Brazil's Bolsa Escola: Can Conditional Cash Transfers Impact Long-Term Poverty by Changing Labour Market Trajectories?

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Hayley Jones

Contents

I. INTRODUCTION.

There is much evidence to support the notion that childhood poverty has life-long effects, reinforcing the intergenerational transmission of poverty (Barrientos and DeJong 2006). The cycle of intergenerational poverty operates through numerous channels, including but not limited to reduced schooling, lower educational attainment, and malnutrition, all of which have long-term effects on future levels of productive capacity and standards of living. The growing literature on the impacts of intergenerational poverty, as well as widespread poverty in the developing world have spawned a multitude of policy responses.

One of the more recent trends in poverty reduction policy has been the implementation of conditional cash transfers (CCT) programs, whereby poor households are targeted with direct cash transfers from the state on the condition that they fulfill established educational and health-related targets. This typically includes maintaining a minimum rate of school attendance, making regular visits to health clinics, and consistent attendance at health seminars for (usually female) heads of household. These programs have two main objectives: (a) in the short term, to provide immediate poverty alleviation and increase basic consumption among poor households; and (b) in the long term, to increase the rate of human capital accumulation among poor children in order to break the intergenerational transmission of poverty.

This study will focus on this second goal; that is, the impact of human capital accumulation on long-term poverty reduction. By increasing CCT beneficiaries' level of human capital accumulation, CCT programs aim to increase their skills and resources to lift themselves out of poverty and thus break the intergenerational cycle of poverty. The purpose of this study will be to understand the prospects of CCT programs for long-term poverty alleviation in developing countries, taking Brazil and its *Bolsa Escola* program as a case study.

In order to address the question of the *Bolsa Escola*'s potential for long-term poverty alleviation through increased human capital accumulation, this paper will (1) examine the literature on CCTs and Brazil's *Bolsa Escola* with regard to their goals and results in terms of increased (a) current consumption and (b) school enrolment and attendance rates; (2) situate the second goal of increased human capital accumulation for long-term poverty alleviation within the broader theoretical literature on the determinants of social mobility through the labour force, with attention to both human capital and discrimination theories; and (3) examine the potential factors involved in determining mobility in Brazilian labour markets, including educational attainment, race/ethnicity, gender, family background, geographical location, quality of services, and economic sectors.

II. Conditional Cash Transfers and Brazil's Bolsa Escola.

Over the past 15 years, CCT programs have become a prominent feature of the social policy landscape across much of Latin America, and are advocated as the state of the art strategies for overcoming the high rates of poverty that exist throughout most of the region. Indeed, nearly every country across the region has implemented some form of conditional cash transfer, with notable programs including Mexico's *Oportunidades* (formerly *Progresa*), Colombia's *Familias en Acción*, Chile's *Subsidio Unitario Familiar*, Ecuador's *Bono de Desarollo Humano*, Argentina's *Plan Jefas y Jefes*, Nicaragua's *Red de Protección Social*, Honduras' *Programa de Asignación Familiar*, Bolivia's *Beca Futuro*, and Jamaica's *Programme of Advancement through Health and Education (PATH)*.

Program Design and Parameters

Among the first and largest CCT programs in the region, Brazil's *Bolsa Escola* ('school stipend') program aims to increase school enrolment rates among the poor by providing direct

cash transfers to poor households, defined as those with a monthly per capita income of less than R$90[1], with children aged 6 to 15, in grades 1 to 8, on the condition of 85% school attendance. Poor households receive R$15 per student/beneficiary at per month, to a maximum of 3 children per household, for a total maximum of R$45 per month per household (Lindert et al. 2007). The program is predicated on the idea that there is decreased demand for educational services as a result of the direct and opportunity costs of school attendance, the inequalities within the household bargaining process, and the discrepancies between private and social rates of return to education. Direct cash transfers aim to compensate for these costs and in turn provide incentives for poor households to take up educational services. Building on municipal level programs, the federal government introduced a national level program in 2001, which was amalgamated with several other CCT programs into the overarching *Bolsa Família* program, and now encompasses approximately 11 million families, or 25% of the population (Ministério de Desenvolvimento Social e Combate à Fome 2009).

