  |
|  | <b>Russia</b> | 7.2  | 9.3  | 8.3  | 7.5  | 12.1 | 11.7 | 12.0 | 14.2 | 10.5 | -4,8  | 3.0  | 29.6 |
|  | <b>India</b>  | 3.4  | 6.0  | 2.9  | 5.9  | 5.6  | 8.5  | 8.7  | 9.2  | 7.1  | 7.0   | 8.1  | 5.5  |
|  | <b>China</b>  | 7.6  | 5.8  | 6.6  | 6.5  | 7.4  | 6.2  | 8.8  | 10.5 | 8.3  | 9.1   | 5.8  | 9.9  |



| Variable   | Countries | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  |
|--|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Adult literacy rate (% of people aged 15 years and over) | Brazil    | 86.4  | -     | -     | -     | 88.6  | -     | 89.6  | 90.0  | 90.0  | -     | -     |
|  | Russia    | -     | -     | 99.4  | -     | -     | -     | -     | -     | -     | 99.6  | -     |
|  | India     | -     | 61.0  | -     | -     | -     | -     | 62.8  | -     | -     | -     | -     |
|  | China     | 90.9  | -     | -     | -     | -     | -     | -     | -     | -     | 94.0  | -     |
|  | World     | 81.8  | -     | -     | -     | -     | -     | -     | -     | -     | -     | 84.0  |
| Pre-primary education gross enrollment rate              | Brazil    | 60.4  | 65.3  | 54.6  | 67.2  | 64.0  | 69.2  |       |       |       |       |       |
|  | Russia    | 74.5  | 80.7  | 83.3  | 84.1  | 85.3  | 86.6  | 88.2  | 89.5  | 89.9  | 89.9  |       |
|  | India     | 23.8  | 24.7  | 28.3  | 32.3  | 34.0  | 39.0  | 39.7  | 47.2  | 53.8  | 53.6  | 54.8  |
|  | China     | 38.3  | 37.9  | 34.9  | 35.4  |       |       | 39.6  | 42.3  | 45.2  | 49.0  | 53.9  |
|  | World     | 34.1  | 34.6  | 34.7  | 36.2  | 37.1  | 39.6  | 40.9  | 43.2  | 45.6  | 46.6  | 48.3  |
| Primary education gross enrollment rate                  | Brazil    | 150.7 | 148.5 | 146.4 | 142.2 | 141.0 | 136.7 |       |       |       |       |       |
|  | Russia    | 103.1 | 106.3 | 114.4 | 122.0 |       | 96.6  | 96.5  | 96.6  | 97.6  | 98.6  |       |
|  | India     | 93.8  | 93.6  | 94.1  | 102.1 | 110.5 | 112.5 | 112.8 | 113.7 | 116.0 |       |       |
|  | China     |       | 113.8 | 114.6 | 115.0 |       |       | 110.0 | 110.2 | 110.9 | 111.1 | 111.2 |
|  | World     | 99.3  | 99.5  | 100.5 | 102.5 | 104.5 | 105.1 | 105.2 | 106.0 | 106.9 | 105.7 | 106.0 |
| Secondary education gross enrollment rate                | Brazil    | 104.4 | 107.2 | 110.0 | 102.3 | 106.0 | 105.8 |       |       |       |       |       |
|  | Russia    |       |       |       | 91.6  | 85.4  | 83.1  | 83.3  | 84.7  | 86.0  | 88.6  |       |
|  | India     | 45.3  | 45.5  | 47.3  | 49.8  | 51.4  | 53.9  | 54.7  | 57.0  | 60.2  | 59.5  | 63.2  |
|  | China     | 62.1  | 63.3  | 64.4  | 66.8  |       |       | 73.2  | 76.1  | 78.5  | 80.1  | 81.2  |
|  | World     | 60.1  | 60.9  | 62.0  | 63.2  | 64.2  | 65.0  | 65.8  | 67.2  | 68.5  | 69.0  | 70.4  |
| Higher education gross enrollment rate                   | Brazil    | 16.1  | 17.8  | 20.1  | 22.3  | 23.8  | 25.6  |       |       |       |       |       |
|  | Russia    | 55.4  | 61.2  | 66.5  | 66.3  | 70.2  | 72.2  | 72.3  | 73.5  | 74.7  | 75.9  |       |
|  | India     | 9.4   | 9.6   | 10.2  | 10.7  | 11.1  | 10.8  | 11.6  | 13.3  | 15.2  | 16.2  | 17.9  |
|  | China     | 8.0   | 10.1  | 12.8  | 15.4  | 17.7  | 19.4  | 21.1  | 21.9  | 22.4  | 24.3  | 25.9  |
|  | World     | 19.1  | 20.1  | 21.5  | 22.5  | 23.5  | 24.1  | 24.9  | 25.9  | 27.0  | 28.1  | 29.2  |

