

## Summary

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September, 13th 2010 - Version 1.0 in English  
Original Version in Portuguese September, 10<sup>th</sup> 2010

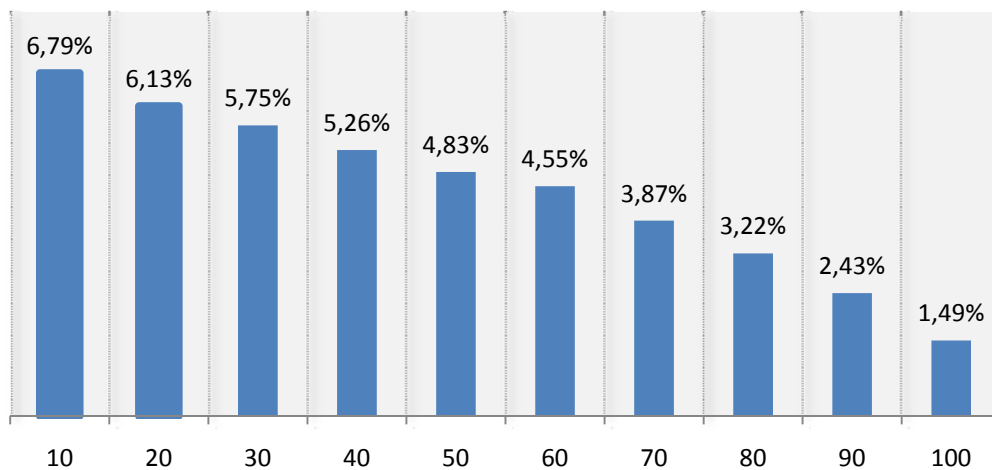
# Summary

## Chapter 1 – Brazilian Boom

Brazil is booming. In the first quarter of 2010 per capita GDP growth was 9% compared to the first quarter of 2009, or 11,7% compared to the last quarter of 2009. Growth is picking momentum now but has been going on since the end of 2003 recession. From 2003 to 2008 per capita GDP growth rate was 3,8% per year. During this period there were marked trend differences between GDP and per capita income directly calculated from national household surveys (PNAD) of 1,5% per year. In China and India happened the opposite during the last years when GDP growth surpassed the growth rates of per capita income data found in household surveys (see chapter 2).

Brazilian income inequality has been falling steadily since (and only after) the very begin of last decade. Between 2001 and 2009 per capita incomes of the 10% richest grew at 1,49% per year while the incomes of the 10% poorest grew at 6,79% per year.

### Variation of Average Per Capita Income by Deciles - Brazil (2009/2001)



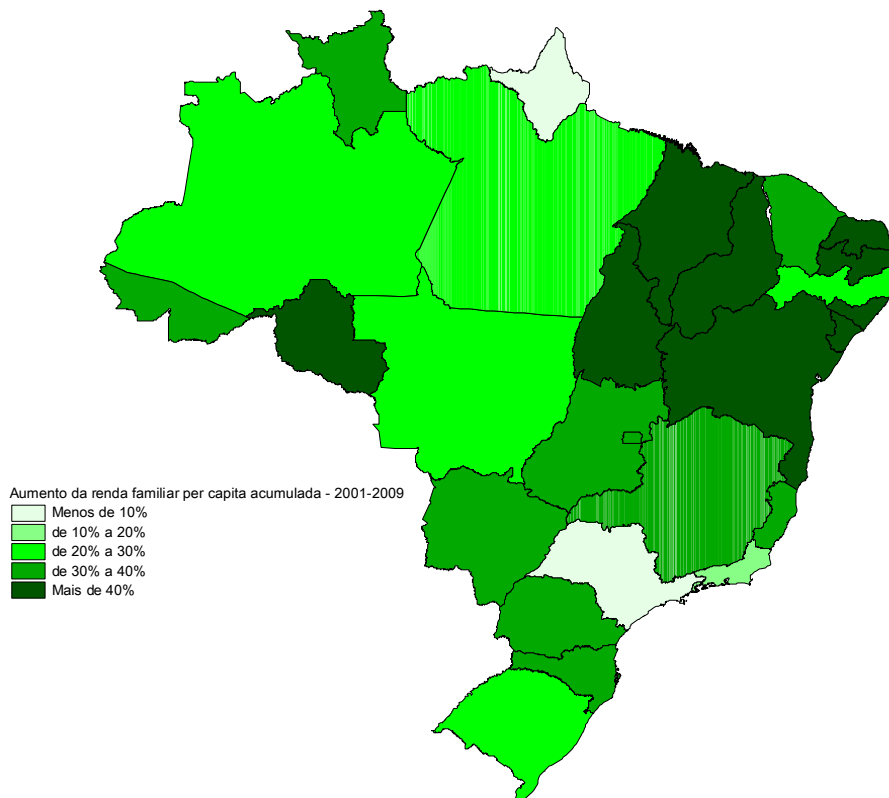
Source: CPS/FGV from microdata of PNAD/IBGE

The size of the Brazilian pie is growing faster while providing larger slices for the poor. Inequality in Brazil has been falling steadily since 2001. Incomes are growing

more in traditionally excluded groups of Brazilian society such as non whites, women, those living in the poor northeast, in *favelas* or in the outskirts of Brazilian cities.