The rationale for the *Bolsa Escola* program and the design of its objectives and conditionalities are rooted in the pervasiveness of poverty in Brazil and its high correlation with low levels of education (World Bank 2001). In 2001, the overall incidence of poverty in Brazil was 22%; however, widespread regional disparities, particularly between the North/Northeast and the Centre-South regions existed, with the incidence of poverty at 22% in the city of Fortaleza, while only 3% in the city of Curitiba (World Bank 2001). Moreover, while school enrolment rates were high, late entry and low attendance rates led to slow progression through the education system. For example, in Brasilia, a relatively affluent city, prior to the introduction of the *Bolsa Escola* only 62% of children enrolling in school were of the right age for their

[1] This was chosen as the cutoff for eligibility as it constituted half the minimum wage at the time of program implementation.

grade, while the rest were older (World Bank 2001). Thus, the *Bolsa Escola* program seeks to address this key feature of poverty by increasing incentives for early enrollment and continuous attendance.

Meeting its Goals? : Impacts on Consumption and Human Capital Accumulation

The first main objective of the education-based CCTs (and the *Bolsa Escola*) is to provide immediate poverty alleviation through increased household consumption. (Rawlings and Rubio 2005) note that CCT programs have seen considerable success in increasing consumption levels among the poor. In Mexico, average consumption levels increased by 14% and median food expenditures by 11% over non-beneficiary households, largely due to higher expenditures on fruits, vegetables and meat products (Rawlings 2005). In Nicaragua, beneficiary households saw no improvement in consumption levels; however, control households saw a decline in consumption, largely due to low coffee prices and a drought, which translates into a 19% increase in per capita consumption as a result of the transfer (Rawlings 2005). This suggests another possible function of CCT programs: to insure against income shocks that might hamper consumption. Income shocks can seriously affect health, nutrition, and educational outcomes of the extremely poor; CCTs can provide an assured source of income to cushion against income shocks among the structurally poor.

As a direct result of the *Bolsa Escola* program, (Resende and Oliveira 2008) find that average annual expenditures of beneficiary households was R$300 higher than non-beneficiary households and that increased expenditures are concentrated on food, education, hygiene and clothing, suggesting the success on the first goal of increasing immediate consumption among poor households. These results indicate a positive effect on consumption of beneficiary households and suggest that these transfers are an efficient means of increasing basic

consumption. This increased consumption, particularly the enhanced nutritional status of beneficiaries, is important for the program's second goal: human capital accumulation.

The second goal of CCTs is increased human capital accumulation with the goal of long-term poverty alleviation, typically measured by school enrollment and/or attendance rates. Human capital accumulation through CCT programs is typically measured by school enrolment and/or attendance. (Rawlings and Rubio 2005) note that CCT programs across Latin America have shown a positive effect on enrolment rates. In Mexico, the impact of the *Oportunidades* program on primary enrolment was estimated at up to 1.07% for boys and 1.45% for girls; however, the impact on secondary school enrolment was up to 9.3% for girls and 5.8% for boys. Colombia's *Familias en Acción* program has seen similar disproportionate gains for secondary school enrolment, with primary school enrolment in urban areas unaffected by the transfers, but a 12-14% increase in secondary school enrolment (Rawlings and Rubio 2005).

In Brazil, evidence shows successes in reducing drop out rates, in ensuring enrolment at the right age, and in ensuring promotion to the next grade. In an evaluation of the municipal *Bolsa Escola* in Brasilia, drop out rates were found to be lower among beneficiaries at 0.4% in 1996, compared to 5.6% among non-beneficiaries, and promotion rates significantly higher at 80% for the former compared to 72% for the latter (World Bank 2001). Britto (2004, 27) notes that "net enrollment rates in grades 1 to 8 […] have increased from 87% to 96% from 1994 to 1999", and (Cardoso and Souza 2003) calculate that, in tandem with these increased school enrollment rates, the *Programa de Erradicação do Trabalho Infantil* (PETI), the predecessor to *Bolsa Escola*, decreased child labour among 7 to 14 year olds by 7% in the state of Pernambuco, 13% in Sergipe, and 26% in Bahia. (Bourguignon, Francisco H. G. Ferreira, and Leite 2003) assess the impact of the *Bolsa Escola* on occupational choice; that is, children's time allocation

between the labour force and school. They find that about 40% of 10 to 15 year olds not enrolled in school, enroll in response to the transfer, and among poorer households, this percentage is as high as 60%; however, the proportion of children both studying and working rises marginally with the transfer.