| Variable  | Countries | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Primary education repeaters (% of total enrollments)          | Brazil    | 25.0 | 21.5 | 20.6 | 20.0 | 20.1 | 18.7 | -    | -    | -    | -    | -    |
|   | Russia    | 1.2  | 1.1  | 0.9  | 0.8  | -    | -    | 0.6  | 0.5  | 0.4  | 0.4  | -    |
|   | India     | 4.2  | 3.7  | 3.6  | 3.6  | 3.2  | 3.4  | 3.4  | 3.4  | 3.4  | -    | -    |
|   | China     | -    | -    | 0.3  | 0.3  | -    | -    | 0.3  | 0.2  | 0.3  | 0.3  | 0.3  |
|   | World     | 5.3  | 5.1  | 5.0  | 4.9  | 4.7  | 4.8  | 4.8  | 4.8  | 4.8  | 4.8  | 4.7  |
| Secondary education repeaters (% of total enrollments)        | Brazil    | 18.3 | 18.0 | 17.4 | 19.3 | 21.9 | 21.1 | -    | -    | -    | -    | -    |
|   | Russia    |      | 0.9  | 0.8  | 0.7  | 0.7  | 0.6  | 0.5  | 0.4  | 0.4  | 0.4  | -    |
|   | India     | 4.2  | 4.8  | 4.8  | 4.8  | 4.7  | 4.7  | 4.7  | -    | -    | -    | -    |
|   | China     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
|   | World     | -    | -    | -    | 4.2  | -    | -    | -    | -    | -    | -    | -    |
| Public expenditure on education (% of government expenditure) | Brazil    | 12.0 | 11.3 | 10.8 | -    | 12.3 | 14.5 | 16.2 | 16.1 | 17.4 | 16.8 | -    |
|   | Russia    | 10.6 | 11.5 | 10.7 | 12.3 | 12.9 | -    | -    | -    | 11.9 | -    | -    |
|   | India     | 12.7 | -    | -    | 10.7 | -    | -    | -    | -    | -    | -    | -    |
|   | China     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
|   | World     | 14.1 | 13.8 | 14.4 | 15.1 | 14.3 | 14.6 | 14.8 | 14.4 | 15.6 | -    | -    |
| Public expenditure on education (% of GDP)                    | Brazil    | 4.0  | 3.9  | 3.8  | -    | 4.0  | 4.5  | 5.0  | 5.1  | 5.4  | 5.7  | -    |
|   | Russia    | 2.9  | 3.1  | 3.8  | 3.7  | 3.5  | 3.8  | 3.9  | -    | 4.1  | -    | -    |
|   | India     | 4.4  | -    | -    | 3.7  | 3.4  | 3.1  | 3.1  | -    | -    | -    | -    |
|   | China     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
|   | World     | 4.0  | 4.3  | 4.3  | 4.4  | 4.3  | 4.4  | 4.5  | 4.4  | 4.6  | -    | -    |

Source: IMF and World Bank.



