

What is the Future of Higher Education in the BRIC countries? A Demographic perspective

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Abstract

In regards to Higher Education (HE) development and reform, recent and projected evidence suggest that growth in enrollment is likely to be slower (or even negative) as a result of ageing populations. The case of BRIC countries is particularly interesting for the study of the impact of demographic changes in HE, since they exhibit considerable diversity in regards to their demographic transition. This paper explores how would demographic changes affect the demand for higher education in BRIC countries. We argue that these countries are now facing a great expansion in enrollments, but given declining fertility levels, diversification of the HE clientele will become a common strategy among these countries. However, equity in HE in the near future will depend on how HE systems are and will be structured in these countries.

Keywords: Higher Education, Demographic Transition, BRIC countries

Área Temática: Demografia

WHAT IS THE FUTURE OF HIGHER EDUCATION IN THE BRIC COUNTRIES? A DEMOGRAPHIC PERSPECTIVE

Introduction

Global demographic transition has transformed the economic and demographic life cycles of individuals, and rearranged populations in ways not imagined 100 years ago (Lee 2003; Kirk 1996). Demography, thus, has become an object of interest in many areas, such as Economics and Health. In Education, population changes are also a central issue. Despite its importance, there is limited interest among demographic researchers in the specific area of Higher Education (HE) development and reform. Meanwhile, among education researchers, the impact of the current and future demographic changes on higher education has not been deeply explored.

Since student flows and composition are largely influenced by demographic trends, changes in population dynamics have become a central issue in educational policy planning (Hüfner 1981; Willekens 2008). Considering the pace and magnitude of population changes, it can be predicted that developed countries will face a stagnation (or even a decline) in HE participation among the relevant age group (18-24) in the long run.

Recent and projected evidence suggest that, in most developed societies, growth in enrollment is likely to be slower (or even negative) as a result of ageing populations and, thus, clientele (college students) will tend to be older and more diverse than in the past (Murdock and Hoque 1999; Hüfner 1981; Trow 1976; Vincent-Lancrin 2008). Therefore, this scenario might challenge HE institutions (HEI): they will be increasingly attempting to halt the fall in enrollments by diversifying their intake and provision (Vincent-Lancrin 2008).

In the developing world, the case of BRIC countries is particularly interesting for the study of the impact of demographic changes in HE. Brazil, Russia, India and China accounted in 2010 for 42% of the world's population and approximately 30% of the world's land mass (World Bank 2011). Nevertheless, these countries exhibit considerable diversity in regards to the stage and pace of their demographic transition: of these four countries, only Russia is experiencing an absolute population decline; whereas the other countries are still going through population growth, despite a clear tendency towards zero or negative population growth in the future (United Nations 2011).

Therefore, it is urgent to ask: How would demographic changes affect the demand for higher education in BRIC countries? With such changes, will clientele in HE systems become more diverse in terms of their ethnicity and socioeconomic status? What are the challenges that BRIC countries can expect to face in the short- and long-term given population changes? This paper aims to answer these questions. The discussion about the impact of demographic trends in HE systems is important because it has implications for the capacity of the BRIC countries to sustain their economic growth and also to advance the social development of their populations.

This study is divided in four parts: The first section presents the state of the relationship between demographics and Higher Education; the second briefly surveys the current and prospective population characteristics in the BRIC countries; the third discusses the implications of population changes for HE systems in BRIC countries; the fourth section concludes the evidence of this paper.

Demographics and their Impact on Higher Education: the state of the art

Demographics and their Impact on HE Participation Rates

Many factors can be considered as decisive for determining HE participation rates: both the anticipated levels and rates of student enrollment depend upon various factors which determine the individual demand (Hüfner 1981). One of the major factors is the labor market prospects for future individual university graduates is determined by means of rate of return calculations (Carnoy 2011a). Also, decisive factors that affect demand for education include: changing occupational structure, student interests and motivations, rates of unemployment among youth and even cultural forces such as the women's movement (Trow 1976). However, in this paper I argue that Demography also plays an important role in determining future trends in HE, despite the fact that few studies have considered this.

Ceteris paribus, demography directly affects higher education enrollment because the size of younger age cohorts (18-24 years) helps determine the number of college students. However, this relationship between population growth and higher education enrollment levels is not as direct as it seems. The HE enrollment rate also depends on the different entry rates, survival rates, the distribution of admissions among relevant groups and the average length of studies (Vincent-Lancrin 2008).

With the convergence of demographic trends worldwide towards low fertility rates and high life expectancy, it can be predicted that most societies will face a decrease in the usual age-cohort population that attends college, that is, the 18-24 age group (United Nations 2011). Meanwhile, migration flows will perform a key role in determining participation rates in HE. International student mobility has been increasing steadily and is predicted to continue to grow further (Marmolejo, Manley-Casimir, and Vincent-Lancrin 2008). However, the equity implications are clear: the future flow of college students mobility between rich and poor countries will heavily depend in the overall quality of HE institutions in poor countries compared to that in rich countries (Ritzen, 2006).