In sum, the Brazilian program is widely considered to be one of the most successful of its kind in terms of increasing consumption, increasing school enrollment rates, and decreasing child labour rates. Yet, the second goal of CCTs (that is, poverty alleviation through increased human capital accumulation) is achieved over the long term, given that the beneficiaries of the program are school-aged children and thus the impact of their additional human capital accumulation will only be seen as they enter the labour force. Moreover, it is not clear that successfully increasing human capital accumulation among beneficiaries will necessarily translate directly into long-term poverty alleviation. Increased human capital formation will likely only translate into higher incomes (and thus lower poverty rates) if those skills and education are successfully deployed in labour markets to secure better employment outcomes for beneficiaries.

III. Theories of Labour Market Mobility.

In the extensive literature on the determinants of social mobility through the labour force, there are two main paradigms that have been offered to explain individuals' labour mobility: (1) theories of human capital; and (2) theories of discrimination.

Human capital theories focus largely on skill and educational attainment as the primary determinants of labour market outcomes and social mobility. Within this paradigm, *functionalist theories* (Davis and Moore 1945) maintain that formal education transforms inherent skills into

skills useful in the labour force and thus educational attainment can be used as an index of skill. *Human capital theories* (Becker 1962; Becker and Chiswick 1966; Mincer 1958) view educational attainment as part of human capital, which, in combination with skill level, determine labour market outcomes. Human capital theory recognizes that an individual's decision to invest in human capital (ie: to undertake training or education) involves both direct (ie: tuition, books etc…) and opportunity costs (ie: forgone wages) for which the individual hopes to compensate in the long term through higher future earnings. Thus, increasing one's human capital, that is, educational attainment, is expected to translate into higher labour mobility and better labour market outcomes. *Signaling theories* (Spence 1973; Weiss 1995) are a variant of human capital theory that, while acknowledging the importance of learning, emphasize the ways in which schooling acts to signal or filter for productivity differences. Signaling theorists argue that employers operate with limited information about employees' skills and therefore use educational attainment as an indicator of skill level; thus, labour market outcomes will reflect educational attainment more than skill.

Discrimination theories, however, focus on the impact of individuals' personal characteristics, such as race/ethnicity and gender, among others in determining labour mobility. Within this paradigm, *statistical discrimination theory* holds that due to the limited information with which employers make hiring decisions, they tend to use subjective considerations such as race and gender as proxies for the productive capacity of workers since the latter is not easily discernible (Phelps 1972). Also within this paradigm, *Conflict theories* (Collins 1971) focus on the power dynamics that determine access to schooling, arguing that educational attainment reflects the distribution of power within society rather than the distribution of skill. Thus, labour mobility will reflect power, proxied by educational attainment, instead of skill. *Credential*

theory, also put forth by (Collins 1979), sees educational attainment as a biased indicator of skill since it is used by powerful groups within society to filter out uncertified, but equally competent, employees. Thus, educational attainment, rather than skill level, is key to determining labour mobility. Credential theory is differentiated from signaling theory in that the former emphasizes discrimination while the latter highlights limited information as the reason for the importance of educational attainment rather than skill in determining labour mobility.

Finally, the *taste-for-discrimination theory* (Becker 1971) holds that employers' taste for discrimination is based on maintaining a given social composition within the workplace. Hiring an employee who is not part of the social group (for example, from a different ethnic/racial group, different gender etc…) lowers productivity because of the psychic and subjective costs implied by association with the non-member employee. Thus, membership in the dominant group within a given workplace determines labour mobility.

