Vulnerability to poverty in Brazilian municipalities in 2000 and 2010: A multidimensional approach

Guilherme Ottoni Teixeira Costa a, *, Ana Flávia Machado b, Pedro V. Amaral b

a Centro de Desenvolvimento e Planejamento Regional (Cedeplar)/UFMG, Rua Trópicos 134/301, bairro Santa Lúcia, Belo Horizonte, MG CEP 30350-630, Brazil

b Centro de Desenvolvimento e Planejamento Regional (Cedeplar)/UFMG, Av. Antônio Carlos 6627, Cedeplar – FACE – UFMG, Belo Horizonte, MG 31270-901, Brazil

Received 2 December 2016; received in revised form 29 October 2017; accepted 21 November 2017

Abstract

The introduction of the temporal component into poverty analysis takes us to the study of the poverty dynamic, which focuses on investigating events of entering, remaining in and getting out of deprivation. As an effort to consider the diverse aspects unrelated to income in the study of vulnerability to poverty, the monetary approach is put aside and the multidimensional approach is used to elaborate the well-being index. The Multidimensional Poverty Index (MPI) is constructed with data from Brazil’s 2000 and 2010 Demographic Census. First, this article intends to quantify and describe the results of the MPI in Brazilian territory, using municipalities as unit of analysis. Second, it intends to analyze the factors associated to the poverty dynamics, which can be understood through the transition probability from a non-vulnerable state to a vulnerable state, in a distribution of the MPI in deciles. Finally, it intends to identify the municipalities that went through this transition in a regional level during the intercensal period. Results show that, despite the improvement observed in its whole national territory, Brazil’s North and Northeast remain with deeper deprivations while the Southern and Southeastern regions present the lowest incidence of multidimensional poverty.

 Dropout Rate of Grades 3–4 of High School, HDI-M Education, HDI-M Longevity, Logarithm of the Population, Gross Value Added per capita of Industry, Service Concentration Index and Entrepreneur Rate contribute positively to the reduction of municipal vulnerability to poverty. Compared to Northern municipalities, Southeastern Brazil has reduced more significantly the likelihood of position loss and has had a greater effect of increasing the probability of its upward movement.

JEL classifications: I32; R13

Keywords: Multidimensional poverty; Vulnerability; Brazil

© 2017 The Authors. Production and hosting by Elsevier B.V. on behalf of National Association of Postgraduate Centers in Economics, ANPEC. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

* Corresponding author.
E-mail addresses: g.ottoni@gmail.com (G.O.T. Costa), afmachad@cedeplar.ufmg.br (A.F. Machado), pedrovma@cedeplar.ufmg.br (P.V. Amaral).

Peer review under responsibility of National Association of Postgraduate Centers in Economics, ANPEC.

https://doi.org/10.1016/j.econ.2017.11.001

1517-7580 © 2017 The Authors. Production and hosting by Elsevier B.V. on behalf of National Association of Postgraduate Centers in Economics, ANPEC. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

Brazil has historically had a proportionately decreasing number of poor people. In the last decade, the share of its population in monetary poverty decreased from 41.9% in 1990 to 15.9% in 2012 and the extreme poverty rate dropped from 20% to 5.3% in the same period. There is a vast literature focused on the understanding of what causes poverty and on the better alternatives to mitigate it. However, today’s poor may not be the poor of tomorrow. For this reason, the temporal component of poverty starts to draw attention.

The introduction of the temporal component into poverty analysis takes us to the study of the poverty dynamics, which focuses on investigating events of entering, remaining in and getting out of deprivation. In this context, the concept of vulnerability is used in different ways by several schools of thought, although one commonality is observed: vulnerability is related to the exposure to unknown events and to one’s ability to deal with them.

The concept adopted in this study is the one embraced by economics, which defines vulnerability to poverty as the probability of well-being loss. Its choice is motivated by the lack of this type of study applied to Brazil. Therefore, this paper intends to contribute to the identification of factors capable of preventing the incidence and the deepening of poverty, and acting towards overcoming poverty as well.

As an effort to consider the diverse aspects that are unrelated to income in the study of vulnerability to poverty, the monetary approach is put aside and the multidimensional approach is used to elaborate the well-being index. The Multidimensional Poverty Index (MPI) is constructed with data from Brazil’s 2000 and 2010 Demographic Census. Unlike what is commonly adopted in the literature of vulnerability to poverty, this paper focuses on the municipal level instead of having the individual as analysis unity. The municipality is chosen because the environment’s influence on individual vulnerability to poverty is significantly important. Also, the 1988 Federal Constitution gave certain autonomy to the local level of public power, in areas such as education and health, and the municipality presents specific socioeconomic characteristics, like local labor market and violence. Hence this choice was proven pertinent.

By analyzing the 2000–10 socioeconomic scenarios, it is possible to observe some expressive changes: the Minimum Wage had a real appreciation on the order of 75%; the productive de-concentration process (initiated in 1970s) continued; social policies were expanded and the labor market intensified its formalization. However, these changes affect the municipalities in different manners because of their particularities. Consequently, the population exposure to these changes brings instability to its well-being, which makes it necessary to use physical, human and social capital to deal with likely well-being losses. The government also has an important role in this context, considering that it is capable of elaborating public policies to develop the citizens’ capability of making use of the their own resources in a more productive way and to reduce local insecurity. Thus, changes in the vulnerability to poverty between 2000 and 2010 for the Brazilian municipalities had been expected.

Considering all the aspects above, this article proposes, in the first place, to quantify and describe the MPI results in Brazilian territory, using municipalities as the unit of the analysis. Second, it intends to analyze the factors associated to the poverty dynamics, which can be understood through the probability of transition from non-vulnerable state to a vulnerable state, according to the MPI levels. Finally, it intends to identify the municipalities that went through this transition in a regional level during the intercensal period.

Taking these objectives into consideration, the article is organized in five sections, including this introduction. The second section brings up the theoretical aspects supporting this study. In sequence, the methodology adopted to achieve the goals proposed herein is outlined. The fourth section treats the results obtained through the application of the methodology described previously. Finally, conclusion and considerations are made in the fifth and final section.

2. Vulnerability and multidimensional poverty

The study of poverty dynamics is characterized by the inclusion of the temporal component into the analysis of poverty. It mainly focuses on events of entering and overcoming deprivation. In this approach, poverty is divided into two principal categories: chronic and transitory. The former considers individuals under deprivation throughout the whole period studied. In the latter, a person moves into and out of poverty in the same time period. Nonetheless, the criteria utilized to define those two categories are not consensual.

The concept of vulnerability emerges in the 1970s with studies on disaster risks and its negative effects. This concept is still adopted in fields such as food safety and health. In Economics, vulnerability to poverty is the likelihood of reduction, or loss, in the well-being, or wealth, below a level defined as the minimum accepted in the current social...
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات