International Poverty Centre

# **IPCevaluationnote**

Number 1

December, 2007

# **Evaluating the Impact of Brazil's** Bolsa Família: Cash Transfer Programmes in Comparative Perspective

"Critics of Bolsa Família allege that it has a negative impact on labour force participation. However, the participation rate of [beneficiary] adults was, in fact, 2.6 percentage points higher, and 4.3 percentage points higher for women."

Fábio Veras Soares Rafael Perez Ribas Rafael Guerreiro Osório

International Poverty Centre



Family from Primeiro de Maio, Belo Horizonte, Brazil. Photo by Francesca Bastagli (LSE).

Copyright© 2007

International Poverty Centre United Nations Development Programme

International Poverty Centre SBS – Ed. BNDES,10° andar 70076 900 Brasilia DF Brazil

povertycentre@undp-povertycentre.org www.undp-povertycentre.org Telephone +55 61 2105 5000 Fax +55 61 2105 5001

#### **Rights and Permissions**

All rights reserved.

The text and data in this publication may be reproduced as long as the source is cited. Reproductions for commercial purposes are forbidden.

The International Poverty Centre's Evaluation Notes disseminate the findings of recent evaluations of poverty-reduction programmes and policies. The notes are signed by the authors and should be cited and referred to accordingly. The findings, interpretations, and conclusions expressed in this note are entirely those of the authors. They do not necessarily represent the views of the International Poverty Centre, IPEA or the United Nations Development Programme (or its Administrator, Directors, or the countries they represent).

Evaluation Notes are available online at http://www.undp-povertycentre.org and subscriptions can be requested by email to povertycentre@undp-povertycentre.org

# **EVALUATING THE IMPACT OF BRAZIL'S** BOLSA FAMÍLIA: CASH TRANSFER PROGRAMMES IN COMPARATIVE PERSPECTIVE\*

Fabio Veras Soares,\*\* Rafael Perez Ribas\*\* and Rafael Guerreiro Osorio\*\*

# **1 INTRODUCTION**

*Bolsa Família* is one of the largest Conditional Cash Transfer (CCT) programmes in the world, benefiting roughly 11 millions families. It provides a monthly transfer to poor households with children up to 15 years of age and/or a pregnant woman, and a monthly transfer to extremely poor households regardless of their composition. Although Brazil does not have official poverty lines, the programme has set the eligibility threshold at R\$ 60 (US\$ 33) *per capita* for extremely poor households and at R\$120 (US\$66) *per capita* for poor households.

Only extremely poor households are entitled to the basic benefit of R\$ 58 (US\$ 32). Whether poor or extremely poor, a household can receive R\$ 18 (US\$ 10) for a pregnant woman or for each child up to a maximum of three children. Therefore, the maximum transfer for an extremely poor household is R\$ 112 (US\$ 61) and for a poor household R\$ 54 (US\$ 30).<sup>1</sup>

The programme started in 2004 with the merger of the existing conditional and unconditional cash transfer programmes of the Federal Government. It specifically unified four major programmes: *Bolsa Escola*, a minimum income grant related to primary education; *Fome Zero* and *Bolsa Alimentação*, two income grants related to food security; and *Vale Gás*, a subsidy to help poor households buy cooking gas. Once created, *Bolsa Família* was scaled up to include 11 million households by the end of 2006.

*Bolsa Família* lacks well-defined objectives since it merged different programmes. But it is taken for granted that it aims: i) to alleviate the income deprivation of poor households and ii) to break the intergenerational transmission of poverty.

The first objective is achieved through the income transfer and the second through the enforcement of conditionalities regarding education and health. The main conditionalities are: i) children 6-15 years old must maintain 85 per cent school attendance; ii) children up to six years old must have their immunisation status confirmed and, together with pregnant women, must have regular health check-ups.

A great deal of attention has been focused on *Bolsa Família*'s implementation and targeting methods, its impact on poverty and inequality and its possible unintended negative impacts, particularly on labour force participation. In this Evaluation Note, we summarise some of the principal findings of recent research undertaken by the International Poverty Centre and the Institute for Applied Economic Research (IPEA), as well as new evidence from an impact

<sup>\*</sup> This study is part of a larger research project: "Growth, Inequality, Poverty and Cash Transfers: A comparative study of Poverty Impacts and Institutional Aspects in Selected Countries in Africa and Latin America", funded by DFID. \*\* International Poverty Centre.

evaluation of the programme undertaken by the Center of Development and Regional Planning (Cedeplar) of the Federal University of Minas Gerais.

# 2 THE TARGETING OF THE BOLSA FAMÍLIA

*Bolsa Família* uses unverified means-testing conducted at the municipal level to select its beneficiaries.<sup>2</sup> Given the programme's large size, it would be very costly to use verified means-testing or proxy means-testing to identify eligible households. The programme's unverified selection method has been criticized on the grounds that its highly decentralized process could lead to selection distortions, such as patronage and leakage.

Although documenting patronage would require more in-depth investigation, we can readily evaluate leakage and other targeting issues through conventional measures of performance. Table 1 reports some targeting indicators for *Bolsa Família*. To provide a comparison, we present the same set of indicators for *Oportunidades*, the Mexican CCT programme, which was formerly called *Progresa*.<sup>3</sup>

The Mexican statistics come from the 2004 round of the ENIGH while the Brazilian statistics come from the 2004 round of the PNAD. Both are annual household surveys with national coverage.<sup>4</sup>

The exclusion error reported in the table is the ratio of the non-beneficiary poor to the total poor population: it represents under-coverage. The inclusion error, which represents leakage, is the number of beneficiary non-poor divided by the total beneficiary population. The inclusion targeting rate is the ratio of the beneficiary poor to the total poor. And the exclusion targeting rate is the ratio of the non-beneficiary non-poor to the total non-poor population.

The results for such measures depend upon the choice of a poverty line. For Mexico we used the intermediate 'capability' official poverty line set for 2004 at 909.71 *pesos* for urban areas and at 651.77 *pesos* for rural areas. For Brazil we utilized the cut-off point for programme eligibility in 2004, namely, R\$ 100.

|                            | Exclusion error  | Inclusion error |                     | Exclusion targeting |  |
|----------------------------|------------------|-----------------|---------------------|---------------------|--|
|                            | (under-coverage) | (leakage)       | Inclusion targeting |                     |  |
| BOLSA FAMÍLIA (PNAD 2004)  | 59%              | 49%             | 41%                 | 92%                 |  |
| OPORTUNIDADES (ENIGH 2004) | 70%              | 36%             | 30%                 | 93%                 |  |

TABLE 1

Under-Coverage and Leakage Rates of Bolsa Família and Oportunidades

Source: Own calculations based on PNAD 2004 and ENIGH 2004.

When we compare *Bolsa Família* to *Oportunidades*, we see, in the last column of Table 1, that they have roughly similar exclusion-targeting measures, namely, just above 90 per cent. Given the large scale of the programmes, these measures are remarkably high.

However, the under-coverage rate and the inclusion targeting rate are worse in *Oportunidades* than in *Bolsa Família*. The ratio of non-beneficiary poor to the total poor is 70 per cent in the former but 59 per cent in the latter. Moreover, in *Bolsa Família* the ratio of the beneficiary poor to the total poor is 41 per cent while in *Oportunidades* it is only 30 per cent.

In contrast, *Bolsa Família* has a higher inclusion error than *Oportunidades*: 49 per cent of all beneficiaries are non-poor in the former programme but only 36 per cent are non-poor in the latter.

These contrasting outcomes demonstrate that such cash transfer programmes face a trade-off between extending coverage and improving efficiency in targeting. The programme in Mexico has more efficient targeting than that in Brazil but at the price of having fewer poor households covered by the programme. Indeed, it is very difficult to expand a targeted programme while keeping the leakage rate from rising.

Another way of measuring targeting performance, which has been suggested by Coady et al.,<sup>H</sup> is to compare the cumulative distribution of the transfers to the cumulative distribution of all pre-transfer income. This is done by taking the ratio of the two at specific cut-off points along the distribution.

If targeting is effective, this index should be higher at poorer percentiles. For instance, if the index were four at the 20<sup>th</sup> percentile, one could conclude that 80 per cent of transfers were received by the poorest 20 per cent of the population (80/20). Table 2 presents this targeting measure for selected percentiles.

We also present in Table 2 the concentration index of the transfers, which serves as a targeting measure for the whole distribution.<sup>s</sup> The more negative this index, the more progressive is the programme—namely, the more the transfers are directed to the poorer percentiles.

|                              | Concentration | Performance: ratios of transfer/percentile |             |             |             |  |
|------------------------------|---------------|--|-------------|-------------|-------------|--|
|                              | Index         | Poorest 10%                                | Poorest 20% | Poorest 30% | Poorest 40% |  |
| BOLSA FAMÍLIA (PNAD 2004)    | -58.9         | 3.3  | 2.9         | 2.5         | 2.2         |  |
| CHILE SOLIDARIO (CASEN 2003) | -56.9         | 3.7  | 3.0         | 2.4         | 2.1         |  |
| OPORTUNIDADES (ENIGH 2004)   | -55.8         | 3.6  | 2.9         | 2.5         | 2.1         |  |

#### TABLE 2

#### Targeting Performance of Bolsa Família, Chile Solidario and Oportunidades

Sources: Own calculations based on PNAD 2004, ENIGH 2004 and CASEN 2003.

To establish yet another comparison of programmes, we add to Table 2 statistics on the Chilean CCT programme, *Chile Solidario*,<sup>5</sup> which is based on its 2003 CASEN survey (row 2). While this programme is targeted at extremely poor households, *Bolsa Família* and *Oportunidades* seek to cover all poor households. The performance indices suggest that all three programmes are very well targeted. According to the rank reported in Coady et al.,<sup>H</sup> they would rank among the 10 best out of 122 programmes analysed.

*Chile Solidario* and *Oportunidades* perform better than *Bolsa Família* for the 10 per cent poorest of the population (with ratios of 3.6-3.7 *versus* 3.3). However, *Bolsa Família* is similar to the other two programmes from the 20<sup>th</sup> percentile through the 40<sup>th</sup> percentile.

The concentration indices rank *Bolsa Família* as the best performer when the entire distribution of the transfers is considered. The reason is that it has lower leakage at the higher percentiles (see Soares et al.)<sup>s</sup>. For the Brazilian programme, this index is -58.9 while for the other two it is -56.9 and -55.8. Nevertheless, we cannot generalize these targeting results since the incidence curves of the three programmes cross one another. That is, our conclusions depend on the poverty cut-off that we use in our analysis.

## **3 THE IMPACT ON INEQUALITY AND POVERTY**

Because of the progressive impact of cash transfers on the distribution of total income, they have had a notable impact on reducing inequality—even though they have not been designed to do so. In addition, this impact has poverty implications since in middle-income countries, poverty is more responsive to changes in inequality than changes in average income.

Soares et al.<sup>®</sup> document that the Brazilian Gini index fell by 4.7 per cent from 1995 to 2004. Bolsa Família was responsible for 21 per cent of this fall. Since the transfers represented a mere 0.5 per cent of total Brazilian household income, it is impressive that *Bolsa Família* was the second most important factor—after labour earnings—in driving down inequality. *Oportunidades* had a similar impact on Mexican inequality, being responsible for 21 per cent of the overall five per cent fall of the Mexican Gini index between 1996 and 2004.<sup>5</sup>

Cash transfer programmes have also had a significant impact on poverty, particularly extreme poverty. For the poorest five per cent of the population, such as in Brazil and Mexico, the transfers can represent 10 per cent or more of their total income. Thus, bottom-sensitive measures of poverty reveal a bigger impact than the headcount ratio. For example, in Brazil, the poverty gap measure shows that *Bolsa Família* was responsible for a 12 per cent reduction in poverty while the poverty severity measure shows that it produced a 19 per cent reduction.<sup>T</sup>

# **4 THE BASELINE IMPACT EVALUATION OF BOLSA FAMÍLIA**

The findings summarized in this section have been presented in Cedeplar's Baseline Report on the Impact Evaluation of *Bolsa Família*.<sup>N</sup> The Report is based on the AIBF (*Avaliação de Impacto do Bolsa Família*), a nationally and regionally representative sample survey carried out by Cedeplar and commissioned by the Ministry of Social Development (MDS) in 2005.