Besides the increasingly importance of flows of migrant students, demographic trends in developed countries and their impact on the 18-24 age group have not translated themselves into decrease in numbers of HE students, because diversification in participation compensated for decreasing population trends. Therefore, as a response to a decline in the tertiary school-age population, future HE strategies will consider a more diverse clientele (Murdock and Hoque 1999; Hüfner 1981; Trow 1976; Vincent-Lancrin 2008). Non-traditional learners (particularly older individuals, women and lower-middle class youth) and international students will play a key role in the HE systems of many developed countries (Altbach et al. 2009). Thus, a relevant demographic aspect for studying upcoming trends in HE enrollments would be the changing composition of the student population by gender, age and socioeconomic group, and not only the effects of a declining population.

Demographics and diversification of Higher Education Clientele

Demographic changes should be understood not merely as quantitative, but as also related to the composition of population. Overall, recent and projected changes in population dynamics suggest that, in most societies, growth in enrollment is likely to be slower (Murdock and Hoque 1999; Hüfner 1981; Trow 1976; Vincent-Lancrin 2008). In response to this, HEI will be engaged in much more active efforts to recruit non-traditional students of all kinds. Among

countries who are already experiencing reduction in the college cohort size, such as Japan and Korea, one strategy of HEIs has been to attempt to halt the fall in enrollments by diversifying their intake and provision (Vincent-Lancrin 2008).

In spite of this tendency to broaden the access of different population groups to the HE level, challenges arise when minorities are incorporated into the system: in most cases, these students do not have equal access to high-quality institutions compared to elite students and also their graduation probabilities are lower than traditional students (Carnoy 2011c; Altbach et al. 2009). Therefore, inclusion of underrepresented groups in HE systems will require that these systems are capable of effectively recruiting, minimizing retention, providing remediation, and developing fundraising strategies (Murdock and Hoque 1999; Carnoy 2011c).

In sum, I argue that, despite the fact that there is a global trend towards the decrease in the regular college-age population (18-24 years) due to fertility transitions, demography still plays a central role in providing insights for HE policy planning due to compositional effects.

Specifically in the case of the BRIC countries, future trends in participation rates and the diversification of student population are a central issue, since these countries are still experiencing a fast demographic transition, except for Russia. In the next section I present relevant demographic indicators that will shape the future demand for HE in these countries.

Demographic and HE indicators for the BRIC countries: current and future trends

In this section I will briefly describe the main demographic trends in the BRIC countries that are relevant for understanding the future challenges for HE systems: fertility rates; age structure; dependency ratios; female labor force participation; number of students; and school life expectancy at the tertiary level. Despite the increasing importance of migration flows of international students and its potential for determining future trends of HE system in BRIC countries, this issue will not be explored in this paper. There are two main reasons for ignoring student migration flows. First, due to the difficulty of getting comparable and accurate data for BRIC countries for many points in time. Second, because projection of future migration flows are subject to a high degree of uncertainty.

Fertility trends

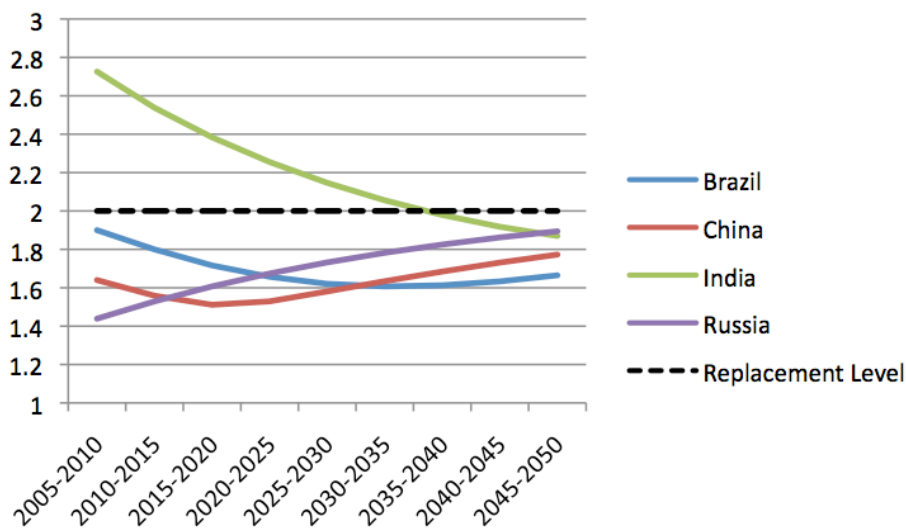
In terms of future population trends of countries still in the process of demographic transition, the central role of fertility rates is well recognized by demographers, since they are the most relevant factor for explaining changes in age distribution during demographic transition (Notestein, Grauman, and Taeuber 1960).