Below we exemplify that with a map across Units of Brazilian Federation of the cumulative growth of the average income between 2001 and 2009 (it corresponds to the Brazilian inequality component between states). The poorest States of the Northesat present the highest growth rates while the São Paulo the richest State one of the lowest.

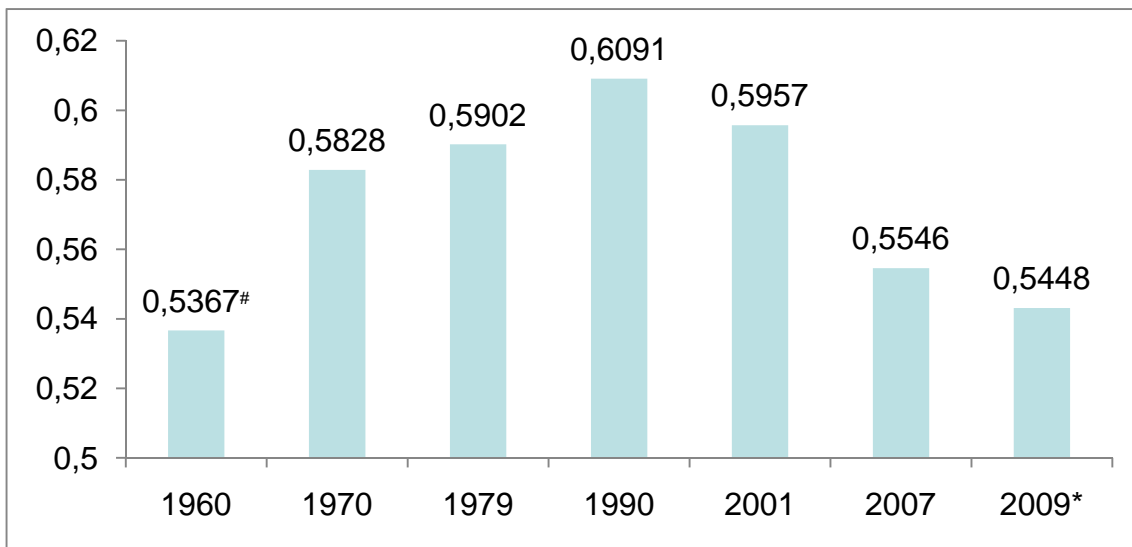
### **Increase of Average household Per Capita Income By States (all sources) – 2001 to 2009**



Source: CPS/FGV from microdata of PNAD/IBGE

Brazil is about to reach the lowest income inequality level since 1960, when the records started. Actually, inequality in Brazil remains among the top ten in the world, and it would take 30 years at the current growth rate to reach the U.S. levels. On the other hand, that means there is considerable growth potential for the Brazilian poor, possibilities that only started to be explored in the last decade.

### Inequality – Gini's Index



*Source: CPS/FGV from microdata of PNAD/IBGE and Census / IBGE*

# Based in variation of individual incomes observed between 1960 and 1970 Census from Langoni 1973.

As a consequence of continuous growth and the decrease in inequality, there is also a constant fall in poverty rates, a trend that began at the end of the 2003 recession, when the number of poor, according to FGV's line, was 49 million, corresponding to class E in our economic class stratification methodology. After the recession during the first year of Lula da Silva's government, until 2008, 19.5 million people surfaced out of poverty. Last year, we added another million and got to 28.8 million poor, definitely still a significant amount. The poverty rate fell to 15.32% in 2009 from 16.02% in 2008, a decrease of 4.32% in a year of World crisis.

Looking at a higher point in the distribution, some 29 million people entered the so-called new middle class (Class C), between 2003 and 2009; 3.2 million of them, between the two last *PNADs*. During the crisis, Class C grew proportionately more

(2.5%) than the other classes, reaching 94.0 million Brazilians in 2009—more than half the population (around 50.5%). In relative terms, classes A and B grew more (30.6%) from 2003 to 2009, with the incorporation of 6.6 million, reaching 20 million Brazilians (approximately 10.5% of the population).