IV. Determinants of Labour Mobility in Brazil.

Historically, the high rates of poverty in Brazil have been more a result of low wages and low labour mobility than of high unemployment rates; that is, Brazilians are generally poor not due to a lack of jobs, but rather to a lack of labour mobility and of high quality/remunerated jobs (Barros, Cossio, and Teles 2006). Given the close relationship between poverty and labour mobility in Brazil, an examination of the determinants of labour mobility is in order.

Human Capital Determinants

Education

Throughout the 1980s and 90s, the Brazilian population saw substantial increases in educational attainment, with average years of schooling increasing steadily from 4.91 years in 1981 to 6.85 years in 1999, while real hourly wages remained almost unchanged at an average of

2.81 reais in 1981 to 2.83 reais in 1999 (Arbache 2001; Blom, Holm-Nielsen, and Verner 2001; Binelli, Meghir, and Menezes-Filho 2009; Lovell 1994). Over the period of 1982 to 1998, (Blom, Holm-Nielsen, and Verner 2001) find that returns to tertiary education increased sharply, while those to primary and secondary education decreased substantially. Yet, the largest expansion in education was at the intermediate/secondary level (Blom, Holm-Nielsen, and Verner 2001). Moreover, (Binelli, Meghir, and Menezes-Filho 2009) find that despite a significant increase in secondary graduation and a dramatically increasing college wage premium, the relative proportion of students progressing to tertiary education remains low. Both these studies suggest that the current supply of workers with tertiary education does not meet demand, driving up the college wage premium. Similarly, (Zepeda et al. 2007) find that while labour incomes increased over the period of 1992 to 1996, this largely did not benefit the poor, whose income increased less than the mean for the labour force overall. Indeed, sluggish and volatile growth along with capital-intensive investment in the 1990s have led to small gains in labour mobility, both in terms of quantity and quality of available jobs, making employment one of the main problems facing Latin America, and Brazil (Zepeda et al. 2007).

Family Background

(Sergio G. Ferreira and Veloso 2006) estimate the extent of intergenerational educational mobility in Brazil, and find that labour mobility increases with fathers' wages, and the improvement of basic education and in turn the fall in returns to education may be behind increased labour mobility among those below the median wage distribution. (Marió, Woolcock, and von Bulow, forthcoming) find that low educational attainment of parents increases the likelihood of an individual living below the poverty line, yet, an additional year of schooling among the parents only increases children's schooling rates by 0.3 years. Thus, they conclude that there is considerable intergenerational inertia. Dunn (2003) considers variations in earnings

mobility in terms of the impact of returns to education, the progressivity of public education investment, and the heritability of income-related traits. His analysis shows that returns to education and progressivity of education investment to significantly impact the intergenerational mobility of earnings, suggesting that public investment in educational opportunities (such as through the Bolsa Escola) can have a considerable impact on earnings and labour mobility. While Brazil is found to have among the highest levels of intergenerational earnings transmissions in the world, progressive investments in education and declining average returns to schooling have contributed to diminishing earnings elasticity recently (Dunn 2003).

Discrimination Determinants

Race and Gender

There is an extensive literature linking race and gender to low labour mobility in Brazil, with the most vulnerable groups to labour market changes including non-whites and women (Marió, Woolcock, and von Bulow; Lovell 2006; Lovell 2003; Lovell 1994; Sergio G. Ferreira and Veloso 2006). Indeed, the *Pesquisa Nacional de Amonstra Domicilio* shows that proportions of workers earning less than the minimum wage were distributed as follows: 68.7% of black women workers; 64.6% of white women workers; 34.5% of black men; but only 24.2% of white men (Marió, Woolcock, and von Bulow). Moreover, women and non-whites are also disproportionately represented in the informal sector compared to men and white workers (Marió, Woolcock, and von Bulow).