Among the BRIC countries, Russia has followed the most discrepant and singular trajectory in terms of its fertility trends. Russian fertility pattern has been characterized by a low and sustainable level and by irregular fluctuations in birth rates (Kharkova and Andreev 2000). Unlike Russia, Brazil, India and China share a similar pattern of fertility changes since 1950s. The case of India reveals a fast fertility transition alongside a large regional difference in fertility decline (das Gupta and Mari Bhat 1997). In Brazil, the onset of fertility transition occurred in the late 60's, and has become rapid and widespread among Brazilian regions. As a result, Brazil has started a sustained process of population aging (Carvalho and Garcia 2003). In turn, the Chinese fertility transition can be viewed as a special case: the country experienced a sharp decline in fertility within a relatively short time period. This is regarded as a result of an 'induced

fertility transition', made possible through the strong intervention of the government towards family planning activities since 1970, as well as a result of a fast socioeconomic development (Tien 1984).

By 2050, BRIC countries will have fertility transitions below the replacement level. Figure 1 shows projected Total Fertility Rates (TFR) for the BRIC countries until 2050¹. Estimates from 2010-2015 onwards are provided by United Nations Projections (United Nations 2011). Among the BRIC countries, India is the only that does not have currently low fertility levels, but projections suggest that it will face a rapid fertility decline. Despite some recovery tendency of fertility levels for Brazil and China, and also despite a slight increase for Russia, all the countries are expected to have TFR below the replacement level by 2050. If held constant for a long period of time, this fertility pattern will lead to a declining population size.

Figure 1: Total Fertility Rates (TFR) for the BRIC countries. 2010-2050. UN Medium Variant.



Shifts in age structure

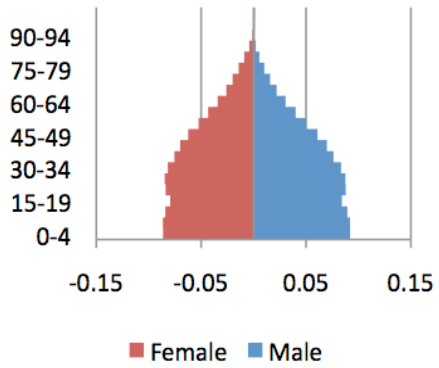
Alongside fertility transition, changes in the age distribution can be considered one of the most relevant population indicators for predicting future impact in HE. At the first stages of the fertility transition, the number of children decreases but the share of the working-age population increases due to past high levels of fertility (Lee and Mason 2009). Therefore, changes in age distribution are relevant for HE systems, since this temporary increase in working-age population impacts positively the demand for HE, *ceteris paribus*.

By 2050, BRIC countries will become increasingly aged. Figure 2 shows the share of population in each age group, according to sex, for the BRIC countries in 2010 and 2050 (UN Medium Variant projection estimates). Graphics are presented on the same scale to ensure comparability. In terms of the population pyramids, an ageing population is recognized by its straight basis and rectangular format. In 2010, India had the youngest population from the BRIC countries, with many children and few elderly: this gave India's age distribution a true pyramidal shape. Brazil had the second youngest population, and the base of its population pyramid shrank

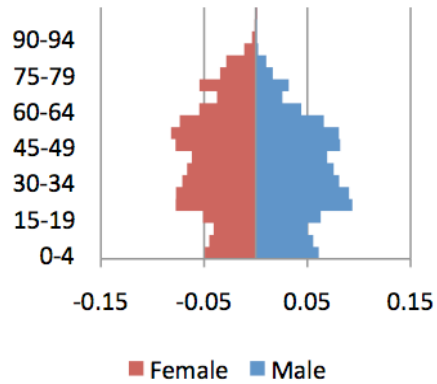
¹ The Total Fertility Rate is the average number of children a woman would bear over the course of her lifetime if current age-specific fertility rates remained constant throughout her childbearing ages.

as the number of working-age individuals increased relative to children and the elderly. For China and Russia, this decrease in the young and child age groups was already clear in 2010. In 2050, all the BRIC countries will have ageing populations.

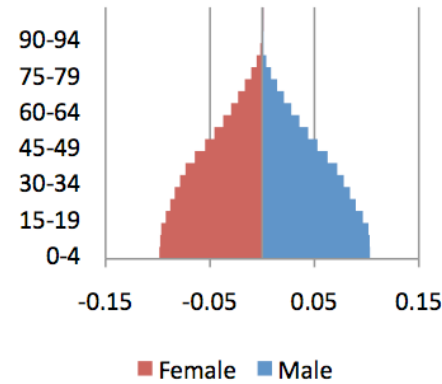
Figure 2: Age composition of BRIC countries: 2010 and 2050