### **Economic classes evolution**

	<b>2009-2003</b>	<b>2008-2009</b>
<b>Class E</b>	<b>-45.50%</b>	<b>-4.32%</b>
<b>Class D</b>	<b>-11.63%</b>	<b>-3.00%</b>
<b>Class C</b>	<b>34.32%</b>	<b>2.49%</b>
<b>Class B</b>	<b>38.51%</b>	<b>3.49%</b>
<b>Class A</b>	<b>40.99%</b>	<b>0.18%</b>

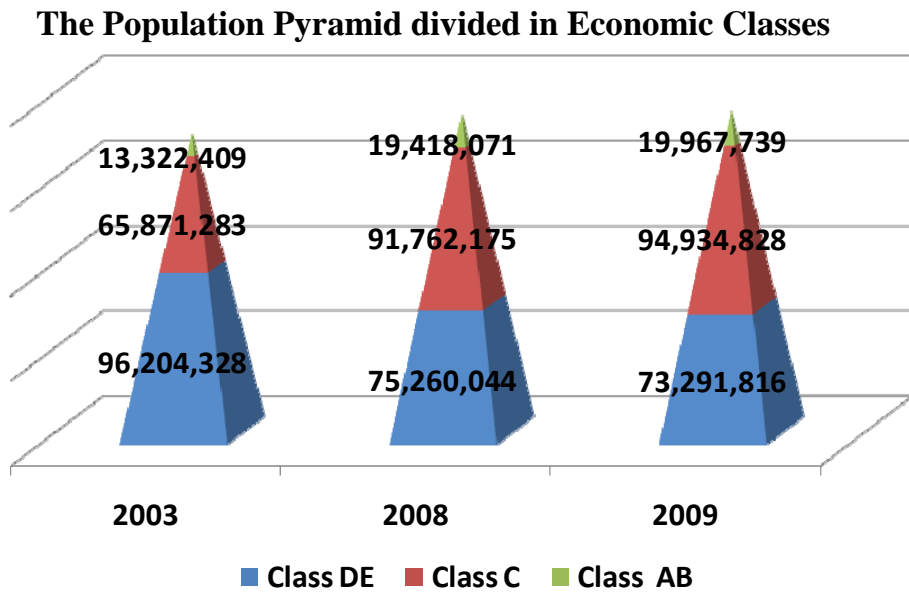
### **Population Difference by Economic Classes**

	<b>2009-2003</b>	<b>2008-2009</b>
<b>Class E</b>	<b>-20,481,069</b>	<b>-1,022,145</b>
<b>Class D</b>	<b>-2,431,443</b>	<b>-946,083</b>
<b>Class C</b>	<b>29,063,545</b>	<b>3,172,653</b>
<b>Class B</b>	<b>3,391,694</b>	<b>443,181</b>
<b>Class A</b>	<b>3,253,636</b>	<b>106,487</b>

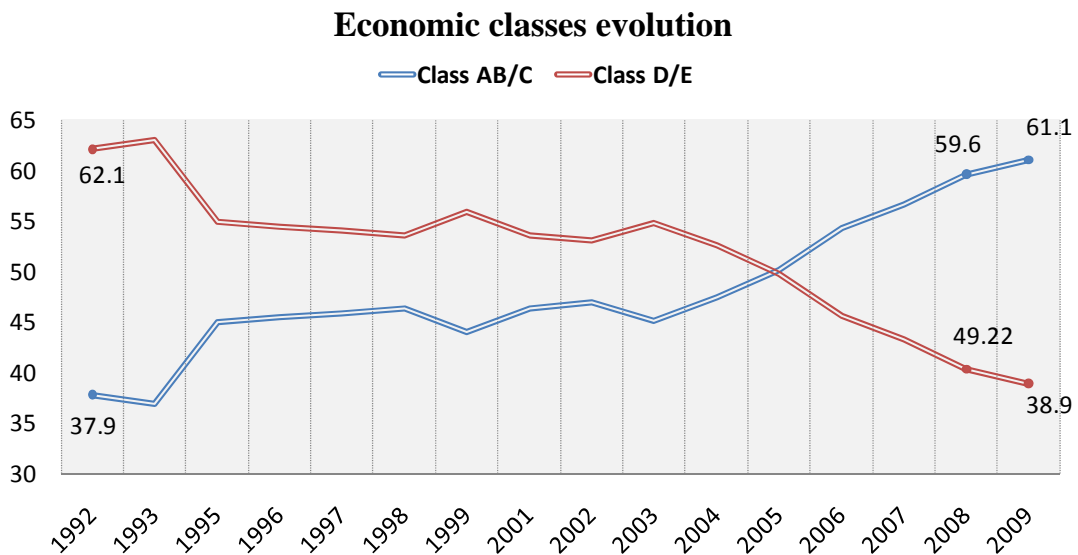
*Source: CPS/FGV from microdata of PNAD/IBGE*

Classes ABC taken together, meaning the middle and upper strata, increased by 35.7 million people between 2003 and 2009, or about 3.7 million more than the 31.9 million in the 2003 to 2008 period. In comparison, the basis of the pyramid, classes D and E, fell from 96.2 million in 2003 to 73.2 million in 2009—2 million of which during the crisis year. It means that, in the last seven *PNADs*, the equivalent to more than half the population of the United Kingdom was added to classes ABC. The

population pyramids below show the evolution of the Brazilian population, divided into several economic strata.



*Source: CPS/FGV from microdata of PNAD/IBGE*



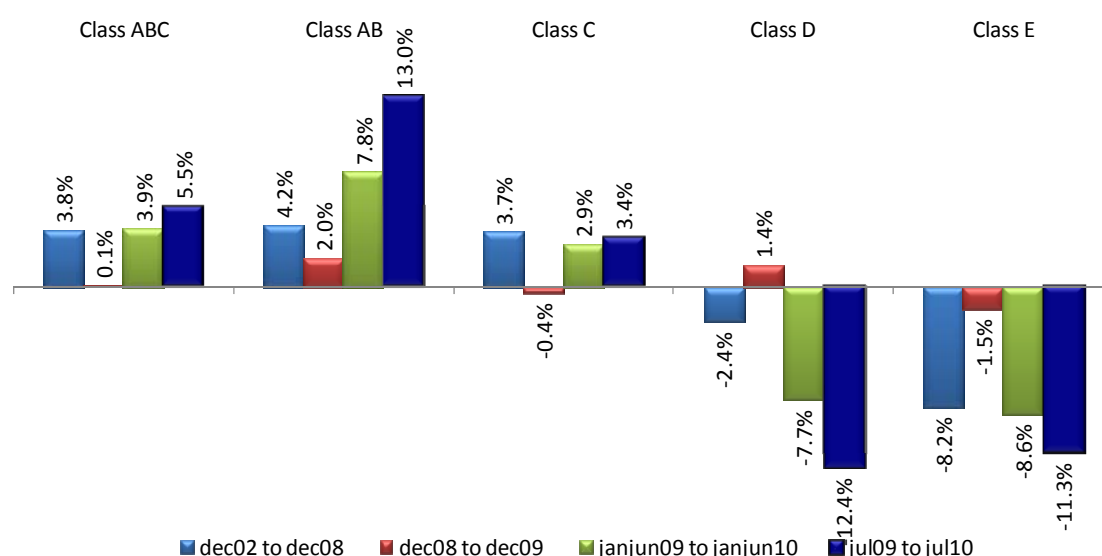
*Source: CPS/FGV from microdata of PNAD/IBGE*

Two reflections are possible, according to the numbers above: one is political, and the other, economics. The 94.9 million Brazilians in the new middle class

correspond to 50.5% of the population. That means that the new Brazilian middle class includes the median voter, believed to be the one that decided an election runoff, but also that it could decide the election alone. From the standpoint of economics, this is also the dominant class, because it concentrates over 46.24% of the total Brazilian purchasing power during 2009 (45,66% in 2008), more than classes A and B taken together, which held 44,12%. Classes D and E today hold 9.65% of purchasing power, a decrease from the 19.79% immediately before Plano Real was launched.

But how did those changes affect Brazilian pocket books after the world crisis? Data about family income gains for the six most important metropolitan regions in Brazil indicate that, in January 2009, Brazilian pockets were severely hit, resulting in a 6.8% increase in poverty during that month alone. However, since February 2009, Brazil kept away from the crisis and returned to its pre-crisis growth rate. Taking 2009 as a whole all improvements stagnated but were not reversed.

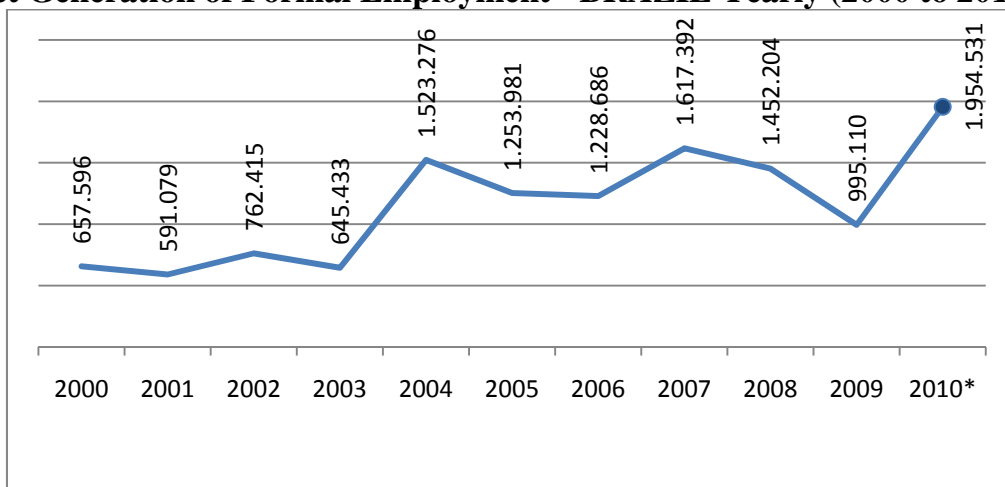
If we go beyond the last figure available in *PNAD* or even the GPD, Brazil is, right now, doing better than it did during the previous golden period: in the 12 months ending in July, 2010, poverty (i.e., class E) decreased 11,3% and the ABC increased 13%. This reflect a combination of a 3.4% growth rate of the new middle class (i.e., class C) and AB class growth of 13%. All that is due to the fact that income is growing 25% faster and inequality decreasing 50% more than in the years between 2003 and 2008.