**Table 4. Health – BRIC and world**

| Variable   | Countries | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  |
|--|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Child mortality rate (per 1,000 live births)                         | Brazil    | 31.2  | 29.4  | 27.8  | 26.2  | 24.8  | 23.3  | 22.0  | 20.8  | 19.6  | 18.4  | 17.3  |
|  | Russia    | 18.2  | 17.2  | 16.2  | 15.2  | 14.2  | 13.2  | 12.2  | 11.4  | 10.6  | 9.8   | 9.1   |
|  | India     | 62.7  | 61.1  | 59.6  | 58.0  | 56.4  | 54.9  | 53.5  | 52.1  | 50.8  | 49.5  | 48.2  |
|  | China     | 27.3  | 25.9  | 24.6  | 23.4  | 22.2  | 21.0  | 19.9  | 18.9  | 17.8  | 16.8  | 15.8  |
|  | World     | 52.0  | 50.8  | 49.7  | 48.6  | 47.4  | 46.2  | 45.1  | 44.0  | 43.0  | 41.9  | 41.2  |
| Maternal mortality rate (national estimate, per 100,000 live births) | Brazil    | -     | 64.0  | -     | 72.0  | 75.9  | 53.4  | -     | 75.0  | -     | -     | -     |
|  | Russia    | 39.7  | 36.5  | 33.6  | 31.9  | 23.4  | 25.4  | 23.8  | 22.0  | 20.7  | -     | 17.0  |
|  | India     | -     | -     | -     | 301.0 | -     | -     | 250.0 | -     | -     | -     | -     |
|  | China     | -     | -     | -     | 51.0  | -     | 47.7  | 41.1  | 36.6  | 34.2  | 32.0  | -     |
|  | World     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| DPT immunization (% of children aged 12-23 months)                   | Brazil    | 98.0  | 98.0  | 99.0  | 98.0  | 96.0  | 96.0  | 97.0  | 97.0  | 98.0  | 98.0  | 98.0  |
|  | Russia    | 96.0  | 96.0  | 96.0  | 97.0  | 97.0  | 98.0  | 99.0  | 98.0  | 98.0  | 98.0  | 97.0  |
|  | India     | 62.0  | 60.0  | 58.0  | 61.0  | 64.0  | 67.0  | 66.0  | 70.0  | 72.0  | 72.0  | 72.0  |
|  | China     | 85.0  | 86.0  | 86.0  | 86.0  | 87.0  | 87.0  | 93.0  | 93.0  | 97.0  | 99.0  | 99.0  |
|  | World     | 74.5  | 74.5  | 73.8  | 75.4  | 77.4  | 79.3  | 80.3  | 82.1  | 83.2  | 84.8  | 85.1  |
| Incidence of tuberculosis (per 100,000 inhabitants)                  | Brazil    | 60.0  | 58.0  | 57.0  | 55.0  | 53.0  | 51.0  | 50.0  | 48.0  | 46.0  | 45.0  | 43.0  |
|  | Russia    | 122.0 | 118.0 | 112.0 | 107.0 | 106.0 | 107.0 | 107.0 | 107.0 | 107.0 | 106.0 | 106.0 |
|  | India     | 216.0 | 216.0 | 215.0 | 214.0 | 212.0 | 209.0 | 205.0 | 201.0 | 196.0 | 190.0 | 185.0 |
|  | China     | 109.0 | 105.0 | 102.0 | 98.0  | 95.0  | 92.0  | 89.0  | 86.0  | 83.0  | 80.0  | 78.0  |
|  | World     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| Fertility rate, total (births per woman)                             | Brazil    | 2.4   | 2.3   | 2.3   | 2.2   | 2.1   | 2.1   | 2.0   | 1.9   | 1.9   | 1.9   | 1.8   |
|  | Russia    | 1.2   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.4   | 1.5   | 1.5   | 1.5   |
|  | India     | 3.1   | 3.1   | 3.0   | 2.9   | 2.9   | 2.8   | 2.8   | 2.7   | 2.7   | 2.7   | 2.6   |
|  | China     | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.6   | 1.6   | 1.6   | 1.6   |
|  | World     | 2.7   | 2.6   | 2.6   | 2.6   | 2.6   | 2.5   | 2.5   | 2.5   | 2.5   | 2.5   | 2.5   |