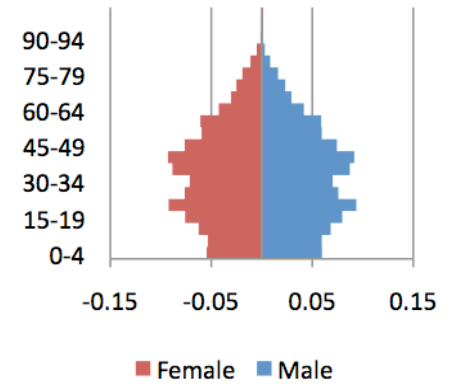
(a) Brazil, 2010



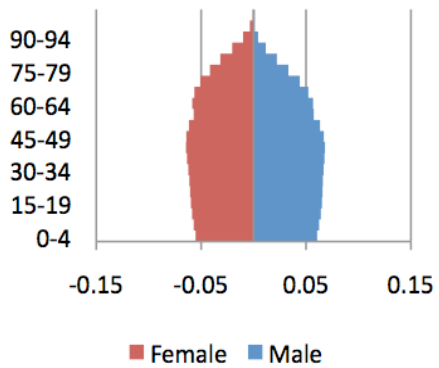
(b) Russia, 2010



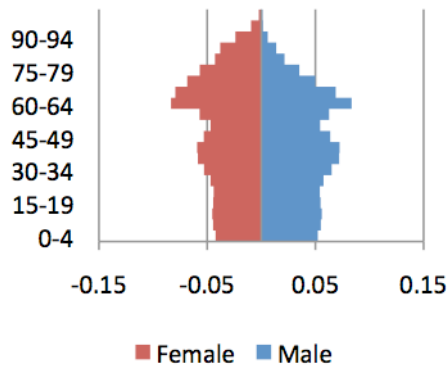
(c) India, 2010



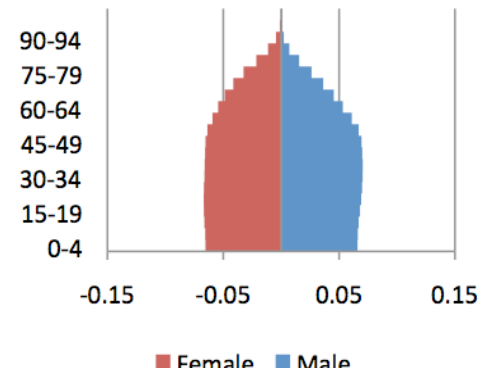
(d) China, 2010



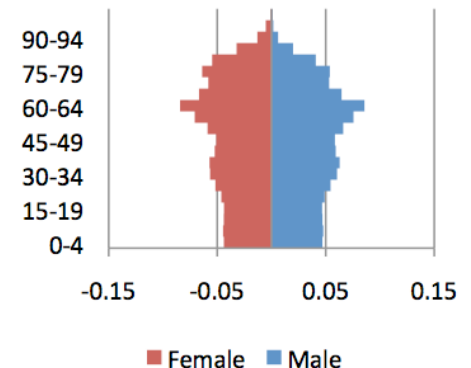
(e) Brazil, 2050



(f) Russia, 2050



(g) India, 2050



(h) China, 2050

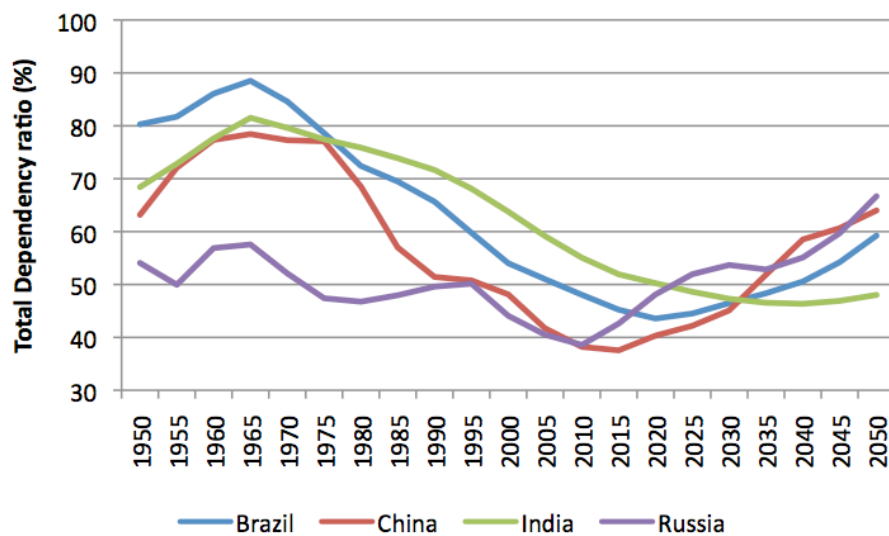
Source: UN Data - United Nations Population Division, 2010 Revision

Dependency ratios

As I previously claimed, BRIC countries will undergo significant changes in their age distributions by 2050 towards ageing populations. Another important demographic indicator for future trends in HE is the Total Dependency Ratio. This indicator consists of the ratio between the number of dependents (elderly and children) and the number of working-age adults (Lee 2003). The fall in dependency ratios as a result of fertility transition is called *demographic dividend*, since it creates opportunities for investment in economic development and human capital (Bloom et al. 2003). In terms of HE conjectures, the decrease in the dependency ratio that occurs during demographic transition can be seen as a unique opportunity for governments to invest heavily in education and promote economic growth.