Source: CPS/FGV from microdata of PME/IBGE

How sustainable is this inclusive growth process? First, one of its key features is formal employment generation which doubled after 2004 with no labor reforms attached to it. Brazil is currently breaking month after month its previous highest record by 20 to 25%. It generated nearly 1,9 million jobs in the first eight months of 2010 more than any other single year taken as a whole. A conservative forecast for 2010 is two million net new records of formal employment generation which is perhaps the main symbol of the emergence of a new middle class in the country.

**Net Generation of Formal Employment - BRAZIL Yearly (2000 to 2010\*)**

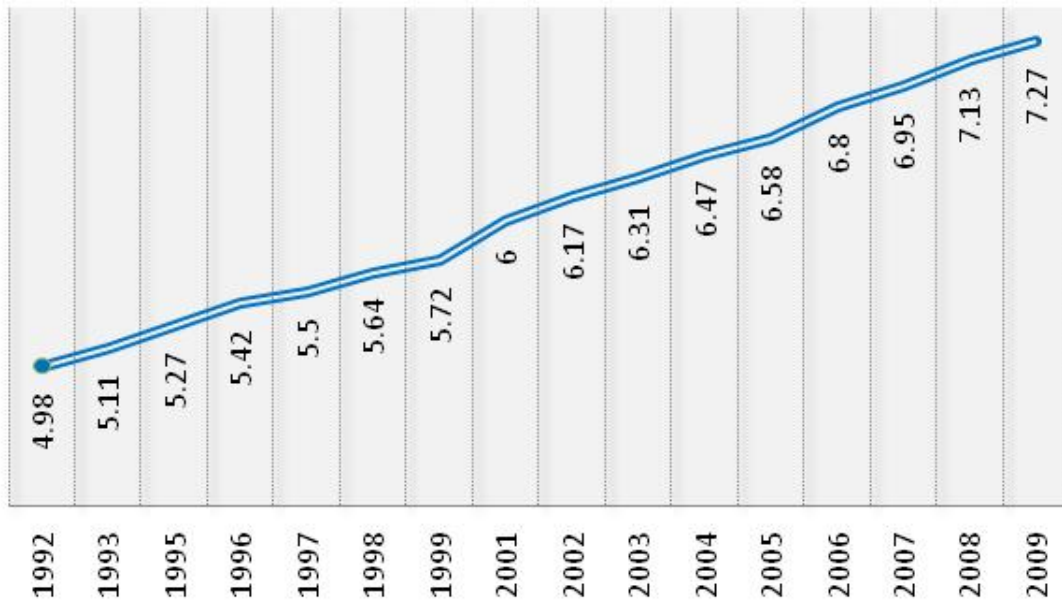


Source: CAGED / MTE \* up to august only

Brazil trends in the level (and inequality) of years of schooling indicate a continuation of this movement towards the future. Increases in the year of schooling explain in the 2003-09 period 65,3% among the 20% poorest mean income increases of 7.95% against 24% of the 20% richest mean income increases of 3,66%. It is true that Brazilian has still many education deficiencies, low savings rates and a vast array of regulatory deficiencies. But for future growth prospects what matters is not the level of these variables but how it changes across time compared to other countries.



**Evolution (years) Average Years of Schooling Brazil - 1992-2008  
Age 25 years or more**



*Source: CPS/FGV from microdata of PNAD/IBGE*

One may also use PNAD to explore the evolution of a vast range of different stocks of different assets and goods, as a basis for a broader view on whether life styles acquired are sustainable, or not. Translating the wealth of data about the evolution of different assets inventories into comparable indexes by using (log) income equations as a basis and per capita incomes as a *numeraire* allows to synthesize different dimensions. These compound indexes grouped two perspectives—consumer and producer sides., using one of La Fontaine’s fables as a metaphor, the survey allowed us to divide Brazilians into ants and cicadas. We showed that, in the picture, Brazilians are more similar to cicadas, but the movie about the last five years shows a gradual metamorphosis towards ants. The progress in the Brazilian ability to generate income increased, according to our index, 31.2% from 2003 to 2009, and the consumption potential increased 22.59%. These data reveal the producer’s side increased 38% faster than the consumer’s. During the crisis year, these indexes increased 3.05% and 2.49%, respectively.

By the same token disentangling the relative importance of different income sources for the advance of income based social indicators in the country. Results indicate that, despite the strong growth of income from social programs and retirement

pay linked to the minimum wage, the amount due to work is close to the significant income growth of 4.72% during the 2003-2009 period. The average work income increase of 4.61% per year, per Brazilian, which corresponds to 76% of average Brazilian income, provides a sustainability basis for life conditions in addition to official income transfers.

How about per capita income inequality? Once more, the present decade may show us the way to keep this process going, by applying a decomposition methodology of the Gini index variations. Labor earnings explain two thirds (66,86%) of the total inequality reduction between 2001 and 2008, next in come the contribution of social programs with emphasis on the *Bolsa Familia* program (Family Grant) and its predecessor *Bolsa Escola* (School Grant) among others, that explain 17% of the higher degrees of equality obtained while social security benefits explain 15,72% of overall reduction of income inequality, and the remaining income account for a residue under 1%.

It is interesting to incorporate in the analysis not only the impacts of different income sources, particularly the official transfers from the Brazilian government, on the inequality movements, but also its costs to the public accounts. When we do that we realize that each percentage point obtained from Social Security Benefits expenses costs 384% more the cost obtained from Bolsa |Familia and social programs expenditures. Leaving political considerations aside and possible impacts of the Minimum Wage that are the *numeraire* of ,most Social Security benefits on income distribution, the unprecedented fall of Brazilian inequality during the last decade could be higher if there were a shift on the new flows of resources from social security adjustments to better target programs such as Bolsa Familia.

Brazil is becoming a nation of consumers, buying cars, computers and houses with cash or on credit. The comparison of indicators on consumption patterns and income generation sides using the same metric of traditional mincerian earnings equation reveal that the producer side of Brazilian is growing twice as faster than the consumer side. The synthetic indicator of potential consumption power increased by 22.6% between 2003 and 2008, while the index of the generation of income raised 31.2%. Difference of 38% in favor of the production side. During the crisis these indexes raised 2.49% and 3.05% respectively. So it is not that Brazilians are going

mostly to shop using credit but that those who went to school are getting now formal jobs.

But how about the immediate post international crisis period? PME Household data on family earnings for the six main Brazilian metropolitan cities show that in January 2009, the crisis hit Brazilian purses with a 6,8% poverty increase and a 2,7% fall in the size of the middle class just in this month. However, since February 2009 Brazil is out of the crisis in the sense of being able to recover its pre-crisis growth pace. If we go beyond the last GDP figure available, Brazil is now surpassing its golden pre-crisis period: in the 12 month period ended in April 2010, poverty fell 10% and the new middle class grew 4,8%. This is because mean per capita earnings is growing at 1 percentage point higher while inequality captured by the Gini index is falling 50% more than in the 2003-08 period.

It is true that Brazilian growth rates still lag behind those of other BRIC countries, especially China. However, Brazilian quality of growth is arguably better than China in several respects: better treatment of the environment and of labor coupled with rising equality. Brazil is a democracy that has learned the hard way how difficult it is to promote sound policy within the messy workings of our system. Historically, Brazilian main problems were of a collective nature such as inflation, informality and inequality which are not in anymore<sup>1</sup>. Brazil still faces many obstacles, including a weak education system, low rates of savings, and a tangle of regulatory impediments. But for future growth prospects what matters is not the absolute level of these factors, but how they evolve over time. Brazil can advance vertically if picks the right tracks towards its frontiers of possibilities.

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<sup>1</sup> Although, economic stabilization happened in 1994, Brazil presents the highest cumulative inflation rates from 1970 to 2008 in the world, biting Argentina, our traditional rival in this field, loosing only to Congo.

## **Chapter 3 - After the Crisis (A.C.)**

**“2009, the year of the crisis was a sudden stop but all indexes have returned to the pre crisis 2003 to 2008 growth rhythm”**

**“Completing one year after the effects of instability left Brazilian pockets: Year I after the Crisis (A.C.)”**

**“We are about to experience the lowest inequality of our historical records that begun with the 1960’s census”**

The research [www.fgv.br/cps/c2010](http://www.fgv.br/cps/c2010) made a retrospect of the main changes of movements in Brazilian budgets in macro terms (the forest, the Brazilian society as a whole), meso terms (the woods, specific sectors, such as industry X finance, capitals X suburbs, etc) and individuals (the trees – this is, tracking each person’s movements across time). Looking at the big trends of the Brazilian forest, we started in January 2009 with strong deterioration of all indexes based on per capita income followed by gradual recovery which by chance resulted in finishing the year at a similar level as the previous year. This “*tie with many goals*” happens to a wide range of indexes: average (-0.3%) and income inequality (0%), shares of social classes AB (2%), C (-0.4%), D (1.4%) and E (-1.5%), the last one equivalent to the proportion of the poor. Despite the geographic coverage and source of income data restrictions to its work in the six main capitals of Brazil, PME (Monthly Employment Survey) is a good predictor to PNAD (National Survey of Household Samples). This adherence is not just for covering 80% of PNAD income, but for the fact that income from social initiatives and retirement has followed closely the boom observed in the labour market. Through samples of over 100 thousand people interviewed each month, PME allows an average 17 month anticipation before the release of PNAD data.