| Variable                                | Countries | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Life expectancy at birth, total (years) | Brazil    | 70.1 | 70.4 | 70.7 | 71.0 | 71.3 | 71.5 | 71.8 | 72.1 | 72.4 | 72.8 | 73.1 |
|   | Russia    | 65.3 | 65.5 | 65.1 | 65.0 | 65.4 | 65.5 | 66.6 | 67.5 | 67.8 | 68.6 | 68.8 |
|   | India     | 61.6 | 62.0 | 62.3 | 62.7 | 63.0 | 63.4 | 63.7 | 64.1 | 64.4 | 64.8 | 65.1 |
|   | China     | 71.2 | 71.4 | 71.6 | 71.8 | 72.0 | 72.2 | 72.4 | 72.6 | 72.8 | 73.1 | 73.3 |
|   | World     | 67.2 | 67.4 | 67.6 | 67.8 | 68.1 | 68.3 | 68.6 | 68.9 | 69.1 | 69.4 | 69.6 |
| Hospital beds (per 1,000 people)        | Brazil    | -    | -    | 2.6  | -    | -    | 2.4  | -    | -    | -    | 2.4  | 2.4  |
|   | Russia    | 10.9 | 10.8 | -    | 10.5 | 9.9  | 9.7  | 9.7  | -    | -    | -    | -    |
|   | India     | -    | -    | 0.7  | 0.9  | -    | 0.9  | -    | -    | -    | -    | -    |
|   | China     | 2.5  | 2.5  | 2.5  | 2.2  | 3.0  | 2.5  | 2.2  | -    | -    | 4.2  | -    |
|   | World     | -    | -    | 2.6  | -    | -    | 2.9  | -    | -    | -    | -    | -    |
| Doctors (per 1,000 people)              | Brazil    | 1.2  | -    | -    | -    | -    | -    | 1.7  | 1.7  | 1.8  | -    | -    |
|   | Russia    | 4.2  | 4.2  | 4.0  | 4.3  | 4.0  | 4.0  | 4.3  | -    | -    | -    | -    |
|   | India     | -    | -    | -    | -    | 0.6  | 0.6  | -    | -    | -    | 0.6  | -    |
|   | China     | 1.6  | 1.1  | 1.6  | 1.4  | -    | 1.5  | -    | -    | -    | 1.4  | -    |
|   | World     | -    | -    | -    | -    | -    | -    | -    | -    | -    | 1.4  | 1.4  |
| Public expenditure on health (% of GDP) | Brazil    | 2.9  | 3.1  | 3.2  | 3.1  | 3.4  | 3.3  | 3.5  | 3.5  | 3.7  | 4.1  | -    |
|   | Russia    | 3.2  | 3.3  | 3.5  | 3.3  | 3.1  | 3.2  | 3.3  | 3.5  | 3.1  | 3.5  | -    |
|   | India     | 1.3  | 1.3  | 1.2  | 1.2  | 0.9  | 0.9  | 1.1  | 1.2  | 1.4  | 1.4  | -    |
|   | China     | 1.8  | 1.6  | 1.7  | 1.8  | 1.8  | 1.8  | 1.8  | 1.9  | 2.0  | 2.3  | -    |
|   | World     | 5.3  | 5.6  | 5.7  | 5.8  | 5.8  | 5.7  | 5.7  | 5.6  | 5.7  | 6.1  | -    |
| Total expenditure on health (% of GDP)  | Brazil    | 7.2  | 7.3  | 7.2  | 7.0  | 7.1  | 8.2  | 8.5  | 8.5  | 8.3  | 8.8  | 9.0  |
|   | Russia    | 5.4  | 5.6  | 6.0  | 5.6  | 5.2  | 5.2  | 5.3  | 5.4  | 4.8  | 5.6  | 5.1  |
|   | India     | 4.6  | 4.8  | 4.8  | 4.6  | 4.1  | 4.0  | 4.0  | 4.0  | 4.0  | 4.2  | 4.1  |
|   | China     | 4.6  | 4.6  | 4.8  | 4.8  | 4.7  | 4.7  | 4.6  | 4.4  | 4.6  | 5.1  | 5.1  |
|   | World     | 9.2  | 9.6  | 10.0 | 9.9  | 9.8  | 9.7  | 9.9  | 9.8  | 9.8  | 10.6 | 10.4 |

Source: IMF and World Bank.

**Table 5. Social infrastructure – BRIC and world**

| <b>Variables</b>   | <b>Countries</b> | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|------------------|------|------|------|------|------|------|------|------|------|------|------|
| <b>Access to electrical power (% of total population)</b>    | <b>Brazil</b>    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 98.3 | -    |
|  | <b>Russia</b>    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
|  | <b>India</b>     | -    | -    | -    | -    | -    | -    | -    | -    | -    | 66.3 | -    |
|  | <b>China</b>     | -    | -    | -    | -    | -    | -    | -    | -    | -    | 99.4 | -    |
|  | <b>World</b>     | -    | -    | -    | -    | -    | -    | -    | -    | -    | 74.1 | -    |
| <b>Access to sanitary facilities (% of total population)</b> | <b>Brazil</b>    | 74.0 | 74.0 | 75.0 | 76.0 | 76.0 | 76.0 | 78.0 | 78.0 | 78.0 | 78.0 | 79.0 |
|  | <b>Russia</b>    | 72.0 | 72.0 | 71.0 | 71.0 | 71.0 | 71.0 | 71.0 | 71.0 | 71.0 | 71.0 | 70.0 |
|  | <b>India</b>     | 25.0 | 26.0 | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 31.0 | 32.0 | 33.0 | 34.0 |
|  | <b>China</b>     | 44.0 | 46.0 | 49.0 | 51.0 | 53.0 | 55.0 | 57.0 | 59.0 | 61.0 | 63.0 | 64.0 |
|  | <b>World</b>     | 55.6 | 56.3 | 57.3 | 58.1 | 59.0 | 59.7 | 60.5 | 61.1 | 61.5 | 62.1 | 62.5 |
| <b>Access to drinking water (% total population)</b>         | <b>Brazil</b>    | 94.0 | 94.0 | 94.0 | 95.0 | 95.0 | 96.0 | 96.0 | 97.0 | 97.0 | 97.0 | 98.0 |
|  | <b>Russia</b>    | 95.0 | 95.0 | 95.0 | 95.0 | 96.0 | 96.0 | 97.0 | 97.0 | 97.0 | 97.0 | 97.0 |
|  | <b>India</b>     | 81.0 | 82.0 | 83.0 | 85.0 | 85.0 | 86.0 | 88.0 | 89.0 | 90.0 | 91.0 | 92.0 |
|  | <b>China</b>     | 80.0 | 82.0 | 83.0 | 84.0 | 85.0 | 87.0 | 87.0 | 89.0 | 89.0 | 90.0 | 91.0 |
|  | <b>World</b>     | 82.5 | 83.3 | 83.9 | 84.6 | 85.0 | 85.8 | 86.3 | 87.1 | 87.4 | 87.9 | 88.4 |