Not all the BRIC countries will be able to take advantage of the fall in dependency ratios to promote high investments in education. Figure 3 presents the total dependency ratios for the BRIC countries from 2010 and estimations for 2050 provided by the United Nations (Medium Variant). The demographic dividend is illustrated by a decrease in the dependency ratio. When this indicator reaches its lower level, the demographic dividend reaches the maximum, that is, the lowest number of dependents (children and elderly) per working-age adult. It is clear that, from the BRIC countries, only India will be still facing a demographic dividend by 2050. The demographic dividend is projected to last in Brazil until 2020 and until 2015 in China, when dependency ratios start to increase. The demographic dividend has ended in Russia by 2010, and now this country will present increasing dependency ratios.

Figure 3: Total Dependency Ratio for BRIC countries: 2010 to 2050. UN Medium Variant.



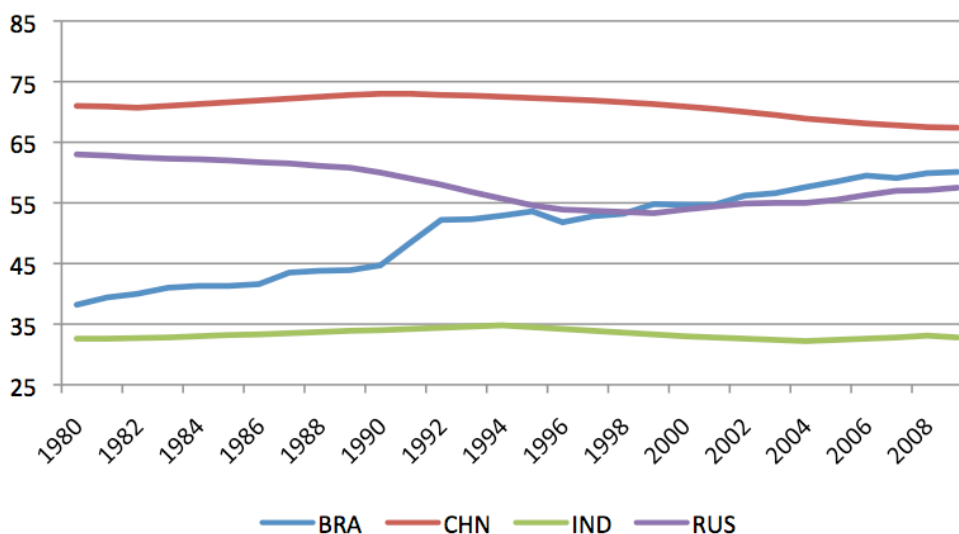
The evidence above demonstrates that India will be able to benefit from the demographic dividend by having a large working-age population until 2050. Therefore, educational policy-making should take advantage of its favorable demographic context by ensuring high participation rates in HE and also increasing quality. On the other hand, the demographic dividend in Brazil and China is virtually ending, and in Russia is already finished. Hence, HEI

strategies in the long run in these countries will aim to compensate for this decline by increasing participation rates of non-traditional population groups (women, older individuals, minorities).

Female Labor Force Participation

Another important indicator for delineating future trends in HE is female labor participation. Human Capital Theory predicts that, as women enter the labor market, they may invest more in education in order to guarantee their competitiveness. Likewise, if more women are investing in education, they are more likely to participate in the labor market. Hence, trends in female participation in the labor market may predict (or be predicted by) increases in HE participation. Figure 4 presents the trends in female labor force participation rates for the BRIC countries from 1980 to 2009. China has the highest level of female labor force participation from the BRIC countries, and India has the lowest. According to Bhalla and Kaur (2011), "While fertility has been declining and approaching international norms for India's level of development, labor force participation (LFPR) of females in India lags considerably behind the 'norm' (p.6)". For Brazil, this indicator has been increasing since 1980, and female labor market participation rates in this country have exceeded those observed for Russia. In terms of the future trends, we can expect that female labor force participation will increase in the BRIC countries, even if differences in level and pace remain, as a result of modernization and gender equality in the labor market (Goldin 2006).

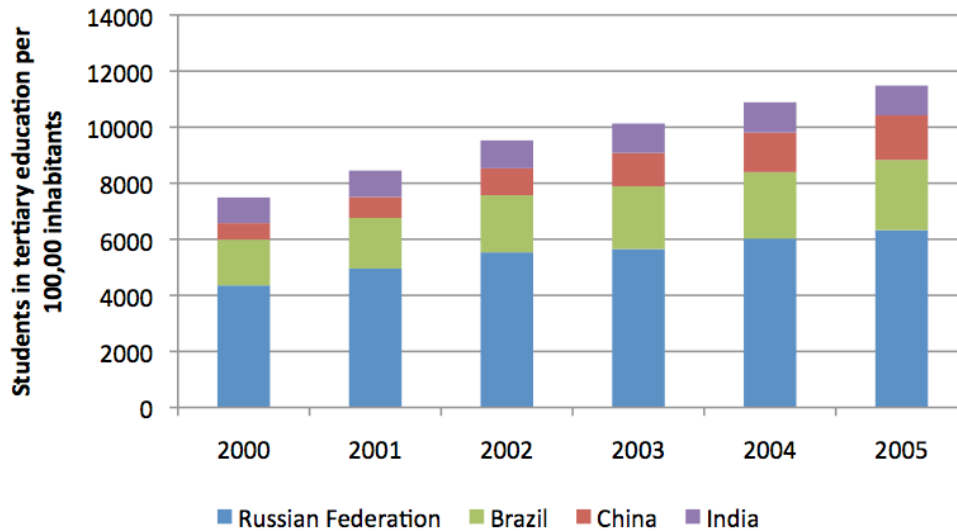
Figure 4: Female labor participation rate for BRIC countries: 1980-2009