**Inflexion** – Returning to the analysis of social conjuncture, not due to the lack of other interesting subjects but because of the inflexion already observed in the begin of 2010: if we compare February 2010 with February 2009, we find very distinct results from the comparison of December 2009 with December 2008, despite having overlap of 10 months in the compared series. As the graph below demonstrates, in annual growth terms, we are back at the rhythm of improvement of the expressed series, similar to the pre-crisis period, between December 2002 and December 2008. Otherwise: class E is reducing in a slightly faster rhythm now (-8.7% against -8.2%) like class D, which is showing a bigger reduction (-4.9% against -2.39%). Looking at the top of distribution, Class C is rising at a slower speed now (2.4% against 3.8%) but class AB faster (7.2% against 4.2%). This means we are out of the inertia of the crisis to the rhythm of the great little decade that occurred between 2003 and 2008.

If we portrait the comparison between January 2009 and 2010, with 11 months of superposition against the other two, December 2008 and 2009, and February 2009 and 2010, it looks more like the latter. The difference is granted by exchanging the passage between December 2008 and January 2009, when the crisis hit with the strength of an undertow, to the December 2009 to January 2010 series. This way we are completing a year after the instability effects have left the Brazilians' pockets. We just completed Year One after the crisis (A.C.).

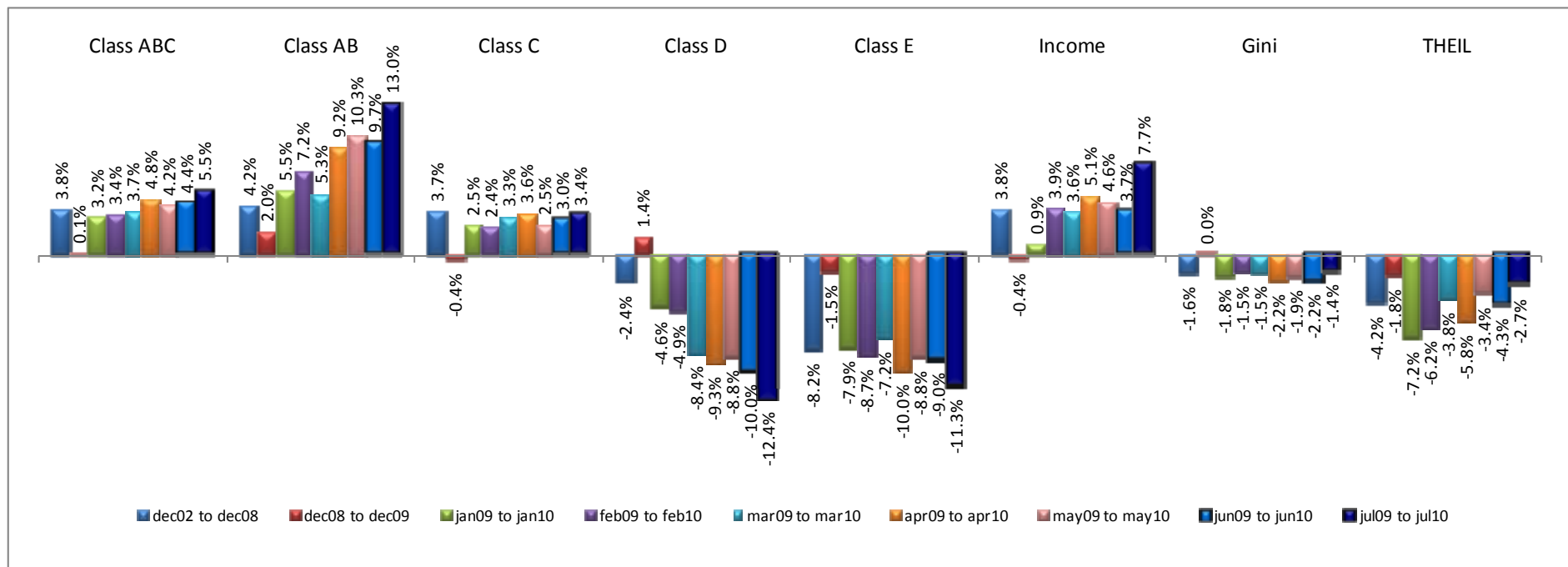
The crisis was not a ripple, nor a tsunami, but an undertow as strong as temporary. From the international start of the crisis on September 15th 2008 until its arrival on the PME series took three and a half months, a similar gap to the arrival of the Asian crisis of September 1997 to the same series. The difference is that the effect of the latter lasted for five years in our series and the one from the recent crisis started to revert after one month.