The Report gauges the impacts of the programme on some key aspects of household behaviour, namely:<sup>6</sup> i) aggregate consumption and its composition; ii) education outcomes; iii) health care; iv) nutrition; and v) labour force participation. Since the Report uses only a baseline evaluation, which compares the variables of interest within a cross-sectional estimation framework, the results that it describes should be treated cautiously.

The impact evaluations were carried out by using Propensity Score Matching (PSM) techniques, which seek to measure the average difference between households receiving *Bolsa Família* and similar households who do not. The similarity of the two groups is determined by the probability of being 'treated', i.e., of being selected to receive the CCT. The comparison group did not receive any cash transfers and had per capita income below R\$ 100, which was the eligibility cut-off point in 2005.

#### 4.1 CONSUMPTION EXPENDITURE

The evaluation found that *Bolsa Família* has not significantly affected the aggregate level of household consumption.<sup>N</sup> This impact is similar to the result found for Ecuador's *Bono* Solidario<sup>Q</sup>, but contrasts with those for Mexico's Oportunidades<sup>K</sup> and Colombia's *Familias en* Acción.<sup>A</sup>

Nevertheless, *Bolsa Família* has affected expenditures on food, education and child clothing, and consequently on the income shares spent on these items. The monthly expenditures on these items increased R\$ 23.18, R\$ 2.65 and R\$ 1.34, respectively, in beneficiary households. In contrast, monthly expenditures on adult health and clothing were reduced by R\$ 6.80 and R\$ 0.74, respectively.<sup>N</sup>

The impact on child clothing is similar to impacts recorded in Mexico<sup>K</sup> and Colombia,<sup>A</sup> and is related to the perception of beneficiary families that the transfer was a bonus that should be spent in the best interests of their children. This same reasoning also helps explain the increase in household expenditures on education. However, the evaluation found that there was no significant impact on the consumption of other important items, even on hygiene and child health,<sup>N</sup> despite conditionalities on health check-ups.

#### 4.2 EDUCATION

*Bolsa Família* has had a clear positive impact on school attendance. The probability of absence in the most recent month before the survey is 3.6 percentage points lower for children in the programme. Also, their probability of dropping out is 1.6 percentage points lower than that of children in non-treated households.<sup>M</sup> Similarly, the Mexican *Oportunidades* has contributed to an increase in school attendance and a decrease in drop-outs. It has also increased re-entry rates among older drop-outs.<sup>G</sup>

However, children benefiting from *Bolsa Família* are almost four percentage points more likely than non-treated children of failing to advance in school.<sup>N</sup> In Mexico grade promotion improved as a result of cash transfers but achievement scores were negatively affected.<sup>F</sup> Such adverse impacts could be attributed to the programme's effect on increasing the number of under-achieving students in school. Since such students have been out of school for a while (or have never attended), they are likely to have greater difficulty in catching up with those who have always been in school.

#### 4.3 HEALTH CARE: IMMUNIZATION AND CHECK-UPS

Cedeplar's evaluation<sup>N</sup> found no impact of *Bolsa Família* on child immunizations despite conditionalities attached to obtaining them. In contrast, the Colombian *Familias en Acción* has improved the probability of adequate vaccination for children up to two years old, and the probability of compliance with health check-ups for children up to four years old.<sup>B</sup> The use of public-health services for immunizations and nutrition monitoring has also been greater in the Mexican villages covered by the CCT programme.<sup>J</sup> In Chile, visits to health centres by children younger than six years old have increased in rural areas due to *Chile Solidario*.<sup>I</sup>

Since *Bolsa Família* has purportedly created greater awareness about the need to access public-health services and obtain child immunizations, the absence of impact suggests that supply-side impediments could have been an important constraint. Namely, the lack of health services available to beneficiaries have probably been a contributing factor. Nevertheless, this aspect was not controlled for in the evaluation.

#### 4.4 NUTRITION

The AIBF collected anthropometric data in order to evaluate the impact of *Bolsa Família* on chronic malnutrition (stunting) and acute malnutrition (wasting). Stunting is measured by the

lack of height-for-age, and wasting by the lack of body mass for height and age. Unfortunately, the results of the impact evaluation have not yet been made public.