While the participation of women in the labour force in Brazil has consistently increased over the past twenty years, it remains below male participation rates; moreover, there has also been a steady decline in the gender wage gap since the late 1980s, from about 70% to approximately 25% (Marió, Woolcock, and von Bulow). Interestingly, both Afro-Brazilian and

white women have consistently exceeded men in educational attainment since the 1960s (van Klaveren et al. 2009). Yet, Brazil's wage gap remains among the highest in Latin America (Lovell 2006). Given that women have surpassed men on average in terms of educational attainment (van Klaveren et al. 2009; Lovell 2006) and that the wage gap prevails even when education and hours are held constant (Marió, Woolcock, and von Bulow), the persistent wage gap indicates lower returns to productivity-related characteristics among women and thus the existence of discrimination against women in terms of wages and therefore decreased labour mobility. Despite the persistence of the wage gap, the data show a smaller gap for younger cohorts of workers of 23% for those aged 25-44 compared to 37% for those aged 45-64 (van Klaveren et al. 2009).

In addition to gender, race has long played a considerable role in determining social mobility in Brazil. Afro-Brazilians constitute approximately 45% of the population, yet constitute over 60% of the poor; moreover, poverty rates and the rate of duration of poverty for non-whites are significantly higher than for whites, even when controlling for schooling (Marió, Woolcock, and von Bulow). The racial wage gap has remained remarkably consistent over the past two decades, with non-whites earning on average half the income of whites (Sergio G. Ferreira and Veloso 2006; Lovell 2006). In addition, (Sergio G. Ferreira and Veloso 2006) find that the persistence of low wages and lack of labour mobility for blacks is considerably higher than for whites: when controlling for other characteristics and variables, the probability remaining in the lowest income quintile is 47% for blacks, compared to 25% for whites. At the same time, the persistence of high wages is stronger for whites, with the probability of remaining in the highest income quintile for whites at 50% compared to 23% for blacks (Sergio G. Ferreira and Veloso 2006). While Afro-Brazilians, both men and women, on average complete fewer

years of schooling than white Brazilians and are disproportionately concentrated in low-income jobs, the racial gap persists even when controlling for these two factors (Lovell 2006). Thus, while the gender wage gap has consistently narrowed since the 1960s, the racial wage gap has remained remarkably consistent. Yet, while there is clear evidence of discriminatory employment practices in the Brazilian labour market, resulting in decreased labour mobility for women and non-whites, it is unclear the extent to which the racial and gender gaps are due to inequality in pay versus inequality in human capital (Lovell 2006).

Other Factors

In addition to human capital and discrimination, there are numerous other factors that could influence an individual's labour mobility in Brazil, namely geographic location, the quality of services available, and the sector of employment. In addition to controlling for human capital and discriminatory factors in determining labour mobility among CCT beneficiaries, these other factors will also need to be considered in order to accurately determine whether beneficiaries' increased human capital is being effectively deployed in labour markets in terms of better quality and better remunerated jobs.

Geographical Location

There are several components to spatial/location factor that are relevant to labour mobility, namely regional location (North vs. South) and/or origin, and rural vs. urban location. Stark regional inequalities have long divided Brazil into almost two different countries in terms of income, living standards and overall economic development. Indeed, while only 30% of the country's population lives in the Northeast, the region is home to nearly 50% of the poor (Marió, Woolcock, and von Bulow, forthcoming). These regional differences have been found to contribute not only to determining economic opportunities available to the poor which could limit social and labour mobility, but also the level of discrimination they face, which in turn

would also affect social mobility. Indeed, Marió, Woolcock, and von Bulow (forthcoming) find discrimination against *nordestinos,* that is, people from the Northeast region, in the labour force in the South. Furthermore, social mobility has been found to be higher in the more developed regions of the country, namely the South, accentuating regional disparities in labour mobility (Marió, Woolcock, and von Bulow, forthcoming). Ferreira and Veloso (2006) corroborate this finding: in the Northeast, the probability of a son of a father in the lowest quintile remaining there is 58%, compared to just 24% in the Southeast. At the same time, they find that the probability of a son of a father in the highest quintile remaining there is 47% in the South, compared to 36% in the Northeast. Thus, regional location has implications for social/labour mobility both in the region itself in terms of economic opportunities available to the poor, and in the rest of the country in terms of the discrimination they face in accessing labour market opportunities.