Trends in HE indicators

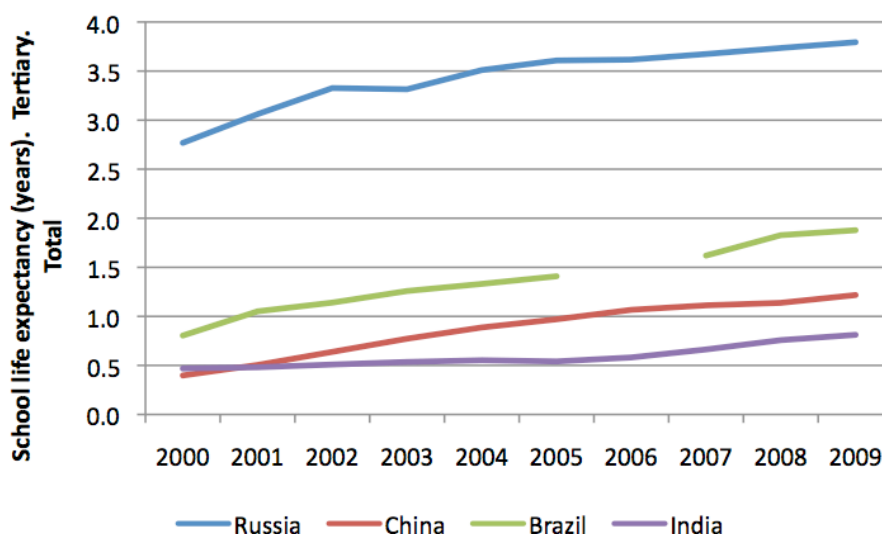
All these changes in demographic components -- fertility, changes in age structure; demographic dividend and female labor participation -- have provoked a significant increase in the number of students in tertiary education among the BRIC countries. Figure 5 presents the number of students in HE per 100,000 habitants from 2000 to 2005. Within the BRIC countries, Russia accounts for the highest number of students in HE, followed by Brazil, China and India. At the same time, China has the fastest-growing number of students in the period.

Figure 5: Students in tertiary education per 100,00 inhabitants in the BRIC countries: 2000-2005.



Besides the number of students, one important indicator of the HE capacity refers to the school life expectancy. This indicator has a similar interpretation of the life expectancy at birth: it represents the average years of participation in HE. Thus, it reflects the number of students that drop out during college and also students who take longer than the standard length of studies (between 4 to 5 years). The higher this indicator, the better is the ability of the system to retain students. Figure 6 presents the school life expectancy at the tertiary level for the BRIC countries between 2000 and 2009 as reported by UNESCO Statistics. Data for Brazil was not available in 2006. According to Figure 6, the BRIC countries are experiencing increases in the HE life expectancy, and it could be inferred that progress in student retention has been made. However, differences in the level of this indicator among these countries are remarkable: Brazil, India and China have a considerably lower level compared to Russia, and India has the lowest. Therefore, initiatives towards the increase in student participation in HE are urgent for Brazil, India and China, especially because those countries are currently experiencing their demographic dividend. When dependency ratio starts increasing for these countries, the opportunity to have a large number of students the traditional age group with college degrees will be gone.

Figure 6: School life expectancy in the tertiary level (Total) for the BRIC countries. 2000-2009 (UNESCO)



Summarizing the evidence, Table 1 provides a comparative analysis of current and future demographic trends for the BRIC countries -- fertility, dependency ratios and female labor force participation -- as well as measures of access and permanence in HE systems -- number of students per 100,000 habitants and school life expectancy. It can be drawn from the table that BRIC countries are not similar with regard to the demographic indicators, but all of them tend to become ageing populations by 2050. Meanwhile, population dynamics of each country will impact its HE system in a particular way. For example, India is still facing a high population growth, whereas Russia is currently on the last stage of the demographic transition. This will impact not only the demand for access, but also the composition of the HE students in terms of their age, ethnical and socioeconomic composition. This issue is particular important in the present for Russia; will become crucial in the medium term for Brazil and China; and in the long run for India. It turns out that HE policy makers in BRIC countries should be concerned with the pace and future demographic trends and their impact on the equity in HE.