The only available results are from the so-called '*Chamada Nutricional*' (Nutritional Call), an evaluation survey conducted by MDS in health centres of Semi-Arid regions.<sup>P</sup> This evaluation showed a significant impact of *Bolsa Família* on the reduction of stunting for children aged 6-11 months, and the reduction of wasting for children up to five months old.

However, the programme has failed to have an impact on children aged 12-36 months. This is the critical age for nutritional vulnerability because of children's increasing demand for nutrients.<sup>L</sup> The lack of impact might be related to the failure to monitor children's growth through regular visits to health centre even though such visits are a conditionality of the programme. As in the case of immunizations, the underlying problem is likely to be a lack of health services rather than an unwillingness of households to send their children for check-ups.

A cautionary note on the nutrition results is that the *Chamada Nutricional* was based on a self-selected sample of children who attended a health centre on a national vaccination day.<sup>7</sup> The authors did not adopt any technique for correcting this treatment selectivity, and did not control for the initial nutritional condition of children in their analysis. Thus, these evaluation results could well be biased.

In Mexico the CCT programme did have significant positive impacts on the height of children who were 12-36 months old.<sup>E</sup> However, it is not clear whether this positive impact was due to the nutritional supplements given by the programme or to the cash transfers.

By comparison, Colombia's *Familias en Acción* did have a positive impact on both height and weight of children up to two years old without offering food supplements.<sup>B</sup> This result could be linked to the impact of increasing household visits to health centres to enable monitoring of children's growth and the provision of advice to parents on how to prevent malnutrition of their children.

#### 4.5 LABOUR FORCE

Critics of *Bolsa Família* allege that it has a negative impact on labour force participation. However, the evaluation<sup>N</sup> found that the labour market participation rate of treated adults was, in fact, 2.6 percentage points higher than for non-treated adults. This impact was gendered: the participation rate of beneficiary women was 4.3 percentage points higher.

Notwithstanding such beneficial impacts, it is not possible to confirm whether treated adults' higher labour force participation has been accompanied by an increasing participation rate for children. Even though there was a section in the major MDS publication<sup>N</sup> that was addressed to child labour, it presented no specific results on this outcome.

The reported impacts of CCTs on labour force participation vary across countries, but overall they do not show a negative impact. This is an important result. The Colombian *Familias en Acción<sup>D</sup>* and the Mexican *Oportunidades<sup>O</sup>* have had no impact on adults' labour force participation. *Chile Solidario* has had a positive and significant effect on labour force participation in rural areas.<sup>1</sup>

While *Familias en Acción<sup>C</sup>* has had no impact on adults' participation, it has slightly diminished the participation of children 10-13 years old, and has had an even more

pronounced effect on reducing their participation in domestic work. In Mexico, the CCT programme has contributed to a significant reduction of the proportion of children engaged in any kind of labour.<sup>o</sup>

# **5 CONCLUSION**

*Bolsa Família* and other major CCT programmes in Latin America, such as those in Chile and Mexico, have had an impressive targeting performance, even though they have adopted different targeting methods. However, these programmes should implement constant monitoring of targeting performance in order to minimize the exclusion of potential beneficiaries, particularly the extremely poor. For example, in all countries with CCT programmes a substantial proportion of eligible households—e.g., about 60 per cent in Brazil and 70 per cent in Mexico—are not reached.

An important point is that targeting effectiveness, together with the large size of the programme, has allowed *Bolsa Família*, as well as *Oportunidades*, to help diminish income inequality in a substantial and very cost-effective way even though such an impact was not a programme objective. These programmes have also had a noteworthy impact on reducing poverty, particularly extreme poverty. Among extremely poor households, transfers represent a sizeable proportion of their total income.

While *Bolsa Família* has not had a noticeable impact on aggregate consumption, it has affected the share of the total household budget spent on certain important items. Expenditures on food, education and child clothing have increased, for instance. The increase in food consumption might have been able to improve child nutrition. Nevertheless, that increase has not necessarily implied improvements in child or adult nutrition because such an outcome also depends on the quality of the household diet and on preventive measures taken against underfeeding as a result of monitoring by health personnel.

Bolsa Família has been effective in both increasing school attendance and decreasing drop-out rates, as have other CCTs. However, the decrease in drop-outs has had an unfortunate side-effect: it has led to more children falling behind in school. Such findings confirm that the programme, as a demand-side intervention, is not able, on its own, to have a positive impact on some education outcomes.

