Economic Cycles, Poverty and Population Well-Being in Brazil

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Abstract:

Economic growth is considered a key-issue for the overcoming of the Brazilian economy structural difficulties. Through the accelerated growth of the economy, there are effects of creation of wealth and employment, of sustainability of social policies or even of balance in public accounts. However, the macroeconomic cycles affect the individuals, the families, the companies and the government in an asymmetric way. Therefore, it urges to understand how these effects are to be felt by the most privileged part of the population, as well as by the poorest. The research is based on a triennial cohort pseudo-panel built from the PNAD database, and our major aims are to find the connection between the real wage progression and poverty, as well as its impacts on the population well-being.

Extended Abstract:

Brazil, in the last two decades, presented an erratic macroeconomic performance if compared to the 1970 decade: high inflation rate until 1994, drastic inflexion in economic growth and also an increase in the unemployment rate. Furthermore, in this period, the country presented a deepening of the social inequality. In this sense, despite the perception that the macroeconomic indicators were related to the levels of poverty and inequality, there is little empirical evidence about this relation for Brazil. In addition, the major part of literature on the determinants of poverty and inequality emphasize their structural determinants, with little attention at the role of the macroeconomic short-term fluctuations.

The article intends, thus, to investigate more accurately the relation between the effects of the economic cycles, as well as the economic policy associated with these cycles, on poverty and inequality.

The idea of the "rising tide lift all boats" was decisive in the battle against poverty in Brazil over the last two decades. The dominance of this process can be demonstrated by the behavior of Brazilian family income between 1977 and 1997, as well as by estimating the determinants factors of the reduction in the poverty level of this period. Despite of modest dimensions, the decline on poverty observed can be divided between the effects due to economical growth and to equality. This division, suggested by Barros et al. (2000), estimates the contribution of economic growth for the reduction of poverty starting from the measurement of the difference between the total of the decline in poverty effectively observed and that estimated, by simulation, to be caused by the impact of the reduction in inequality.

The empiric analysis verifies the regularity with which the reduction of poverty can be attributed to the economic growth. With the exception of the end of the 1980's, in particular the adjustment after 1989, when the major degree of inequality of the two decades was in force, the redistribution of the income had a very limited role. An evidence of this fact is that the decline in poverty observed between 1993 and 1995 corresponded in 84% to the economic growth. The point of reference is the year of 1997. Since then, in the studied period, it is this year which presents the highest family income per capita and the lowest degree of inequality. So, it evidences that the degree of poverty in 1997 was relatively the lowest when compared with the other years of the period, with the exception of 1986. As it can be seen in the following graph:



Graph 1: Contributions of economic growth and the decline in inequality to the reduction on poverty, 1977-1997

The analysis of the connections between the economic growth and poverty and between the cyclic performance of the economy and poverty is the natural starting point for any investigation on how are these two factors related. Cycles are here characterized in accordance to the oscillation between 1981 and 2006 of the Gross Domestic Product – GDP – and the unemployment. Through the comparison of the periods of expansion and recession, it is possible to observe the effects of economic events on the Brazilian households, in terms of the distribution of income and variability of individual incomes.

The dynamic analysis of poverty refers to the study of transition and permanency of individuals in this state, according to a classification in monetary terms, characterizing a multidimensional approach.

A possible difference between the periods of expansion is that economic growth can be related to substantial increases in the real wage of workers or in a modest increase of their wages. Analyses for the North-American data suggest that the most important factor for the impact of the economic growth on poverty is a change in the relation between economic growth and real wage increase.

The following graph reveals the decline of the real income of less-remunerated workers on the economic expansions, which leads to questions on the capability of economic growth in relieve the problems of the poorest ones. A hypothesis raised by Hines et al (2001) is that the indicators more sensitive to economic conditions are the most connected to the labor market. As an example, the poverty rate is more sensitive than the indigence rate.



Graph 2: Mean of Real Wage of Workers with 0 to 4 Years of Formal Education, 1981-2006

Real wage growth is not the unique labor market factor that weakens the connection between economic growth and poverty. According to Levy and Murnane (1992), wage inequality tends to get higher during recessions. When income distribution is stable and real wage rises, economic growth causes poverty to decline. On the other hand, in a period of increasing inequality, growth effects over poverty are overwhelmed by the enlargement of this indicator. Measuring inequality as the ratio between average income and poor people income, inequality would have to rise at the same proportion as average income to cause poverty rate to be stable.

Over the last two decades, Brazilian's unemployment rate showed two distinguished patterns: decreasing over the 1980s and increasing over the 1990s. Some exceptions are the enlargement in 1983-1984 and the retreating in 1994-1995, variations consistent with the business cycles (Barros et al., 2000). Diverging from unemployment, poverty and inequality have presented a continuous growth trend with some oscillations. Theil index is almost 12 points higher in 1998 than in 1982. Barros et al. (2000) demonstrates that the linkage between unemployment and poverty or inequality became feebler at the end of the 1990s. This tendency can be inferred by the graphic below, where poverty starts to get

lower in 1995 despite the fact that unemployment begins to grow.



Graph 3: Gini e Theil Index, 1981-2006

How unemployment, wage and real income behave over the business cycles is an issue frequently discussed in the economic literature (see Hines et al. 2001). Most evidences indicate that employment and worked hours have a pro-cyclical pattern – there are more job offers for less educated workers and they also tend to work longer hours. Real wages, on the other hand, seem to behave slightly pro-cyclical. The majority of the researches show that labor market indicators are pro-cyclical, especially among the less educated workers. Hence, the methodology of this paper intends to verify whether the Brazilian data shows the same pattern from 1981 to 2006.

The source of data used in the article is the Pesquisa Nacional por Amostra de Domicílios (PNAD), from IBGE. This is a sample survey of households with multiples proposes, which investigates various social-economic characteristics, as aspects of the population, education, employment, income and habitation. The surveys are annuals and the sample is built from an annual mean of 350 thousand individuals. Due to the lack of longitudinal data, we constructed a pseudo-panel from the successive PNAD cross-sectional data sets, separating the database into triennial cohorts. We were thereby able to use pseudo-panel methods with conventional OLS. These findings should contribute to the construction of sceneries for the next decades, providing background for the conception of social policies in Brazil, as well as helping to understand the Brazilian contemporary reality.