Table 1: Summary of current and future trends in Demographics and HE indicators for the BRIC countries

Theme	Subtheme	Brazil	Russia	India	China
Current stage of the Demographic Transition	Fertility	Advanced/late stage	Already finished	Medium/Advanced Stage	Advanced/late stage
	Dependency ratios	Minimum level by 2020	Minimum level in 2010	Minimum level by 2040	Minimum level by 2015

	Female Labor force Participation	Rapid and consistent increase over time	High level with a slight tendency of decrease	Low level and stable over time	High level with a slight tendency of decrease
HE indicators	Demand for Higher Education (number of students enrolled per 100,000 hab.)	Second highest level	Highest level among BRIC countries	Lowest level among BRIC countries, but increased over time.	Third highest level and with a high rate of increase
	School Life expectancy at the tertiary level	Second highest level and also experienced improvement, but has a large gap compared to Russia	Highest level and has increased over time	High growth of school life expectancy over time but still lags behind Brazil.	Lowest and stagnant level.

Source: UNData, UNESCO Education Statistics, World Development indicators

How demographic forces will affect HE systems in the BRIC countries?

As I claimed in the previous section, BRIC countries are now facing a great expansion in enrollments, except for Russia. However, expansion pattern will be even more complex given declining fertility levels, which will tend to decrease the size of the 18-24 age group. As a result, diversification of the HE clientele will become a common strategy among BRIC countries, by means of incorporating older adults and minorities who may have not had a chance to attend college previously. However, the success in interchanging the traditional with non-traditional students will depend on the ability of BRIC HE systems to incorporate a more diverse clientele. Therefore, we should expect that issues regarding inequality and equity in HE will become more important in the future. In this section I will describe how HE systems are currently structured in BRIC countries and discuss the implications of demographic changes to the equity in the HE level.

Previously, I argued that the increased diversification of HE clientele and the current organization of the HE system's features, may impact equity. If HE systems are heavily differentiated in nature in the present, it turns out that the incorporation of previously excluded population groups will induce an even further increase in inequality. For the BRIC countries, HE systems exhibit more similarities than divergences in their ability to ensure equity in the HE level. Therefore, for the purpose of comparing the impact of demographic prospects on the HE systems for the BRIC countries, I try to answer the following questions in each country:

- How BRIC governments have recently responded to the expansion of HE demand?
- Have HE students in BRIC countries been selected to specific types of HE institutions or prestigious majors according to their social class?

- Are there policies in BRIC countries to enable the access and permanence of low-SES students?
- How are the financial systems in the BRIC countries currently structured? Are there any contradictions in terms of inequality?

In the next subsections I will address these questions.

Expansion of HE demand and privatization in BRIC countries

As a response to a rapid and sustained demand for tertiary education since the 1990's, BRIC countries have created new institutions, expanded existing ones, introduced and extended distance-learning options. But, most importantly, BRIC countries have allowed a private HE sector to supplement or even substitute the slots provided by the public sector (Altbach et al. 2009; Carnoy 2011b). Therefore, privatization of HE is a prominent characteristic of HE systems in BRIC countries, despite the fact that there are significant differences in size of the private sectors. For instance, Russia has the smallest participation of a private sector, but it has been increasing considerably since the beginning of 2000's: it increased from 7% in 2000 to 14% in 2008. The share of private enrollments in HE was 20% in 2008 for China and 30.7% for India in the same year. For Brazil, this share was approximately 75% in 2007 (PROPHE 2011).

Some researchers claim that the uncontrolled creation of private institutions has exceeded the ability of the State to monitor and ensure quality (Kapur 2010; Carnoy 2011b). This seems to be the case of BRIC countries, since there is evidence that the high and remarkable expansion of private institutions, especially in Brazil and India, have compromised quality (Carnoy 2011b).

Having considered the future population trends in BRIC countries, I argue that privatization may seriously compromise the future of HE systems in these countries. First, because the demand for HE will not continue to increase indefinitely given current demographic trends. It turns out that the current unbridled expansion of private HEIs will not be adequate for the size of the expected student population in the long run. Even though we can expect a diversification in HE clientele, future population trends are not expected to come in pace with or to exceed the growing number of institutions. Besides the probable inadequacy of an uncontrolled expansion of private HEI in the context of ageing populations, privatization may also negatively affect the increasing number of non-traditional students in HE systems. Since there is, in general, a strong relationship between SES and tertiary participation (Hossler, Shonia, and Winkle-Wagner 2007), increasing privatization might reduce the participation of these population groups or even select them into low quality institutions.

BRIC countries and Institutional/Major segregation according to SES

Future equity trends in HE are heavily influenced by the association between the quality of high school that the student attended and his/her chances to participate in high-quality institutions and in high competitive majors as well. In other words, students that are able to receive a high-quality secondary education are most likely to enter into the best HE institutions as well as the more prestigious/competitive courses (Carnoy 2011b). For the BRIC countries, this association has been quite strong (Carnoy 2011b). Given this scenario and the future pace of diversification of HE demand due population changes, I expect that the majority of students who come from low-SES families and low-quality high school institutions will not be able to enter in prestigious universities and majors. Hence, HE systems in BRIC countries will have to propose mechanisms to solve this upcoming inequality issue.

