Bolsa Família, Occupational Choice and Informality in Brazil[1]

by Ana Luiza Neves de Holanda Barbosa[2] and Carlos Henrique L. Corseuil[3]

This study assesses the impact of the conditional cash transfer programme, Programa Bolsa Família (PBF), on the occupational composition of the Brazilian labour market. In particular, the goal is to analyse to what extent the PBF distorts the occupational choice of beneficiaries in the sense of making them more likely to opt for an informal occupation.

The motive behind this investigation is the idea that income from informal employment is less visible to the institution managing the programme than income from formal employment.

There is, however, a major challenge in evaluating the effects of the PBF on the adult labour supply. Participation in this type of programme is voluntary. Therefore, the group of beneficiaries may differ in certain aspects from the group of non-beneficiaries, which might affect both participation and the choice of occupation. This makes it difficult to find a comparison group that resembles the treatment group. Our strategy for identifying the PBF's effect on occupational choice seeks to isolate the programme's real effect from these differences in the unobservable characteristics of individuals.

One of the major contributions of our article is the application of a method that allows us to deal with the problem of self-selection within the PBF based on unobservable characteristics. We exploited a discontinuity present in the eligibility criteria of the programme, about the age of the youngest child of the household. We assumed that the discontinuity around a critical age value (16 years old) represents an exogenous variation in eligibility that could be accompanied by a variation in programme participation also around this critical value. This last variation would represent the effect of the programme on the occupational choice of the household heads.

This type of strategy is known as Regression Discontinuity Design (RDD).[4] In particular, since eligibility does not coincide with participation in the programme, the explored methodology uses the case known as a **fuzzy** RDD. Our main identification hypothesis is to assume that the unobservable characteristics of adults in families whose youngest child reaches the age threshold for eligibility shortly **before** the beginning of the school year are very similar to those of families whose youngest child reaches the eligibility age threshold shortly **after** the beginning of the school year.

This is considered a weak assumption, given the randomness component involved in determining an individual's exact date of birth. In addition, we carried out tests whose results are consistent with the validity of this hypothesis.

The analysis is carried out with 2006 microdata from the National Household Sample Survey (PNAD) conducted by the Brazilian Institute of Geography and Statistics (IBGE).

Unlike what was found in the existing empirical literature, our results suggest that the cash transfer has no impact on the occupational choice of Brazilian adults among formal and informal jobs. This result appears in estimates both in a sample of household heads (Table 1) and in what we will call secondary jobs—that is, those who contribute at home with the second largest source of income from work, secondary to the income from the main occupation held by the head of household (Table 2). It is worth mentioning that this result is solid in a wide range of situations that we have considered. Twelve separate household samples were used to estimate our parameter of interest. In all these situations, the estimate was statistically nil.

Table 1: Impact of the PBF on the Occupational Choice of the Household Head

	Total Sample All households receiving the PBF benefit		Filter I Households with PCHIs < R$ 700.00		Filter II Households with PCHIs > R$ 50.00 and PCHIs < R$ 700.00	
	Coef.	Optimal Window	Coef.	Optimal Window	Coef.	Optimal Window
Bolsa-Família (standard error)	**-3.237** (3.329)	1.61	**-2.417** (1.460)	1.78	**-2.429** (1.485)	1.76
Bolsa-Família **(**bandwith = 110) (standard error)	**-2.339** (1.612)	1.77	**-2.846** (1.797)	1.96	**-2.629** (1.580)	1.94
Bolsa-Família (bandwith = 125) (standard error)	**-1.996** (1.387)	2.01	**-2.607** (1.875)	2.23	**-2.697** (1.747)	2.20
Bolsa-Família (bandwith = 150) (standard error)	**-1.122** (0.973)	2.41	**-2.539** (1.614)	2.67	**-2.648** (1.563)	2.64

Source: IBGE, 2006.

Table 2: Impact of the PBF on the Secondary Occupational Choice

	Total Sample All households receiving the PBF benefit		Filter I Households with PCHIs < R$ 700.00		Filter II Households with PCHIs > R$ 50.00 and PCHIs < R$ 700.00	
	Coef.	Optimal Window	Coef.	Optimal Window	Coef.	Optimal Window
Bolsa-Família (standard error)	**-1.196** (1.339)	1.74	**-1.997** (1.355)	1.81	**-1.904** (1.347)	1.91
Bolsa-Família (bandwith = 110) (standard error)	**-1.614** (1.563)	1.92	**-1.970** (1.366)	1.99	**-1.626** (0.983)	2.10
Bolsa-Família (bandwith = 125) (standard error)	**-1.304** (1.627)	2.18	**-1.347** (1.236)	2.27	**-1.301** (1.208)	2.38
Bolsa-Família (bandwith = 150) (standard error)	**-1.107** (1.023)	2.62	**-1.481** (1.235)	2.72	**-0.854** (0.956)	2.86

Source: IBGE, 2006.

References:

IBGE (2006). *Pesquisa Nacional por Amostra de Domicílio*. Brasília, Instituto Brasileiro de Geografia e Estatística.

Imbens, G. and T. Lemieux (2008). 'Regression Discontinuity Designs: A Guide to Practice', *Journal of Econometrics,* Vol. 142 (2): 615–635.

Notes:

1. The authors would like to thank Sergei Soares for several explanations on the inner workings of Bolsa Familia. We benefited from valuable comments from our colleagues Peter Herculano de Souza, Miguel Foguel and Fábio Soares. Finally, we are grateful to Italo Cabral de Souza for his assistance in processing the 2006 PNAD.

2. Researcher from the Department of Social Studies and Policies (Disoc) at Institute for Applied Economic Research (IPEA). Email: ana.barbosa@ipea.gov.br.

3. Researcher and Deputy Director of Disoc at Ipea. Email: carlos.corseuil@ipea.gov.br.

4. See Imbens and Lemieux, 2008.

Click and comment