

The Role of Inequality in Economic Development

Implications from Brazil's "New Middle Class"

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List of abbreviations

BC	Banco Central do Brasil (<i>Brazilian Central Bank</i>)
BRICs	Brazil, Russia, India, China
CNC	Confederação Nacional do Comércio de Bens, Serviços e Turismo (<i>National Confederation of Goods, Trade, Services and Tourism</i>)
CNI	Confederação Nacional da Indústria (<i>National Confederation of Industry</i>)
FGV	Fundação Getulio Vargas (<i>Getulio Vargas Foundation</i>)
GDP	Gross Domestic Product
IBGE	Instituto Brasileiro de Geografia e Estatística (<i>Brazilian Institute of Geography and Statistics</i>)
Ibope	Instituto Brasileiro de Opinião Pública e Estatística (<i>Brazilian Institute of Public Opinion and Statistics</i>)
ICF	Pesquisa Nacional de Intenção de Consumo das Famílias
LAC	Latin America and the Caribbean
OECD	Organisation for Economic Co-operation and Development
PEIC	Pesquisa Nacional de Endividamento e Inadimplência do Consumidor (<i>National Survey of Consumer Indebtedness and Credit Default</i>)
PNAD	Pesquisa Nacional por Amostra de Domicílios (<i>National Household Sample Survey</i>)
POF	Pesquisa de Orçamentos Familiares (<i>Household Budget Survey</i>)
PPP	Purchasing Power Parity
SAE	Secretaria de Assuntos Estratégicos (<i>Secretariat of Strategic Affairs</i>)
UNDP	United Nations Development Programme
US	United States

Author's Note

The present work has been elaborated as a seminar paper in scope of the course “Crescimento Econômico” (Economic Growth) at the University of Porto Alegre, Brazil. The descriptive empirical analysis primarily relies on official data provided by the Brazilian Secretariat of Strategic Affairs (Secretaria de Assuntos Estratégicos, SAE). The underlying middle class definition may be contested as it possibly tends to overestimate the growth of Brazil’s “new middle class” across the past decade. Therefore, the following should be seen as a point of comparison for future research. In this regard, within her master thesis the author envisages to propose an alternative middle class definition and present an own data analysis (based on PNAD data), which may relativize the rise of Brazil’s middle class according to official government information. This upcoming research will furthermore build on an empirical model in order to determine, which factors affected the change in inequality patterns in Brazil, as well as to detect the resulting economic consequences.

I. Introduction

An outstanding trend of upward class mobility and narrowing income gaps, leading to a remarkable process of social transformation, has recently been detected within the emerging and developing nations. Particularly in Latin America and the Caribbean (LAC), the unprecedented explosion of the region's middle class seems to have broken with historic patterns, according to which economic growth had been accompanied by increasing levels of social inequality followed by decades of stagnation in the size of the middle class. For a long period, the population share of the poor had been around 2.5 times larger than the one comprised by the middle class. This trend reversed over the last decade marked by sustained economic growth, although temporarily disrupted by the consequences of the world financial crisis in 2008 and 2009. Over the ten-year period from 2000 to 2010, moderate poverty in the region fell from more than 40% to less than 30%. This remarkable reduction is equivalent to 50 million Latin Americans escaping poverty over the decade. For the first time in economic history, after having expanded by 50% between 2003 and 2009, Latin America's middle class has recently gained a population share similar to the one made up by those defined as living under the poverty line. This development is said to be a reflection of a period of economic growth combined with low unemployment and declining inequality in the region (c.f. World Bank 2012; The Economist, 2012).

The present work aims to shed some light on the economic consequences, and partly on the political implications, which arise from this process of social transformation, on the national and global level. Furthermore, the sustainability of the observed trends will be critically assessed. Hence, the questions guiding the subsequent analysis can be summarized as follows: In how far is the expanding middle class really the result of sustained and inclusive economic growth in the region? In how far does the upward mobility in the income ladder result from an improvement in the micro- and macroeconomic foundations? And, in how far does the expansion of the middle class impact the economic and political environment, nationally and internationally?

Taking on these issues, the remainder of this paper is structured as follows:

Providing the methodological fundament for the subsequent analysis, **Section II** includes a short note on the innumerable ways – proposed by economists and sociologists – in which social classes may be defined subject to objective and subjective criteria. Even among those who agree on per capita household income as the principal, class-defining factor, discrepancy exists regarding the choice of lower and upper bounds separating the middle class from the rest of the population. The important message to be communicated is that there exists no unique correct approach, and each of the individual definitions may lead to different results and diverging implications.

Keeping these conceptual particularities in mind, **Section III** exposes the rise of the middle class as an international phenomenon – concentrated among the population in the developing world, but with global consequences. After some data evidence on the expansion of the middle class in the LAC region is presented, the internal and external implications of this phenomenon are assessed. In this respect, the rise of the middle class not only impacts the national growth performance, but may also lead to a restructuring of the global financial and economic order: Rising incomes of a large share of the developing world's population increase their consumption possibilities and, hence, shift purchasing power towards the emerging and developing countries.

Allowing for a more detailed and profound analysis, **Section IV** concentrates on the expansion of the middle class in Brazil over the past decade. After presenting the way in which social classes are nationally defined, data evidence on the substantial rise of Brazil's "new middle class" is provided. In 2011, according to official information 53.9% of the population, equivalent to 104 million Brazilians, belonged to this income group. The share had expanded by 15 percentage points over the last decade, making Brazil a prime example for middle class growth in the LAC region. The country's doubtlessly impressive performance in reducing extreme poverty and limiting income inequality has been exhaustively celebrated by policymakers and the media alike. However, economists raise increasing concerns regarding the fundamentals on which these developments are based. It appears that targeted government programs and expanded credit options, artificially increasing household income, have been the mayor force underlying the process of social transformation in Brazil. However, these drivers failed to create the necessary basis to sustain progress in the future: Production and efficiency decreased in Brazil's industrial sector, national demand is about to experience a remarkable decline due to rising household indebtedness, and recent growth indicators point to the possibility that the country might be approaching a period of economic stagnation. Especially with respect to the national education system, significant deficits became evident.

Concluding, the final **Section V** summarizes the principal results and aims to derive some policy implications regarding the challenges which the LAC countries in general, and Brazil in particular, have to face in the following years in order to sustain the advancements which have been achieved.

II. Methodology: Defining the middle class

“What it means to be middle class is a matter of definition and debate” (The Economist, 2012). Innumerable criteria, subject to which social classes in general and the middle class in particular may be defined, have been proposed in the academic literature. While economists generally see (per capita) household income as the determining factor, sociologists and political scientists, by contrast, tend to define the middle class according to education, occupational status and ownership of assets (c.f. The Economist, 2012).

Providing a first oversight, Marcelo Neri (2010) categorizes existing concepts into objective and subjective approaches. While per capita income is supposed to provide an objective criterion, subjective approaches rely rather on the analysis of people’s attitudes and expectations. In addition, a new line of surveys, such as the *Gallup World Poll*, proposed the use of internationally identical questionnaires in order to measure perceived life quality.

Aware of the variety of existing concepts, the present work opted to focus on the income criterion as the principal class-defining indicator. In this respect, social classes are generally defined based on (per capita) household and not individual income. A number of different conceptualizations how to isolate the middle class from the rest of the population have been proposed:

First, the middle class can be defined using a relative measure. In this regard, for example, Birdsall et al. (2000) define the middle class as those in the population who have between 75% and 125% of the per capita median income at their disposal. Similarly, Easterly (2001) considers the population’s cumulative consumption distribution as the underlying criterion and defines the middle class between the 20th and the 80th percentile.

Second, social classes can be defined according to absolute boundaries. In this regard, for example, Banerjee and Duflo (2008) define the middle class as those who live on between US\$2 and US\$10 per day, focusing their analysis on two groups, living respectively on US\$2 to US\$4 at the low end and US\$6 to US\$10 at the high of the middle class. The authors argue that although those individuals defined as belonging to the middle class are admittedly still very poor when measured by developed country standards – taking for example the poverty line of the United States (US) defined at US\$13 per day as a point of reference – they are still much better off than the poor share of the respective emerging or developing country’s population.

Another example can be found in a recent study elaborated by the *Organisation for Economic Co-operation and Development* (OECD). Trying to develop a global conceptualization, Kharas (2010) identifies households with daily expenditures between US\$10 and US\$100 per person as middle class. According to this definition, the global middle class excludes those who are considered poor in the poorest advanced countries and those who are considered rich in the richest advanced countries.