But what explains the recent improvement (besides the pre-election climate)? The similarity of average and inequality movements together in the last 12 months with the previous period is even closer. The per capita income increased 7.7% last year, compared to 3.8% during the pre-crisis period. Income decentralization measured by the Gini coefficient varies almost the same -1.5% in the two periods. The Gini coefficient worsened in January 2009 (+2.5%) and then stayed leveled from December 2008 to

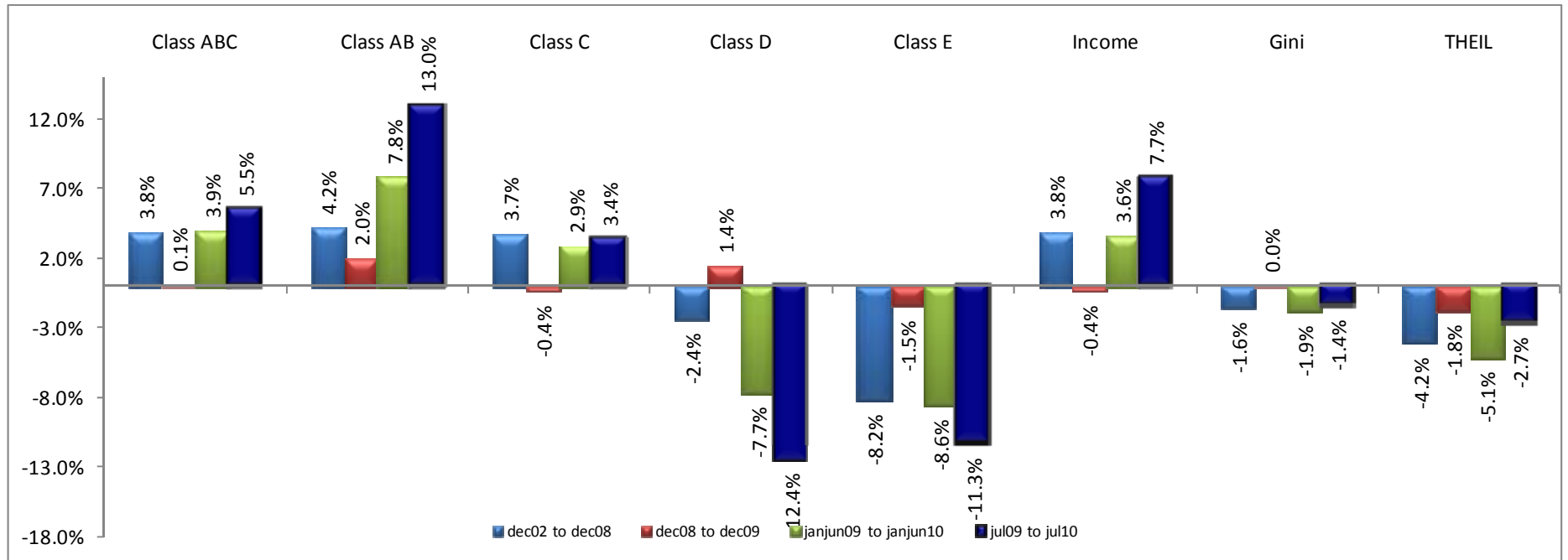
December 2009. Comparing the last 12 months ended in May, it varies -1.5%, the same rate of the boom in the previous year (-1.4%), the period known in Brazil and elsewhere as the period when inequality fell in Brazil. Both points are relevant: the first one because it goes beyond the recently-published GDP period, ended in June 2010, while none of standard statistics used in conjunctural analysis captured inequality.

Because every measure inequality entails a specific value judgment associated to the idea of social welfare from which it derives, the robustness of results should be carefully checked. The Theil-T index, which is more sensitive to changes at the lower tail of the income distribution, decreased 3.2% per year between December 2002 and December 2008, and 6.2% from February 2009 to February 2010, indicating the decrease in Brazilian inequality is growing faster. It is important to highlight this issue, because income decentralization was possibly the biggest socio-economic Brazilian innovation in the last decade. Data from the post-crisis period suggest the equalization trend will continue.

Obviously, we must take into account the constraints imposed by the geographical coverage and income concepts used in PME, besides some instability in monthly data.



Source: CPS/FGV from microdata of PME/IBGE




Source: CPS/FGV from microdata of PME/IBGE



## The New Middle Class in Brazil: The Bright Side of the Poor

This present research website [www.fgv.br/cps/nmc](http://www.fgv.br/cps/nmc) offers an interactive data set with a vast array of data. There are statistics for up to 2009 with extensions up to July 2010 which allow you to study how and where the recent evolution in income distribution happened, poverty and the new Brazilian middle class, its financial possibilities, assets and aspirations.



The image displays two components related to the research website. On the left is a navigation menu for the FGV CPS (Centro de Políticas Sociais) website. The menu includes sections for 'Sumário' (Text and Slides), 'Pesquisa Completa' (Text and Slides), 'Banco de dados - Panoramas', and 'Vídeos'. It also lists specific data topics: 'Evolução da Renda', 'Decomposição por Fontes de Renda', and 'Decomposição da Renda via Mercado de Trabalho'. A contact email 'cps@fgv.br' is provided at the bottom of the menu.

On the right is a promotional poster for the research project. The poster features a stylized world map with a rainbow arching over it, symbolizing the 'bright side' of poverty. A circular logo in the top right corner reads 'THE BRIGHT SIDE OF THE POOR'. The main text on the poster is 'A NOVA CLASSE MÉDIA: O LADO BRILHANTE DOS POBRES'. The FGV CPS logo and the website URL 'www.fgv.br/cps/nmc' are visible at the bottom of the poster.

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