Source: World Bank.

**Table 6. Poverty and income distribution – BRIC**

| Variables  | Countries | 1999  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|-----------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Share in the income of the 10% poorest   | Brazil    | 0.58  | -    | 0.5  | 0.6  | 0.6  | 0.7  | 0.7  | 0.7  | 0.7  | 0.8  | 0.8  | -    |
|  | Russia    | 2.48  | -    | 2.5  | 2.8  | 2.7  | 2.7  | 2.7  | 2.3  | 2.4  | 2.6  | 2.8  | -    |
|  | India     | -     | -    | -    | -    | -    | -    | 3.8  | -    | -    | -    | -    | -    |
|  | China     | 2.73  | -    | -    | 2.3  | -    | -    | 1.8  | -    | -    | -    | -    | -    |
| Share in the income of the 20% poorest   | Brazil    | 2.2   | -    | 2.07 | 2.29 | 2.27 | 2.51 | 2.76 | 2.64 | 2.77 | 2.87 | 2.85 | -    |
|  | Russia    | 6.22  | -    | 6.1  | 6.9  | 6.6  | 6.6  | 6.5  | 5.7  | 5.7  | 6.0  | 6.5  | -    |
|  | India     | -     | -    | -    | -    | -    | -    | 8.6  | -    | -    | -    | -    | -    |
|  | China     | 6.39  | -    | -    | 5.5  | -    | -    | 5.0  | -    | -    | -    | -    | -    |
| Share in the income of the 20% richest   | Brazil    | 63.78 | -    | 63.9 | 63.4 | 62.4 | 60.9 | 61.4 | 60.9 | 59.8 | 59.0 | 58.6 | -    |
|  | Russia    | 44.05 | -    | 46.2 | 42.9 | 44.3 | 44.1 | 44.4 | 48.4 | 50.0 | 48.9 | 47.1 | -    |
|  | India     | -     | -    | -    | -    | -    | -    | 42.4 | -    | -    | -    | -    | -    |
|  | China     | 46.1  | -    | -    | 48.6 | -    | -    | 47.9 | -    | -    | -    | -    | -    |
| Share in the income of the 10% richest   | Brazil    | 47.38 | -    | 47.7 | 46.8 | 46.3 | 45.4 | 45.5 | 44.7 | 43.8 | 43.3 | 42.9 | -    |
|  | Russia    | 27.94 | -    | 30.4 | 27.1 | 28.6 | 28.2 | 28.6 | 32.4 | 34.5 | 33.5 | 31.7 | -    |
|  | India     | -     | -    | -    | -    | -    | -    | 28.3 | -    | -    | -    | -    | -    |
|  | China     | 29.72 | -    | -    | 31.7 | -    | -    | 32.0 | -    | -    | -    | -    | -    |
| Share of the population earning less than US\$ 2 a day (PPP) (% of the population) | Brazil    | 21.32 | -    | 21.7 | 20.2 | 20.6 | 18.6 | 16.6 | 14.4 | 13.2 | 11.3 | 10.8 | -    |
|  | Russia    | -     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
|  | India     | -     | -    | -    | -    | -    | -    | 75.6 | -    | -    | -    | -    | 68.7 |
|  | China     | 61.44 | -    | -    | 51.2 | -    | -    | 36.9 | -    | -    | 29.8 | -    | -    |

Source: World Bank.