Third, complementary to these approaches, a very recently published study by the World Bank (2012), analyzing “Economic Mobility and the Rise of the Latin American Middle Class”, proposed to integrate the aspect of economic security into the class definition. Hence, households are ranked by their respective possibility of remaining in or falling (back) into poverty. In this respect, the middle class is supposed to comprise only households who face a relatively low probability of falling (back) into poverty. The World Bank suggests the creation of a fourth class, “the vulnerable”, which in turn includes those households who were currently successful in escaping poverty and attained middle-class-incomes, but still run a comparatively high risk of falling back below the poverty line. In order to derive a monetary definition of boundaries separating the middle class from the lower and upper class, the World Bank (2012) employs a multidimensional approach using a complex combination of different data sources. On this basis it is determined that a Latin American household requires on average a minimum income of US\$10 per capita per day (at purchasing power parity exchange rates) in order to face a maximum chance of 10% of falling (back) into poverty within the subsequent five years. The World Bank calls those living on US\$4 to US\$10, which would fall into the median or upper middle class definition used by Banerjee and Duflo (2008), “the vulnerable” or the “lower-middle class” (c.f. World Bank 2012; The Economist, 2012).

Employing a similar approach inspired by the World Bank’s conceptualization, Birdsall (2012) identifies the Latin American middle class as people living in households with an income per capita between US\$10 and US\$50 per day, adjusted for purchasing power parity (PPP). “This income-based definition is conceptually and empirically grounded in the analysis of household surveys and is used to provide a region-wide profile of households that are neither vulnerable to falling back into poverty nor rich by their national standards” (Birdsall, 2012).

III. Expansion of the Middle Class and Falling Inequality

Over the last decade, the world has seen an “unprecedented explosion” in the global middle class (Goldman Sachs, 2008). The trend of an expanding middle had already been detected by Sala-i-Martin in 2006, who showed that worldwide income distributions seemed to have narrowed between the mid-seventies and 2000. This process gained impetus in subsequent years. According to more recent findings, the pace at which global income inequality is narrowing has accelerated dramatically since 2000 (Goldman Sachs, 2008). While some of the developed economies worry about a rising gap in national incomes and a slightly disappearing middle class, a strong opposite trend emerged in the developing world, which overcompensates the tendency observed in the industrial nations by far. Amaury de Souza and Bolívar Lamounier (2009) call the impressive rise of the middle class in emerging and developing countries, “one of the most important social and economic phenomena in recent history” (author’s translation from the original version in Portuguese). The new middle class is estimated to comprise today 400 million people in the developing world; until 2030, two additional million persons are expected to enter this social group.

Illustrating these developments, **Figure 1** compares the population share corresponding to the national middle class across several countries. Argentina is the only emerging economy in the sample where the social composition deteriorated. The middle class shrunk from a comparatively high share of 46% in 1999, that time significantly above the regional average, to 34% in 2004. By contrast, in Brazil and Mexico the population share held by the middle class almost doubled, from 18% to 30% and from 17% to 29% respectively. In Chile, already in 1999 31% of the households were defined as middle class, which widened to 45% in 2004. Considering the historically high level of inequality among the Chilean population, these numbers appear surprising. At this point it shall be noted that, despite remarkable growth rate, the middle class in the emerging world, accounting on average for about 30% of the population, still remains significantly smaller than in the industrial countries, like the United States (US) or Sweden, where a share of 90% was denoted in 2004.

III.1 The rise of the Latin America’s middle class in numbers

The most influential study in recent years, analyzing in detail the rise of the middle class in Latin America, has been elaborated by the World Bank (2012). In this regard, the report “Economic Mobility and the Rise of the Latin American Middle Class” not only provides powerful insights on the expanding middle in the LAC region, but the presented methodology based on household “vulnerability” also inspired further research and has been translated into new approaches of conceptualizing social classes on a national scale, as the case study of Brazil presented in **Section IV** is going to show.

Measuring social mobility, the World Bank (2012) denotes that between 1995 and 2010 two in five Latin Americans were upwardly mobile. According to the bank, at least 40%

of the Latin American households have moved upward in “socio-economic class”. In consequence, Latin America’s middle class grew from 103 million in 2003 to 152 million in 2009. Although this increase by 47.6% in relative terms representing around 30% of the continent’s population appears substantial at first sight, in fact only a comparatively small share of those moving up in the social ladder went directly from poverty to the middle class. Most of those escaping poverty joined the intermediate group of the “vulnerable” which grew considerably over the last ten years. According to the World Bank data set, in 2010 this group made up the largest share of the Latin American population. In comparison, the proportion of those defined as poor, i.e. those living on less than US\$4 per day, decreased remarkably from 41.4% in 2000 to 28% in 2010.

Analyzing the development of the middle class in eight LAC countries – including Brazil, Mexico, Chile, Colombia, Costa Rica, Colombia, Peru and the Dominican Republic – Birdsall (2012) finds that in the countries studied, the population share of the middle class (household per capita income between US\$10 and US\$50 per day) increased from 20% in 1999 to 30% in 2010. Over the same time period, the income share of the middle class increased from 40% to nearly 50%.

Other sources estimated the Latin America’s middle class to be even larger than suggested by Birdsall (2012) and the World Bank study (2012). In this regard, the 2010 publication by OECD defined 275 million people in Latin America, presenting almost 50% of the region’s population, to be middle class.

III.3 Economic implications of the expanding middle class in the developing world

Important economic and political consequences may nationally and internationally result from the rise of the middle class in the developing world. Exposing the expanding middle class as a driver of economic growth, the OECD (Kharas, 2010) coined the term “Consumer Class” which refers to the observation that the middle class’ income elasticity for consumer durables and services is found to be larger than one. However, Kharas (2010) presumes future middle class growth to come mainly from Asia: The paper projects that the Asian share of the global middle class (defined as households with a daily per capita of US\$10 to US\$100, PPP adjusted) will increase from 28% in 2009 to 66% in 2030. Over the same time horizon, the share held by Central and South America in the global middle class is expected to decrease from 10% to 6%. Similarly, the Asian share in world middle class spending is expected to increase from 23% to 59%, while the Central and South American share of global world middle class spending is projected to a decline from 7% to 6%. Based on these prescriptions, Kharas (2010) dedicates major attention to exploring the question, whether the emerging Asian middle class will be large enough to replace the US as a driver of Global Economy over the next 25 years.

Certainly, the growth of the middle class in the developing world, implicating a rise in incomes across large part of the population, shifts global spending power towards the emerging economies and, hence, away from the richest industrial countries. This may lead to a point where, for the first time in decades, the developing countries with the largest population dominate global spending. In this regard, despite the OECD's projections, some LAC economies such as Brazil and Mexico may gain power in international relations. While in 1980 the seven largest countries ranked by total GDP (in US\$) were all developed economies, in 2007 this list included China (rank 5). Brazil reached rank 11, the other BRICs followed on rank 12 (Russia) and 13 (India). If GDP growth continues, by 2025 all BRICs could be among the 10 largest economies, while other industrial countries which are currently in the list may lose importance. It is estimated that by 2050, if recent trends continue, six of the N-11 (Egypt, Philippines, Indonesia, Iran, Mexico, and Vietnam) and three of the BRICS (China, India, and Brazil) could be responsible for up to 60% of the world's GDP (c.f. Goldman Sachs, 2008). Hence, a significant shift in economic and political power may be expected on the international scale.

In addition to these global consequences, an expanding middle class may internally have an important impact on growth relevant variables. In addition to an increase in domestic demand due to higher incomes, the World Bank (2012) finds middle class entrants to be more likely to live in urban areas and to be employed in formal sector jobs than those who remain poor. Furthermore, women classified as middle class generally have fewer children and are more likely to participate in the labor force than women belonging to poor or vulnerable groups. Most of those who moved up in the social ladder tend to have more years of schooling. However, despite the denoted improvement in vertical mobility, parents' education remains to be a major determinant of children's education levels, implicating continued inequality of opportunity. Although the average number of school years increased remarkably in Latin America over the past 15 years, leading to a reduction of the educational gap between social classes, schooling remains expensive in the region and there is a notable difference in the quality of schools attended by the richer and the poorer share of the population. In this regard, student loans are vital in financing high school attendance of poorer students, which tends to be essential for moving up into the middle class (c.f. World Bank 2012; The Economist, 2012).

IV. Case Study: The rise of a “new middle class” in Brazil

Without a doubt, Brazil’s socioeconomic profile changed heavily over the last decade. The substantial expansion of the country’s middle class or “Class C” or emerging class gained increasing attention in the media and has been intensively studied by research institutes and government agencies. However, before entering into the discussion, it needs to be clarified to which share of the population we actually refer when talking about Brazil’s middle class.