Cost-sharing policies in HE and its implications for BRIC countries

Another important impact of the demographic trends in BRIC countries on HE policymaking refers to the implementation of cost-sharing policies. In order to absorb an increasing number of both traditional and non-traditional students, HE systems in BRIC countries (particularly for the former type of student) have been relying even more on tuition and student fees, even in the public institutions (Carnoy 2011b). This scenario may impact considerably students and their families, especially among minority groups (Altbach et al. 2009). For instance, Heckman (2005) shows that, in China, fees operate inequitably in urban and rural sectors, since in the latter fees are approximately two times higher. The author concludes that fee-based system in China reduces access to education. Also, in the case of India and China, and in Brazil, for the more demanding courses, high tuition has prevented students from low socioeconomic background to acquire high quality education (Carnoy 2011b). Given the increase in diversification of HE student population in the future, this will be a crucial agenda for policy making.

Equity policies in BRIC countries

The upcoming demographic trends and their impact on HE systems for the BRIC countries -- towards a highly diversified clientele -- will challenge the ability of the State to ensure the access and participation of low-income and minority students. The organization of HE systems in terms of affirmative action, tracking, cost-sharing and even the equality of opportunities in the secondary education may certainly be influenced by the diversification of demand. However, an inadequate response of HE policy makers to this increasing demand of previously excluded groups will clearly have equity implications.

Recently, BRIC countries have adopted affirmative action policies as a response to an increased social demand. For instance, public school and black students in Brazil are guaranteed a certain quota of the enrollments in some public institutions, and the government has also provided scholarships and loans to enable the participation of poor students in HE. India has promoted the access of low-income students in HE by charging reduced fees for certain scheduled castes and tribes. Yet, India's HE system can be considered as the most segregated among the BRIC countries: they charge differential tuition rates and restrict the access in some high quality institutions according to the student's caste or tribe.

Despite these initiatives to promote the access of new socioeconomic groups in BRIC countries to HE and given the tendency towards a further diversification of clientele by demographic changes, the question of whether the current policies will be sufficient for ensuring the access to a more diverse clientele in the long run remains unanswered. This will depend on the political willing of governments and the population aspirations and voice as well.

Table 2 provides the main characteristics of HE systems in BRIC countries by an equity perspective. In general, BRIC countries have attempted to develop policies to incorporate a more diverse clientele. However, remarkable differences in the quality and effectiveness of the programs still persist. Given demographic changes in the future, it becomes urgent that policy makers attempt to discuss what should be the strategies to serve a more diverse clientele.

The implication and importance of incorporating demographic changes in HE policy are straightforward: if policies are not adequate, this may seriously compromise economic growth as well as social development in BRIC countries.

Table 2: Summary of the current structure of BRIC HE systems in regards to equity policies

Theme	Subtheme	Brazil	Russia	India	China
Differentiation	Expansion trends	Mostly in the private sector; some recent initiatives to expand public slots (REUNI)	Expansion through charging fees within public institutions; massification of higher education in Russia has resulted in the devaluation of tertiary education	Mostly in private sector with low quality in response to the heavily population growth	Expansion of World-Class universities
	Mass vs. elite	Elite goes to public universities, whereas the mass of HE students go to private universities (most of them for profit)	Elite and mass goes to public universities, but there is an elite hierarchy within public HEIs.	Elite goes to public universities, whereas the mass of HE students go to private aided HEIs. Private unaided and "Deemed" Universities	
	Equity	Loans, fellowships, affirmative action/quotas	Grants and Loans on the basis of per-capita ratios	Tuitions are set and differentiated by caste and also quality (within the casts there is also heterogeneity). There are some affirmative programs by charging reduced tuition rates	Enrollment plan (by province)
	Tracking	No	No	Yes (low)	Yes (High)
	High school sorting by SES	Yes	Yes	Yes	Yes (not as much pronounced as the other countries)
Rationalization	Cost-sharing	Public HEIs are free, whereas private HEIs charge fees.	Test scores determine whether a student must pay tuition or no in public universities	Cost-sharing is spread out among public and private HEIs.	Test scores determine whether a student must pay tuition or no in public universities

Source: Carnoy (2011b); Hossler, Shonia, and Winkle-Wagner (2007)

Conclusion

The role of HE in future development prospects for the BRICs is quite clear. Demography plays a central role in shaping HE systems. The BRIC countries are experiencing a substantial expansion in their system. Where progress toward broader social inclusiveness has occurred in these countries, diversification of the student body has placed a complex new set of demands on higher education institutions and systems around the world.

In this paper I presented future demographic trends and their impact on HE systems for the BRIC countries. Rapid transition in these countries brought both challenges and opportunities. However, country-specific choices will define how these opportunities will be exploited. Policies to ensure equity in HE, both in terms of access, permanence, and quality, will be crucial for attending the demands of a more diverse clientele. Therefore, policy makers should incorporate demography in their policy prospects.

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