Another axis of the spatial/location factor is rural vs. urban location. Data suggest that the poor are disproportionately represented in rural areas, which contain 35% of the population, but 55% of the poor (Marió, Woolcock, and von Bulow, forthcoming). Furthermore, there is evidence of discrimination based on place of residence within urban areas, namely restricted labour market opportunities for those living in favelas who are often automatically associated with criminal activities as a result of their place of residence (Marió, Woolcock, and von Bulow, forthcoming). Thus, social mobility is restricted both by rural vs. urban location due to limited economic opportunities, but also by location within urban settings as a result of discriminatory societal attitudes. In sum, regional location and origin, rural-urban location, and place of residence within urban locations all constitute relevant factors in determining Brazilians'

social/labour mobility both for reasons of economic opportunities and of discriminatory practices.

Quality of Services

The quality of educational services received by both beneficiaries and non-beneficiaries is arguably another major factor in determining social/labour mobility. While Brazil has developed a very respectable system of institutions of higher education in comparison with any other Latin American or developing country, basic education was long neglected. Indeed, educational spending has disproportionately favoured higher education: in 1995, while 4.7% of GDP was spent on education, 25.5% of that was spent on higher education serving less than 2% of the population (Castro 2000). As a result, both the quantity and quality of basic education has long been mediocre at best. Furthermore, the Brazilian education system is highly stratified along public-private lines in terms of the quality of educational services offered by each. While all public education is tuition-free, implying that all students have access to mediocre public primary and secondary schools, a private primary and secondary education is a de facto prerequisite to pass the entrance exams to publicly funded, tuition-free universities. Undoubtedly, the disparities in the quality of education offered in the public system (that is, the only system accessible to the poor) pose a considerable obstacle to social mobility. However, in terms of the present study which aims to compare the labour mobility of *Bolsa Escola* beneficiaries and non-beneficiaries, both groups will be drawn from comparable income levels and thus can be assumed to only have access to the public education system.

Given the high level of decentralization of education in Brazil, disparities between states and municipalities in terms of funding capabilities could also influence the quality of educational services offered. Despite considerable disparities in funding capabilities between municipalities

and states, FUNDEF, a federal program subsidizing education in poor schools by supplementing education budgets for those states and municipalities that are spending the constitutionally-mandated proportion of their budgets for education but are still unable to reach the define per student cost of $315 reais, and by redistributing funds from those municipalities and states that do not need to spend their mandated budgets for education towards poorer communities (Castro 2000). The reshuffling of funds as a result of this program has been considerable and suggests a relative equalization of funding and thus the quality of services offered across public schools throughout the country (Castro 2000). Even so, proxies for the measurement of educational service quality could include, for example, teacher to pupil ratios, the ratio of average teacher salaries to per capita GDP, and the drop out or repetition rate.

In sum, this study will likely focus exclusively on the publicly-educated given that private education would inherently be beyond the reach of the groups studies, both beneficiaries and non-beneficiaries of the *Bolsa Escola*. However, proxies will need to be used to control for the quality of services offered across public primary and secondary school as the quality of the education received by beneficiaries and non-beneficiaries is likely to impact their social/labour mobility.

Sectoral Employment

Many scholars have noted the marked increase in the informality of employment during the 1990s onwards, as well as a concomitant decline in workers' wages, benefit structures, and working conditions as a result of the lack of protections provided by state legal structures in the formal sector (Portes and Hoffman 2003; Vernengo 2004; Reygadas 2006), across Latin America since the 1980s (Vernengo 2004). Indeed, the vast majority (20 million of 29 million) of newly created jobs in Latin America between 1990 and 1999 were in the informal sector (Reygadas

2006), defined as those economic activities and production occurring outside state legal and accounting structures (Cacciamali 2000). The informal sector is now estimated to account for over 55% of the Latin American labour force (Ernst 2008) compared to 28.9% in the 1980s (Reygadas 2006), although this varies by industry and was as high as nearly 87% in the agricultural sector (Hallak, Namir, and Kozovits 2006; Ernst 2008).