IV.1 Defining the middle class in Brazil

As **Section II** discussed, there exist innumerable ways how to define a country’s middle class, following criteria elaborated on an international scale – for example by the OECD, the World Bank, or Goldman Sachs –, or on the national level – for example in the case of Brazil by the *Getulio Vargas Foundation* (Fundação Getulio Vargas, FGV), the *National Confederation of Industry* (Confederação Nacional da Indústria, CNI), or the *Brazil Criterion* (“Critério Brasil”). This variety of diverging approaches must be kept in mind, as different sources tend to use an unequal underlying definition leading to diverging results.

According to the *Brazil Criterion*, the country’s population is divided into five classes (E, D, C, B and A) based on the households’ consumption potential – understood as the access to and respective amount of durable goods (such as TV, radio, washing machine, or fridge), toiletries and domestic servants – and the level of education of the head of the household. Complementary to the *Brazil Criterion*, Marcelo Neri proposed in 2010 a new concept which includes the household’s capacity to keep the present consumption potential through time as an additional criterion. Hence, the capacity to sustain wealth in the longer term is meant to be taken into account when defining the middle class (“Class C”). In this regard, the access to public and private universities, formal jobs that ensure a higher level of social protection, private pension, housing credit, and health insurance have been suggested as additional class-defining criteria (c.f. Neri, 2010).

The present work is primarily based on the research results provided by the Brazilian *Secretariat of Strategic Affairs* (Secretaria de Assuntos Estratégicos, SAE), which rely on data derived from national household surveys (Pesquisa Nacional por Amostra de Domicílios, PNED) conducted by the *Brazilian Institute of Geography and Statistics* (Instituto Brasileiro de Geografia e Estatística, IBGE). The SAE has elaborated a comprehensive database* which allows to explore the evolution of Brazil’s middle class, filtering for temporal, geographic, demographic and ethnic criteria. The Secretariat’s analyses gained recognizable media presence. The SAE publications present data evidence for the growth of Brazil’s middle class, analyze the characteristics of those who newly entered and now constitute the

* A nove classe média em números (*The new middle class in numbers*)
<<http://sae.gov.br/novaclassemedia/numeros>>, last accessed Feb 20th, 2013.

country's "new middle class", and discuss the implications of a wider middle class for the formulation of national policies. The underlying motivation for studying excessively Brazil's socioeconomic and demographic profile lies in the recognition that the needs and risks faced by each social group diverge and hence require different policy responses.

As **Table 1** displays, the SAE divides the Brazilian society into eight social groups (A1, A2, B1, B2, C1, C2, D, E). The lower and upper income bounds of each class have been defined by a technical commission composed of experts from ministries, universities and research institutes. The rent earned by members of the middle class was supposed to vary around the median household per capita income of R\$440. As proposed by the World Bank, the lower and upper bound, defining the Brazilian middle class to dispose of a per capita household income between R\$291 and R\$1,019 (see **Table 1**), were chosen in accordance with the vulnerability criterion. The probability of remaining in or falling back into poverty within the subsequent five years was calculated based on national household surveys (PNAD/IBGE), in reference to the poverty line used by the *Ministry of Social Development* (Ministério do Desenvolvimento Social) in order to identify those households eligible to the national financial support program "Bolsa Família", corrected by the inflation rate. Ranking households by their estimated vulnerability, the middle class was defined between the 34th and 82nd percentile of the population's cumulative possibly distribution, corresponding in 2009 to a per capita household income between R\$291 and R\$1,019 (c.f. SAE, 2012a). Hence, in 2009, the base year, the lower class included the poorest 34% of the population, while the upper class comprised the richest 18%. The 48% in between constituted the middle class.

The polarization method, grouping together most homogeneous households, was applied for the finer subdivision of the Brazilian society into eight classes. As **Table 1** indicates, the lower class was subdivided into three categories: i) the "extremely poor", disposing of a household per capita income of less than R\$81; ii) the "poor", disposing of a household per capita income between R\$81 and R\$162; and iii) the "vulnerable", who have passed the national poverty line but face a high possibility of falling back into poverty, disposing of a household per capita income between R\$162 and R\$291.

What should be noted is that, in transferring total household income into per capita household income, household rent (including only regular income sources, excluding additional benefits such as 13th salary) was simply divided by the number of household members, ignoring adult equivalents and returns to scale in consumption. However, in order to account for the fact that children consume less than adults and make households with a different number of adults and children comparable, it would have been reasonable to apply adult equivalents, attaching different weights to adults and children based on nutrition intake. Furthermore, the existence of household-specific public goods, which are commonly used by

all household members, should have been taken into account. Since public goods (e.g. a washing machine) are used more efficiently in larger households, it would have been reasonable to give less weight to the second/third/etc. individual living in the household.

Despite employing its own criteria, the SAE experimented with a number of different ways of conceptualizing the middle class: A relative approach suggested by the OECD – which identifies the middle class as those who dispose of an income between 50% and 150% of the median (R\$440 in Brazil), equivalent to a household per capita income between R\$220 and R\$660 in the case of Brazil – would have led to a slightly smaller lower bound and a significantly lower upper bound of the Brazilian middle class. Similarly, defining the middle class as those in the interval between the 25th and 75th percentile of the national income distribution (the 50% in the center of the distribution), would have corresponded to a smaller lower and upper bound of household income per capita of R\$230 and R\$802 respectively. Using the households' consumption pattern as the underlying criterion, considering the share of income spent on basic goods (such as food, water, shelter, transport and energy) or the share spent on luxury goods (such as perfume, jewelry, beauty products, and travelling), would have identified the Brazilian middle class as disposing of an household per capita income between R\$288 and R\$1.009 (basic goods definition) or between R\$303 and R\$1.056 (luxury goods definition); ranges very similar to the one obtained applying the vulnerability criterion (defining the middle class between R\$291 and R\$1,019) (c.f. SAE, 2012a). Hence, according to SAE information, alternative concepts would have led to similar or even inferior bounds of the middle class.

However, Brazil's Class C comprises many households which would have been classified vulnerable under the World Bank (2012) definition, implicating that many middle-class households remain close to poverty and are possibly facing idiosyncratic risks that may draw them back into poverty in case of deteriorating macroeconomic conditions. In fact, using the household budget survey "Pesquisa de Orçamentos Familiares 2008/09" (POF) instead of the PNAD (both conducted by the IBGE) would have changed results. **Table 2** displays the diverging lower and upper bounds of the middle class depending on the underlying database. In both cases the middle class is defined between the 34th and 82nd percentile of the national income distribution. The subdivision into lower, middle and upper middle income class is made at the 51st and 68th percentile. When data from the POF 2008/09 is used, the calculated bounds are over 60% higher. Differences are caused by the diverging ways how income is defined: The POF measures the absolute household budget, including irregular income sources such as 13th salary, extra hours, and financial gains, which are excluded from the PNAD. However, the PNAD has the advantage of providing yearly data, while the POF is only conducted every five years, which was the decisive factor to rely the analysis on data provided by the PNAD.

IV.2 The rise of Brazil's "new middle class" in numbers

Brazil has been growing significantly over recent years. Especially in the time after the world financial crisis, the country showed impressive rates of economic recovery: In the first quarter of 2010, the national GDP per capita grew by 9% compared to the first quarter of 2009. Compared with the last quarter of 2009, an even higher growth rate of 11.7% was denoted. In the prior period between 2003 and 2009, per capita GDP had grown at a remarkably lower average rate of 2.88% per year. Over the same time horizon, national household income per capita grew at an average annual rate of 4.71%, 1.83 percentage points higher than the average per capita GDP growth. Other booming countries such as China and India showed an opposite relationship, with GDP growth exceeding income growth in per capita terms (c.f. Neri, 2010).

Per capita income growth in Brazil was accompanied by declining poverty, as **Figure 2** illustrates. Since the end of the 2003 recession until 2009, the share of the country's population living below the national poverty line fell by more than one third, from 39.4% to 23.9%. Even in presence of the world financial crisis, the share of those living in extreme poverty (according the FGV's line) decreased from 16% in 2008 to 15.3% in 2009.