Namely, it would not necessarily enable disadvantaged children to break the intergenerational transmission of poverty if educational policies did not concomitantly improve the performance of such children while in school. This problem underscores the need to improve educational quality or provide special attention for under-achieving children.

The Nutritional Call Survey has shown positive impacts on reducing wasting and stunting in infants, but it has not shown significant effects on children 1-3 years old, who are often especially vulnerable. Nonetheless, these results could be plagued by selectivity bias since the survey took place in health centres instead of randomly in households.

The AIBF survey has revealed that a substantial number of poor children (23-25 per cent) either have not had or have failed to show their vaccination cards. That is, they have probably not attended health centres. In addition, beneficiary children are no more likely than non-beneficiary children to have their vaccination card updated. This might point to a supply-side problem arising from a lack of coverage of health service among the poorer population.

*Bolsa Família* has had a positive impact on adult labour force participation, with this impact being greater for women. Therefore, receiving cash transfers does not appear to lead people to drop out of the labour force, as some critics have contended.

However, it would also be important to investigate what has happened to child labour. We need to determine whether the cash transfer and the school-attendance conditionality succeeded in taking children out of work, or whether children continued to combine both school attendance and work activities.

The Brazilian Programme for the Eradication of Child Labour (PETI), which was recently incorporated into *Bolsa Família*, has addressed this problem by including an extra shift in school (*jornada ampliada*). This has not only helped the school performance of beneficiary children but has also constrained them from spending such time at work.

Some of the explanations offered here for the impact of the Brazilian programme cannot be explored further without access to the microdata of the AIBF. The release of the primary data generated by the AIBF survey would enable researchers to examine more closely some of these preliminary findings in order to establish clearer causal relations between outcomes and programme efforts. The release of data has had such a beneficial effect, for example, in *Progresa/Oportunidades*. Moreover, the follow-up survey of the impact evaluation will be critical in assessing the robustness of the preliminary results that we report here.

### REFERENCES

- A) Attanasio, O., and A. Mesnard (2006). 'The impact of a conditional cash transfer programme on consumption in Colombia'. *Fiscal Studies*, v. 27 (4), p. 421-442.
- B) Attanasio, O., L. C. Gómez, P. Heredia, and M. Vera-Hernandez (2005). 'The short-term impact of a conditional cash subsidy on child health and nutrition in Colombia'. Report Summary: Familias 03, Institute of Fiscal Studies.
- C) Attanasio, O., E. Fitzsimons, A. Gomez, D. Lopez, C. Meghir, and A. Mesnard (2006). 'Child education and work choices in the presence of a conditional cash transfer programme in rural Colombia'. Working Paper W06/13, Institute of Fiscal Studies.
- D) Attanasio, O., et alii (2004). 'Baseline report on the evaluation of Familias en Acción'. IFS Report, Institute of Fiscal Studies.
- E) Behrman, J., and J. Hoddinott (2005). 'Programme Evaluation with Unobserved Heterogeneity and Selective Implementation: The Mexican PROGRESA Impact on Child Nutrition'. Oxford Bulletin of Economics and Statistics, v. 67 (4), p. 547-569.
- F) Behrman, J., P. Sengupta, and P. Todd (2000). 'The impact of PROGRESA on achievement test scores in the first year'. Final Report, International Food Policy Research Institute.
- G) Behrman, J., P. Sengupta, and P. Todd (2005). 'Progressing through PROGRESA: An Impact Assessment of a School Subsidy Experiment in Rural Mexico'. *Economic Development and Cultural Change*, v. 54 (1), p. 237-275.
- H) Coady, D., M. Grosh, and J. Hoddinott. (2004). *Targeting of Transfers in Developing Countries: Review of Lessons and Experience*, World Bank and IFPRI, Washington DC.
- I) Galasso, E. (2006). "With their effort and one opportunity': Alleviating extreme poverty in Chile", Mimeo, Development Research Group, World Bank, Washington DC.
- J) Gertler, P. (2004). 'Do Conditional Cash Transfers Improve Child Health? Evidence from PROGRESA's Control Randomized Experiment'. *American Economic Review*, v. 94 (2), p. 336-341.
- K) Hoddinot, J., E. Skoufias, and R. Washburn (2000). 'The impact of PROGRESA on consumption: A Final Report'. International Food Policy Research Institute.
- L) Martorell, R. (1999). 'The Nature of Child Malnutrition and Its Long-Term Implications'. *Food and Nutrition Bulletin*, v. 20, p. 288-292.
- M) MDS (2007). 'Primeiros Resultados da Análise de Linha de Base da Pesquisa de Impacto do Programa Bolsa Família'. SAGI/MDS, Brasília.
- N) Oliveira, A. M. H. et alii (2007). 'Primeiros Resultados da Análise da Linha de Base da Pesquisa de Avaliação de Impacto do Programa Bolsa Família'. In J. Vaitsman and R. Paes-Souza (eds.), Avaliação de Políticas de Programas do MDS – Resultados, v. 2, SAGI/MDS, Brasília, pp. 19-66.
- O) Parker, S., and E. Skoufias (2000). 'The Impact of PROGRESA on Work, Leisure, and Time Allocation'. Final Report, International Food Policy Research Institute.