This process of poverty reduction went in line with a decline in domestic income inequality. Over the last decade, between 2001 and 2009, the incomes of the poorest 10% of the Brazilian population grew at an average rate of 6.8% per year, while the incomes of the richest 10% grew at 1.5% per year. Growth rates were particularly large among the most vulnerable groups of the Brazilian society, such as people with Afro-Brazilian decent, inhabitants of the historically poorer Northeast region, and women (c.f. Neri, 2010). With a decline of the GINI coefficient from 0.533 in 2001 to 0.5 in 2011, Brazil has reached the lowest level of inequality denoted within the last 30 years. In 1989 the index had been at a historically high level of 0.633 (World Bank POVCALNET database, accessed Feb. 2013).

As highlighted by the SAE, official statistics indicate considerable vertical social mobility throughout Brazil over the last decade: In 2001, 38% of the Brazilian population lived in households with a per capita income between R\$291 and R\$1,019 (value of 2012, corrected for the inflation rate), hence belonging to the middle class in accordance with the SAE definition. In 2009 this income class accounted for 48% of the population. Based on the PNAD 2009 it was estimated that until 2012 the middle class would comprise 53% of the population. According to a recent newsletter published by *Data Popular*, Class C (defined according to the Critério Brasil) comprised 104 million persons in 2011. While in 2001 Class C had accounted for 38.6% of the total national population, the share increased until 2011 to 53.9%. (c.f. Data Popular, 2012). Hence, both data sources using slightly diverging definition derive the same result: Between 2001 and 2011/12 the middle class in Brazil expanded from roughly 38% to about 53%, indicating an increase by approximately 15 percentage points.

Despite the overall narrowing of the income gap in Brazil, going in line with decreasing poverty rates and an expansion of the middle class, internal patterns of interregional inequality remain evident. As **Figure 3** illustrates, in 2009, despite significant advancements over the last decade on the national level, the low income class remains concentrated among the rural population. While roughly one third (29.4%) of the urban population belong to this class, more than half (57.9%) of the rural population are to be found in this lowest income group. In contrast, the majority (54.4%) of the urban households fall into the middle class definition. In comparison, 38.5% of the rural population are considered to be middle class. The upper class is primarily composed of households living in urban areas. Only 3.6% of the rural population dispose of incomes defining them as upper class. In comparison, 16.2% of the urban households belong into this category.

Similarly, inter-state inequality persists as **Figure 4** displays. Poverty in Brazil has historically been concentrated in the North and the Northeast of the country, while the South and the Southeast are historically the wealthiest regions. Accordingly, also in 2009, the low income class remains concentrated in the Northeastern (55.7%) and Northern (48.1%) part of Brazil, while the upper class is rather to be found in the South (19.5%), Southeast (18.5%) and Central-West (16.6%) of the country. In the South, with 60.5% the share of the local population defined as middle class is the highest nationwide, followed by the Southeastern (59.1%) and Central-Western (56%) region. However, the middle class has gained significant presence in all parts of the country. Although shares exceeding the 50% mark are only observed in South(east) and the Central-West, also in North Brazil 44.2% of the population fall into the middle class definition. In the Northeast, the population share of the middle class (37.8%) remains just below the 40%-line.

Allowing for a more detailed, longitudinal analysis, **Figure 5** compares the evolution of population shares defined as lower, middle and upper class in Rio Grande do Sul, representing the Southern region, and Bahia, representing the Northeastern part of the country. Despite highly diverging initial conditions in 1999, both states show similar trends in social transition. As can be seen, the proportion of the population belonging to the lowest income earners decreased in both Brazilian states by almost 20 percentage points: in Bahia from an alarmingly high rate of 72.2% in 1999 to 53.7% in 2009, indicating a decline by 18.5 percentage points; and in Rio Grande do Sul from 37% to 21.5%, indicating a reduction by 16.5 percentage points. Over the same ten-year period, the middle class expanded in both states by around 15 percentage points: in Bahia from 23.6% to 39.2%, indicating a rise by 15.6 percentage points; and in Rio Grande do Sul from 48.1% to 59.6%, indicating an increase by 11.5 percentage points. The percentage of households belonging to the upper class increased in both states by about 3 to 4 percentage points, as **Figure 5** displays.

IV.3 Social government programs as an important underlying factors of the process of social transformation in Brazil

Certainly, changes did not occur over night but resulted from a long-term process involving the interaction of a multitude of interdependent factors, such as demographic changes, increased price stability and educational improvements. In this regard, particular attention must be paid to the wide range of social government programs, which induced substantial advancement in the fight against national poverty and inequality.

Especially Brazil's former president Inácio Lula da Silva's ("Lula") detached high importance to the achievement of the Millennium Development Goals, which had been officially established following the Millennium Summit of the United Nations in 2000, making the fight against extreme poverty the central aim of his government agenda. The already mentioned considerable number of people entering Brazil's middle class and people escaping from poverty over the seven years of Lula's government went in line with a wide range of successfully implemented social policy programs. Although it is difficult to establish a direct link between the implementation of a policy measures and improvements of poverty indicators and no causality can be proved, the launched initiatives may be assumed to have contributed significantly to the advancements attained in the fight against poverty.

At the beginning of his term in 2003, President Lula declared the eradication of hunger the top priority of his government. In October of the same year, the program *Bolsa Família* ('Family Benefit') was launched, under which four different cash transfer programs, which had previously been operated by separate ministries, were merged. By conditioning cash transfers on the recipients' compliance with requirements for school attendance, vaccinations, and pre-natal visits, the initiative not only raised poor household's income, but at the same time increased their use of basic health services while also strengthening the accumulation of human capital – factors which are essential in overcoming poverty. According to a publication by the United Nations Development Program (UNDP), the large-scale program currently supports 13 million households (nearly 30% of the Brazilian population). Furthermore, in 2003 the program *Fome Zero* ('Zero Hunger') was created, which means to promote the elimination of malnutrition and to improve the health of children of poor families. In this regard, the initiative made an important contribution to the inclusion of the "right to food" in the Brazilian constitution, which was enacted in February 2010.

Additional initiatives include programs for literacy, vocational training, micro-credits (for small farmers), and the infrastructure program *Luz Para Todos* ('Light for All') launched in November 2003, which envisages achieving universal electrification of rural areas by December 2015. According to UNDP information, by December 2011 the national initiative had already reached 2.9 million families (about 14.5 million people).

Also the current government under Dilma Rousseff is committed to continue and enhance the programs initiated under President Lula. In particular, turning Brazil into “a middle-class society” became one of the declared policy aims of the country’s actual president. In this regard, the newly launched social program *Brasil Sem Miséria* (‘Brazil Without Poverty’) started in 2011, is meant to extend (by 2013) *Bolsa Família* to over 800,000 additional families that have previously been eligible to the program, but have not yet received any payments (UNDP, 2012). *Brasil Sem Miséria* is meant to promote in particular development in the Northeast of Brazil, the poorest region of the country. Moreover, in October 2011, the environmental conservation support program *Bolsa Verde* (‘Green Benefit’) was created, which focused primarily on the preservation of the Amazon region and presents an extension of the previous program *Bolsa Floresta*. The program is meant to encourage families living in extreme poverty in or close to Brazil’s protected areas to pursue environmentally sustainable livelihoods. In exchange participants receive quarterly payments of about US\$160 over a two-year period (which can be extended) and training in forestry management. By 2014, *Bolsa Verde* is expected to provide payments to nearly 73,000 smallholder families and other traditional communities living in national forests, protected areas, and other settlements that contain important forest resources (UNDP, 2012).

IV.4 Economic implications resulting from the rise of Brazil’s “new middle class”

The rising size of the middle class – comprising 104 million Brazilians in 2011, accounting for 53.9% of the total population (Data Popular, 2012) – matters from an individual, as well as from a broader economic and political perspective. Without a doubt, people are better off when falling into the middle class definition than when living below the poverty line. Besides raising individual living standards and facilitating the households’ escape from poverty, a larger middle class is widely associated with further benefits on the national level. In this regard, a strong middle class is supposed to favor the country’s stability and the performance of democratic institutions, since individuals belonging to this class are assumed to be less prone to populism and more intolerant of corruption; and improved living conditions reduce the risk of social unrest. Furthermore, expanded consumption possibilities can provide important economic stimuli.

In its formulation of the “45 Curiosities about the New Middle Class”, the SAE denotes that the Brazilian middle class, here defined as disposing of a monthly household income between R\$1064 and R\$4561, experienced between 2002 and 2008 an increase in the rent available to its families of more than 40% (approx. R\$150 billion). Since 2002, this income increase, which led to a significant change in the consumption behavior of the households, is estimated to have injected more than R\$100 billion into the Brazilian economy. With a total of R\$881 billion consumption expenditure in 2009, Brazil’s Class C (as defined by the *Cr terio*

Brasil) accounted for 46.24% of the national purchasing power and hence surpasses the higher income classes A and B (44.12%), as well as the lower income classes D and E (9.65%).

While most of those newly entering the middle class were formerly forced to spend their entire income on basic needs, rising incomes today allow the “new middle class” to augment their spending on higher manufactured, technological products and education – with important growth implications. In this regard, the share of consumption expenditure dedicated to education – such as school fees, study material and text books – increased from R\$1.8 billion in 2002 to R\$15.7 billion in 2009. The SAE denotes a rising tendency of children in classes C and D to attend private schools, which currently offer primary and secondary education of better quality than public schools, implicating a higher, growth relevant, accumulation of human capital. According to data provided by the Brazilian research institute *Data Popular*, the country’s Class C accounts for 80% of the domestic internet users, 78% of the total national supermarket purchases, 70% of the total number of credit card holders, and 60% of the women making use of nationally provided services in form of beauty treatment (c.f. SAE, 2013). A study published by the *Brazilian Institute of Public Opinion and Statistics* (Instituto Brasileiro de Opinião Pública e Estatística, Ibope) in 2010 reveals that 19% of the Brazilian middle class members plan to buy a private immovable property and 9.5 million persons pretend to acquire a car within a time horizon of the subsequent 12 months.

Higher incomes of the members of the expanding middle class not only imply an increase in purchasing power, but, combined with higher average levels of education, may also positively affect further growth-relevant factors, such as fertility rates. In this regard, an article published on the 20th of February 2013 in the national newspaper “Valor” refers to the Brazilian favelas as a new growing market comprising 12 million persons. Together the inhabitants of these communities receive a rent of R\$56.1 billion, a value even higher than the GDP of Bolivia (R\$48.8 billion). According to the article, an analysis by *Data Favela* based on PNAD data revealed that in 2011 65% of the favela inhabitants formed part of the middle class, following the SAE definition. This share almost doubled since 2002, when 37% fell into the middle class definition (see **Figure 6**). The increase in income was accompanied by a positive effect on fertility rates. Between 2002 and 2013, the percentage of persons below an age of 14 decreased in the favelas from 31% to 26%, while the share of persons between 35 and 59 years of age increased from 27% to 31% (c.f. Valor, 2013).

Summarizing, from an economic point of view, Class C can be said to be the most optimistic social class in Brazil: In 2005, 40% of the middle class members declared to be better off than in the previous year; a share which increased to 50% in 2009. In addition, the

percentage of those perceiving their future perspectives for the following year as optimistic augmented from 74% in 2005 to 84% in 2009 (c.f. Ibope, 2010).

IV.5 Is the rise of Brazil's "new middle class" sustainable?

Despite the unquestionable existence of significant advancements in the fight against poverty over the last decade, lately increasing skepticism arises regarding the sustainability of the widening of Brazil's middle class (c.f. World Bank, 2012). As Amaury de Souza and Bolívar Lamounier (2009) note, the vertical upward mobility observed in the emerging countries' societies over the last decade, at first sight seems to replicate the former rise of the middle class in today's industrial countries. However, an important aspect, which has been ignored so far, concerns the economic foundation of these exceptionally high growth rates of Brazil's middle class. In this context, it is essential to ask in how far the observed dynamics were driven by enhanced efficiency and competitiveness in the production sector, financing increasing rents, or whether they have rather been artificially created by cash-transfer programs and consumption credits, boosting private income in the short run without building the fundamentals for long-term economic growth.

Regarding this question, the principal indicators of the Brazilian economy from the end of 2010 onward are far from promising. After the strong crisis recovery in the months after 2009, Brazil's economic performance started to deteriorate in December 2010. In the industrial sector, compared to the prior month, sales decreased by 0.6%, hours worked declined by 2.2%, and employment was reduced by 0.5%; as a study by the National Confederation of Industry (Confederação Nacional da Indústria, CNI) revealed. Concerns also arise considering the evolution of the index of economic activity (IBC-Br) calculated by the Brazilian Central Bank (BC). As highlighted by an article published by the national newspaper "O Globo" on the 21st of February 2013, economic activity decreased significantly after the strong crisis recovery in 2010. The IBC-Br fell by half from 7.6% in 2010 to 2.79% in 2011, reaching a low point of 1.35% in 2012. Given these developments, Brazil remains significantly behind the rates of economic growth achieved in other parts of the world. The leading country in 2012 was China with a GDP growth of 7.8%, followed by Indonesia (6.3%), the Philippines (5.9%), and Venezuela (5.5%) (c.f. O Globo, 2013).

Industrial production in Brazil grew at a low rate of 0.4% in 2011, a significant decline in growth rates compared to 2010, when production expanded by 10.5% (after having decreased by 7.4% in the crisis year 2009). In 2012 industrial production experienced a remarkable decrease, falling back to the 2007 level (IBGE, BC). This decline was accompanied by a reduction in the efficiency of production. According to data provided by the Brazilian *Institute for Applied Economic Research* (Instituto de Pesquisa Econômica Aplicada, IPEA), over the last 30 years labor productivity in Brazil's manufacturing industry

decreased by 15%. Over the same time period, China's labor productivity in manufacturing increased 808%. Also Brazil's neighboring countries showed a better performance: labor productivity growth in Chile was 82.11%, in Argentina 16.98%.

This decrease of production and productivity was accompanied by a smaller growth rate of national demand, which after 2003 had been the main driver of Brazil's GDP growth, compensating the reduction in external demand, which had been constantly falling since 2005. Between 2006 and 2010, excluding the crisis year 2009, national demand had been growing at a rate between 5.3% and 10.3%. However, in 2011 its growth rate declined to 2.7% (BC).

Confirming this trend, a survey directed in February 2013 by the *National Confederation of Goods, Trade, Services and Tourism* (Confederação Nacional do Comércio de Bens, Serviços e Turismo, CNC) indicated that from 2012 to 2013 domestic consumer spending has fallen by 3.8% (CNC, 2013a).

This reduction in domestic consumption is likely to be related to rising levels of private debt, which are particularly worrying as they present a serious constraint to the households' budget. In this regard, the CNC survey (2013b) provides alarming figures on consumer indebtedness and private insolvency: As **Table 3** indicates, between January and February 2013, the proportion of indebted households in Brazil – including those who report making use of postdated checks, credit cards, overdrafts, and personal loans, amongst others – increased from 60.2% to 61.5%. One year earlier, in February 2012, this figure had been at 57.4%. **Figure 7** illustrates the evolution of household debt over the past year. While the share of indebted households slightly declined between March and May 2012 to 55.5%, it rapidly increased thereafter by more than 5 percentage points in only nine months. In addition, over the last year, the proportion of families who report being unable to cover current bills and credit repayment rates rose from 6.6% to 7.0%. In February 2012, 7.3% of the households were unable to repay (see **Table 3**).

According to data provided by the Brazilian Central Bank (BC), national household indebtedness, calculated as the ratio between the sum of total debt and total household income, amounted to 44.5% in October 2012, the highest ratio denoted since the start of the series in 2005. One year earlier, in October 2011, this ratio had been at 42.4%. In October 2012, the Brazilian households spent 21.5% of their income on debt payments (14% on debt amortization; 7.5% on interest rate payments).

Furthermore, in addition to these factors, the low investment rate in Brazil is cause of concern. Although the national investment rate (ratio of gross capital formation to GDP) rose from 15.9% of GDP in 2005 to 19.5% in 2010 (IBGE), it remained significantly behind the developing and emerging countries average of 31.1% (2010). Not only were investment

ratios in Asia far higher (e.g. China: 48.8%; India 37.9%; Indonesia: 32.5%; Korea: 28.7% (2010)), also the share of GDP reinvested by other countries in Latin America was around 5 percentage point ahead of the Brazilian investment rate (e.g. Chile: 26.3%; Mexico: 25.7%; Argentina 24.5%; Ecuador 25.2%; Colombia: 22.4% (2010)); as statistics provided by the International Monetary Fund reveal.

These recent statistics question the underlying macro- and microeconomic basics of the Brazilian growth experience and might indicate that developments have been overrated by political and economic experts and by the media, who celebrated the rise of Brazil's middle class as an expression of the country's exceptional economic performance. Of course, labor market improvements and higher rents, combined with increased price stability have been influential, but still it appears that the rise of the middle class in Brazil in first place resulted from targeted social transfer programs and expanded credit, which helped to reduce poverty and increased household income.

As Amaury de Souza and Bolívar Lamounier (2009) denote, the rise of the Brazilian middle class may not be considered as a “natural” or “irreversible” process, as in the past the example of Argentina has shown (recall **Figure 1**). The authors identify three key areas, which are essential in order to sustain recent developments: First, economic factors and structural processes; second, the so-called “Weberian” resources including education; and third, political resources. In how far improvements have been achieved in these key areas, appears questionable. According to the authors, the new Brazilian middle class faces significant fears of losing the newly gained income position in subsequent years. Those who recently gained middle class status are competing with the traditional middle class for example on the labor market, in order to maintain their position and avoid slipping back into poverty. In this regard, education is the symbol par excellence of the identity of the middle class. 97% of the survey respondents considered good quality education to be an “essential” or “very important” element to succeed in life.

Despite a high rate of appreciation of formal education, fundamental deficits in the Brazilian education system have become evident. The “new middle class” is predominantly young and includes a significant share of persons with of Afro-Brazilian descent (c.f. SAE, 2013). The largest difficulty these adolescents are currently facing in Brazil is the lack of access to education of good quality. In order to reduce the inequality of opportunities, even before 2010 various public universities in Brazil established minimum quotas for the proportion of places reserved for alumni from public schools. In September 2012, this quota has been set by law to 50%. Moreover, the proportion of students of Afro-Brazilian decent is meant to be gradually increased. However, the establishment of these quotas leaves

untouched the underlying problem of poor quality of public elementary and secondary schools and, hence, does not present an adequate long-term solution.

Closely linked to the demand for a revision of the educational system, is the need to improve the chances of the young people on the labor market – particularly of those belonging to the “new middle class”, who do not dispose of a strong network of acquaintances and family members facilitating business contacts. According to a study conducted by the *International Labour Organisation*, in 2006, 67.5% of 15 to 24-year-old Brazilian youth were unemployed or in informal work. Moreover, incomes well below the national average and a lack of social security and labor protection ranked among the problems of working youth.

The precarious situation of the middle class youth on the labor market is currently aggravated by a looming shortage of qualified professionals in Brazil and increasing international competition: According to a 2012 survey conducted by the employment agency *Manpower*, 71% of the employers surveyed in Brazil stated to have problems filling vacancies adequately – a reflection of the educational deficits. As a consequence, between 2011 and 2012 the number of work visas granted to foreigners increased by 22%. About 90% of the issued visas were granted to people with completed higher education, engineering professionals, master graduates or post-doctorates. Without a significant increase in the quality of the Brazilian educational system at all levels, but especially in the area of primary and secondary education, the Brazilian youth will not be able to keep up with this rapidly growing international competition on the national labor market.

V. Conclusion and Future Perspective

Despite the remarkable expansion of the Latin American middle class, pointed out by this paper, the progress made by LAC towards becoming a middle-income region cannot yet be considered as permanent and certainly much remains to be done. How to sustain the growth of the middle class presents one of the major challenges Latin America has to face in upcoming years. Without a doubt, even in absence of any (still possible) adverse shock, progress will only be kept up with the right educational, industrial and financial policies in place. In this regard, for example, training and information programs improving the employment opportunities of the “vulnerable” may help to prevent this group from slipping back into poverty. In addition, moving towards higher equality of opportunity fundamentally requires investment in better quality and accessibility of schools and health care across the population. In this context, low tax rates prevalent in many Latin American countries may present a serious obstacle to the provision of good-quality services. However, whether the new middle class will be willing to pay higher taxes or rather be tempted to ally with the rich to block reform remains questionable (c.f. *The Economist*, 2012).

Particularly in Brazil, substantial advancements achieved over the last decade are increasingly jeopardized by weak international competitiveness, low investment rates, rising levels of household indebtedness, and deficits in the education system. In this regard, the declining production efficiency in the industrial sector, as well as the low quality of public primary education and the unequal opportunities in accessing secondary and tertiary education present important challenges which the country has to face in order to sustain and promote the process of social transformation which has marked the last ten years of the country's history.

In conclusion, significant improvements in the underlying industrial, financial, and educational structures are urgently needed in order to sustain the rise of the region's "new middle class" and avoid a reversal of trends in the following years. In this regard, dissent emerged in the economic literature with respect to role which the middle class may play in this process. It has not yet been clearly determined whether the larger middle class will push the Latin American states to provide better quality services, or will rather choose to opt out of state services, which could worsen as a result (c.f. *The Economist*, 2012). The observed preference, primarily of upper middle class parents in Brazil, to send their children to private schools instead of enforcing and demanding improvements in public education, unfortunately provides support for the latter view.

Furthermore, in addition to the attempts to sustain economic growth rates and promote the security and prosperity of those who are vulnerable, "regional leaders will need to continue to devote considerable policy attention to the one-third of Latin Americans who remain poor" (World Bank, 2012). Although the present study was focused on the considerable population share which succeeded to move up in the income ladder, it should not be forgotten that for example in 2009 6.1% of Brazil's population were still living on less than US\$1.25 per day (UNDP). Although this share may sound almost negligible in relative terms, it is equivalent to 11.7 million Brazilians living in extreme poverty. In this context, some attention has been attached to persisting rural-urban and inter-state income gaps, which must remain in sight of continuing policy efforts.

Tables

Table 1: Definition of social classes in Brazil

Classes			Lower bound of total household income	Lower and upper bound of household per capita income
Low	extremely poor	E	247	<81
	poor	D	648	81-162
	vulnerable	C2	1030	162-291
Middle	lower middle class	C1	1540	291-441
	middle class	B2	1925	441-641
	upper middle class	B1	2813	641-1019
High	lower upper class	A2	4845	1019-2480
	higher upper class	A1	12988	>2480

Source: Authors representation based on SAE, 2012a.

Note: Values expressed in R\$ of April 2012.

Table 2: Comparing different databases for the definition of social classes in Brazil

Classes			Pesquisa Nacional por Amostra de Domicílios		Pesquisa de Orçamentos Familiares	
			Lower bound	Upper bound	Lower bound	Upper bound
Middle	lower middle class	C1	291	441	458	675
	middle class	B2	441	641	675	1032
	upper middle class	B1	641	1019	1032	1661

Source: Authors representation based on SAE, 2012.

Note: Values expressed in R\$ of April 2012.

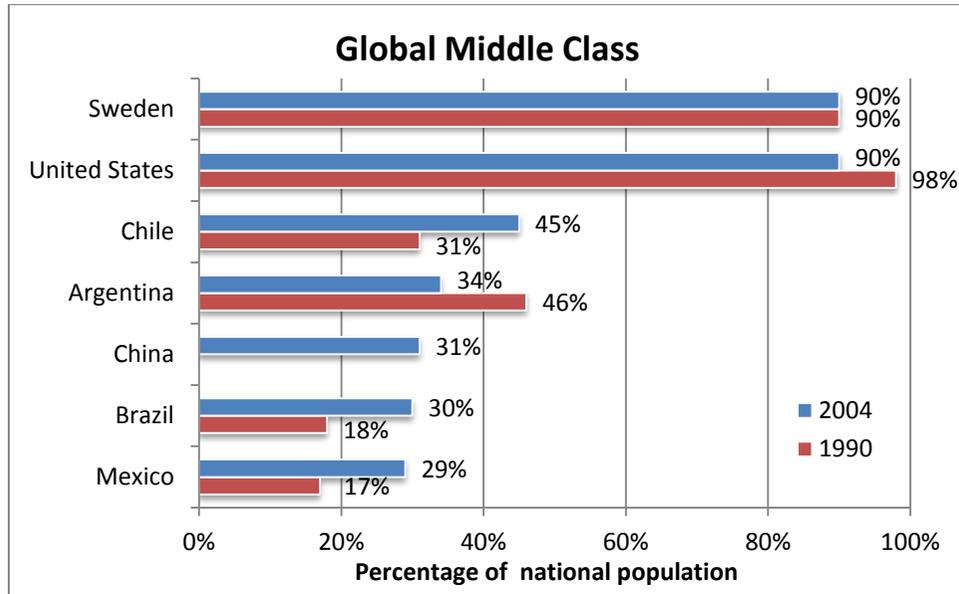
Table 3: Consumer indebtedness and private insolvency in Brazil

Month	Total indebtedness	Delayed bills or debt repayments	In conditions unable to repay
Feb 12	57.40%	20.50%	7.30%
Jan 13	60.20%	21.20%	6.60%
Feb 13	61.50%	22.10%	7.00%

Source: PEIC/CNC, 2013b.