- P) Santos, L. M. P. et alii (2007). 'Perfil Nutricional de Crianças Menores de Cinco Anos do Semi-Árido Brasileiro'. In J. Vaitsman and R. Paes-Souza (eds.), Avaliação de Políticas de Programas do MDS – Resultados, v. 1, SAGI/MDS, Brasília, pp. 347-382.
- Q) Schady, N. R. (2006). 'Conditional Cash Transfer Programs: Reviewing the Evidence'. Third International Conference on Conditional Cash Transfers, Istanbul.
- R) Soares, F. V., S. S. Soares, M. M. Sousa, and R. G. Osório (2006). 'Cash Transfer Programmes in Brazil: Impacts on Inequality and Poverty'. Working Paper n. 21, International Poverty Centre, Brasilia.
- Soares, S. S., R. G. Osório, F. V. Soares, M. M. Sousa, and E. M. Zepeda (2007). 'Conditional Cash Transfers in Brazil, Chile and Mexico: Impacts upon Inequality'. Working Paper n. 35, International Poverty Centre, Brasilia.
- T) Zepeda, Eduardo (2006). Background research for 'Do CCTs Reduce Poverty?'. One Pager #21, September, International Poverty Centre, Brasilia.

# NOTES

1. The amounts of the transfers were defined when *Bolsa Família* was created in January 2004. The income thresholds for eligibility were adjusted in April 2006. All those values were still effective when this Evaluation Note was written. Figures in US\$ were calculated using an estimated average exchange rate of R\$1.83 to one US\$ for the period between September and November of 2007.

2. In fact, the application form (*Cadastro Único* form) gathers some information on consumption that is used to cross-check reported income. The operational rule of thumb is that when consumption is 20 per cent higher than reported income, the income information should be double-checked.

3. Since *Oportunidades* is an extension of *Progresa*, we will always refer to both as *Oportunidades*, even if the data presented refer to *Progresa*.

4. In order to make the Mexican data comparable to the Brazilian, we took account of only the monetary value of earned in-kind items in computing household income; see Soares *et al.*<sup>5</sup> for more details on data and methodology.

5. In the CASEN 2003, the Chilean household survey, the income definition was also adapted to make it comparable to the definitions of PNAD 2004 and ENIGH 2004. See Soares *et al.*<sup>5</sup> for more details on data and methodology.

6. The Cedeplar Report does not provide information on the impact on child nutrition. However, some relevant information can be obtained from the analysis of the results of a survey of beneficiary and non-beneficiary children in the semi-arid region.<sup>P</sup> This report is also discussed here.

7. *Chamada Nutricional* assumes that almost 100 per cent of children usually attend health centres in order to be immunized. However, according to the AIBF, 23-25 per cent of the children in its sample either did not have the vaccination card or failed to show it when asked to do so.<sup>N</sup>



**International Poverty Centre** SBS – Ed. BNDES,10° andar 70076 900 Brasilia DF Brazil

povertycentre@undp-povertycentre.org www.undp-povertycentre.org Telephone +55 61 2105 5000 Fax +55 61 2105 5001