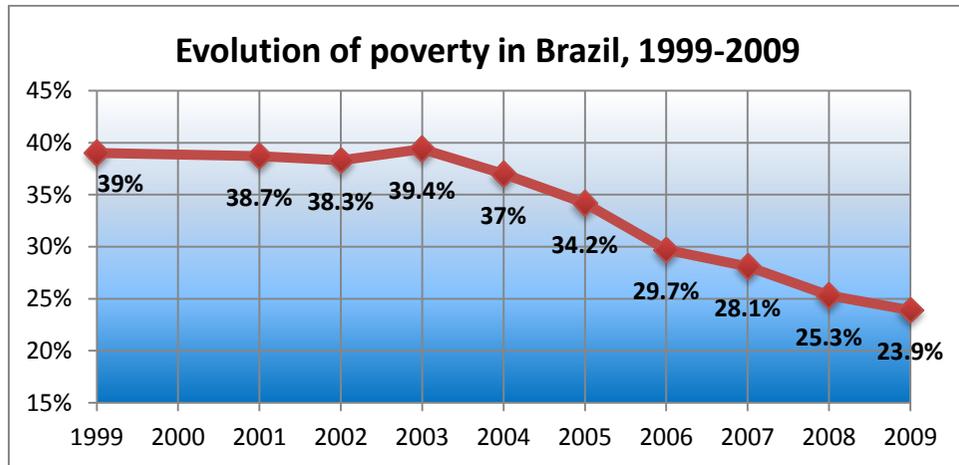
Figures

Figure 1: Population share of the middle class worldwide, 1990 vs. 2004



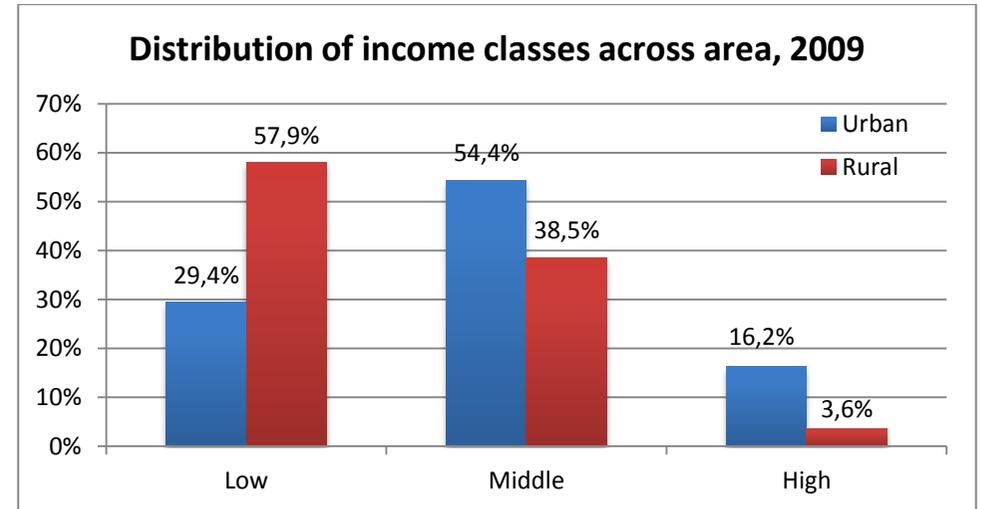
Source: de Souza & Lamounier (2009)

Figure 2: Percentage of the Brazilian population living below the national poverty line, 1999-2009



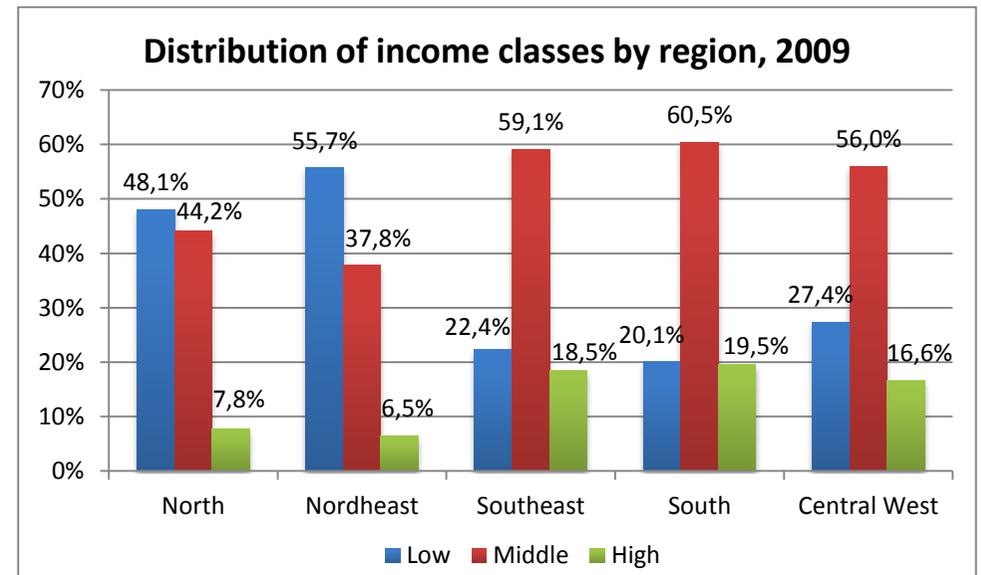
Source: SAE, estimates based on PNAD 1999-2009.

Figure 3: Population distribution across income classes by area (%), 2009



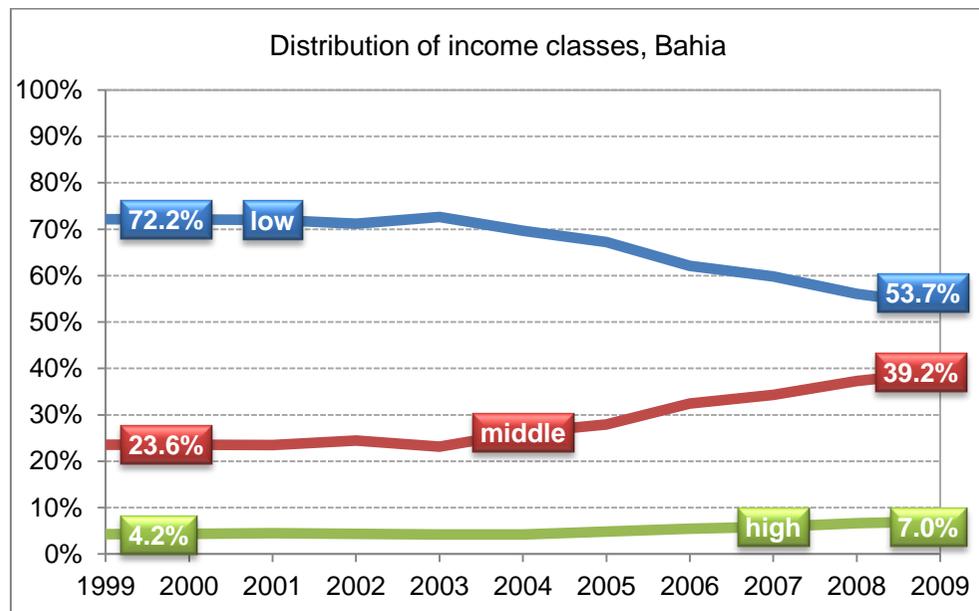
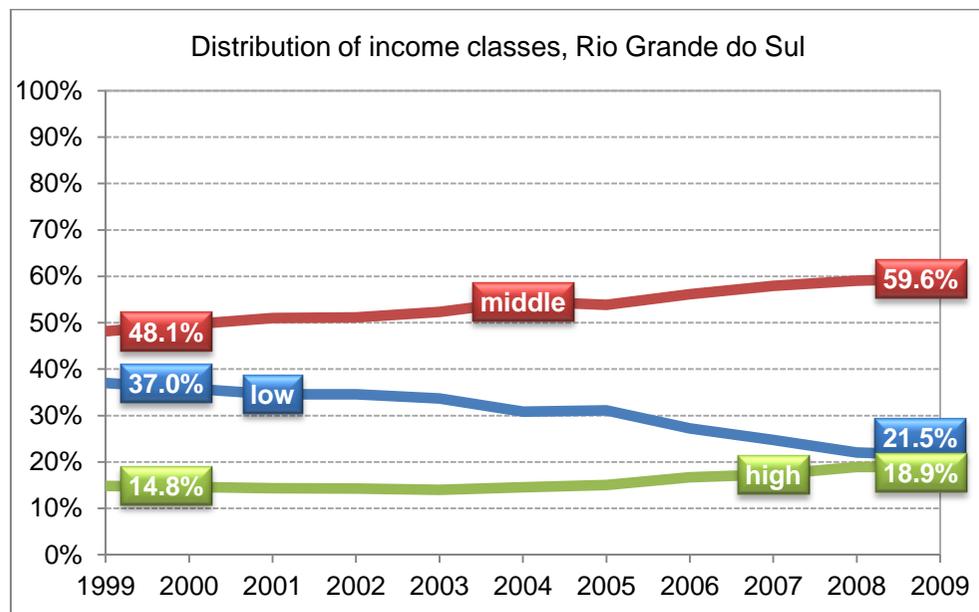
Source: SAE, estimates based on PNAD, including Rural North.

Figure 4: Population distribution across income classes by region (%), 2009



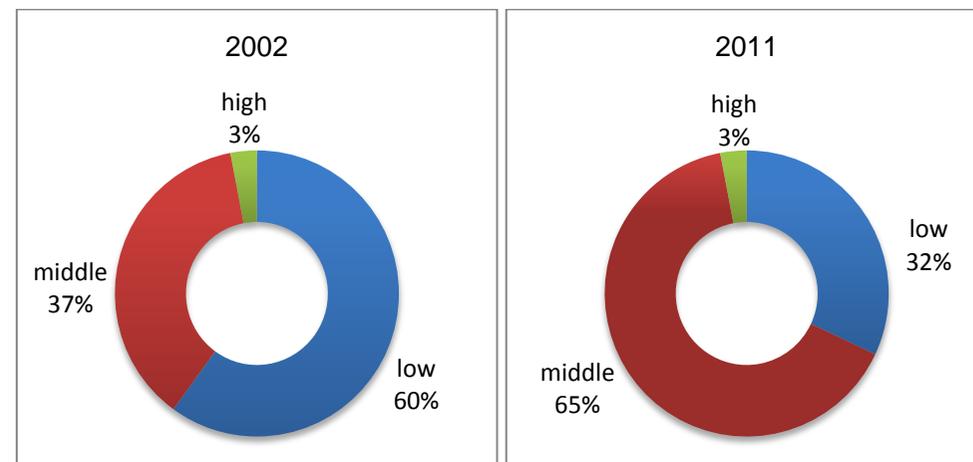
Source: SAE, estimates based on PNAD, including Rural North.

Figure 5: Population distribution across income classes, Rio Grande do Sul vs. Bahia, 1999-2009



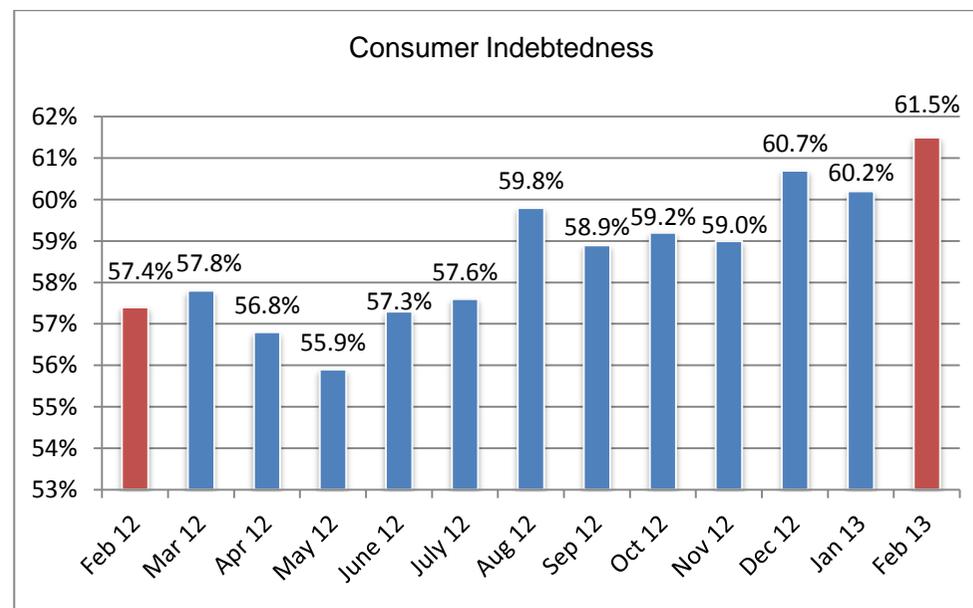
Source: SAE, estimates based on PNAD, excluding Rural North. Estimates for 2000 obtained from simple measurement between 1999 and 2001.

Figure 6: Distribution of population living in favelas across social classes in Brazil, 2002 vs. 2011



Source: Data Popular/PNAD/IBGE.

Figure 7: Share of Brazilian indebted households (% of total), February 2012-February 2013



Source: CNC/PEIC, 2013b.

References

- Banerjee, A.V. & Duflo, E. (2008). "What Is Middle Class about the Middle Classes around the World?". *Journal of Economic Perspectives*, American Economic Association, vol. 22(2), pp. 3-28, Spring.
- Birdsall, N. (2012). "A Note on the Middle Class in Latin America". forthcoming as a chapter in Changyong Rhee, Juzhong Zhuang, and Ravi Kanbur, eds., *Inequality in Asia and the Pacific* (Manila: Asian Development Bank, 2013).
- Birdsall, N. & Graham, C. & Pettinato, S. (2000). "Stuck in The Tunnel: Is Globalization Muddling The Middle Class?". Brookings Institution, Center on Social and Economic Dynamics Working Paper No. 14.
- CNC, Confederação Nacional do Comércio de Bens, Serviços e Turismo. (2013a). *Pesquisa Nacional de Intenção de Consumo das Famílias*, ICF, February 2013.
- _____. (2013b). "Aumenta o número de endividados e inadimplentes". *Pesquisa Nacional de Endividamento e Inadimplência do Consumidor*, PNEI, February 2013.
- de Souza, A. & Lamounier, B. (2009). "A Classe Média Brasileira: Ambições, Valores e Projetos de Sociedade". Elsevier.
- Easterly, W. (2001). "The Middle Class Consensus and Economic Development". *Journal of Economic Growth*, vol. 6(4), pp. 317-35.
- Goldman Sachs. (2008). "The Expanding Middle: The Exploding World Middle Class and Falling Global Inequality". Goldman Sachs Economic Research, Global Economics Paper, Issue No: 170.
- Ibope, Instituto Brasileiro de Opinião Pública e Estatística. (2010). "Classe C Urbana no Brasil: somos iguais, somos diferentes". <<http://www4.ibope.com.br/maximidia2010>>, last accessed Feb 20th, 2013.
- Kharas, H. (2010). "The Emerging Middle Class in Developing Countries". OECD Development Centre, Working Paper No. 285.
- Neri, M. (2010). "The New Middle Class: The Bright Side of the Poor". Rio de Janeiro: Fundação Getulio Vargas Press.
- O Globo (2013). "BC confirma Pibinha". Gabriela Valente, Daniel Haidar, Renata Cabral & Nice de Paula, 21st Feb 2013.
- SAE, Secretaria de Assuntos Estratégicos (2013). "45 Curiosidades sobre a Nova Classe Média". <http://www.sae.gov.br/novaclassemedia/?page_id=58>, last accessed Feb 20th, 2013.

- _____(2012). “Perguntas e Respostas sobre a Definição da Classe Média”. <<http://www.sae.gov.br/site/?p=12100>>, last accessed Feb 20th, 2013.
- Sala-i-Martin, X. (2006). “The World Distribution of Income: Falling Poverty and Convergence, Period”. *Quarterly Journal of Economics*, vol. 121(2), pp. 351-397.
- The Economist. (2012). “Class in Latin America: The expanding middle: A decade of social progress has created a bigger middle class – but not yet middle-class societies”. Published online Nov 10th 2012 from the print edition. <<http://www.economist.com/news/americas/21565930-decade-social-progress-has-created-bigger-middle-class-but-not-yet-middle-class>>, last accessed Feb 20th, 2013.
- UNDP, United Nations Development Program, 2012, “Brazil: making sustainable development happen” in *Case Studies of Sustainable Development in Practice: Triple Wins for Sustainable Development*, pp. 30-37.
- Valor (2013). “Renda aumenta nas favelas e classe média chaga a 65% dos moradores”. Paola de Moura, 20th Feb 2013.
- World Bank (2012). “Economic Mobility and the Rise of the Latin American Middle Class”. Washington D.C.
- _____(2007). “Global Economic Prospects 2007: Managing the Next Wave of Globalization”. Washington D.C.