In Brazil, informal workers are defined as those who do not hold social security cards that entitle them to employment benefits such as unemployment insurance (Soares 2004). The Brazilian labour market is highly segmented, with the informal sector accounting for approximately 55% of employment in Brazil overall, and 87% of rural employment (Ernst 2008). The Brazilian informal sector is characterized by predominantly non-white workers (although the number of white workers in the informal sector is increasing), lower levels of educational attainment among workers, lower levels of unionization, higher levels of discrimination, and lower levels of productivity (Soares 2004). The poor are disproportionately represented in the informal sector (Marió, Woolcock, and von Bulow, forthcoming), notable given that labour mobility has been found to be lower in the formal sector and does not vary with educational attainment, while labour mobility in the informal sector decreases with higher educational attainment (da Silva and Pero 2008), suggesting there is a cap on the level of social mobility accessible to those in the informal sector. This will likely be another variable to be considered when determining *Bolsa Escola* beneficiaries and non-beneficiaries' labour mobility.

V. Conclusions and Research Agenda.

In sum, while there is considerable evidence to support the success of CCTs across Latin America in achieving short-term poverty alleviation through increased current consumption, and in achieving higher rates of school enrollment and attendance, whether this increased human

capital formed as a result of Brazil's *Bolsa Escola* is being effectively deployed in labour markets in terms of higher labour mobility (that is, better quality and remunerated jobs) remains to be seen. There is a paucity of research on CCT programs' long-term impact on poverty in terms of the success with which beneficiaries of CCTs, and the *Bolsa Escola*, are able to successfully deploy their increased educational attainment in labour markets compared to non-beneficiaries in order to effect the desired results in poverty reduction. Given that one of the explicit goals of CCTs and the *Bolsa Escola* is long-term poverty alleviation through increased human capital accumulation, this study aims to fill this gap in the research on CCT programs by investigating the impact of increased human capital formation among program beneficiaries versus non-beneficiaries in terms of increased labour mobility in order to reduce long-term poverty. Establishing the long-term prospects for poverty alleviation through increased labour mobility will be key to determining CCTs' long-term effectiveness and viability as poverty reduction policies.

The existing literature sheds considerable light on the determinants of labour mobility. While these factors may all have differing impacts on labour mobility, given that CCT programs explicitly link human capital formation with long-term poverty reduction, this study will seek to isolate the human capital variable as a determinant of labour mobility, while holding these other determinants constant. The study will seek to assess results from primary research with former beneficiaries and non-beneficiaries of the *Bolsa Escola* in terms of (a) occupational status; (b) income/earnings; (c) formal vs. informal employment, and associated social protection and benefits; and (d) job security and/or stability, in order to assess prospects for long-term poverty alleviation. The results of this study will be instructive for Latin American countries in both the

design and implementation of CCT and other social protection programs in order to maximize their impact on poverty reduction, a key challenge facing most, if not all, of the region.

Research Question: Are beneficiaries of Brazil's *Bolsa Escola* able to effectively deploy their increased human capital in the labour market in terms of better quality and remunerated employment as compared to non-beneficiaries? Put another way, does the Brazilian labour market, despite its high levels of informality, provide better labour market opportunities for the beneficiaries of the Bolsa Escola as compared to non-beneficiaries?

Hypotheses: 1) If beneficiaries are able to secure better employment outcomes than non-beneficiaries, to what extent is this a result of increased human capital formation through the *Bolsa Escola*?

2) If beneficiaries are not able to secure better employment outcomes than non-beneficiaries, what are the constraints that are preventing the effective deployment of the former's increased human capital? To what extent are other determinants of labour mobility (such as family background, race, gender, geographical location, quality of educational services, and sectoral employment) more significant than education in determining labour mobility and poverty reduction?

VI. PRELIMINARY DATA ANALYSIS.

The proposed research will require review of both primary and secondary sources, including but not limited to: an exhaustive review of the secondary research, including journal articles, books, World Bank and UNDP Poverty Centre reports, as well as data from foreign donor agencies, such as Germany's GTZ (which has conducted extensive research on CCTs), to

be conducted in Vancouver; some secondary research only available locally, in Brazil, including data from academics studying CCTs and the labour market in Brazil, the *Ministério do Trabalho e Emprego* (Ministry of Labour), the *Instituto Brasileiro de Economia at the Fundação Getúlio Vargas* (Rio de Janeiro), the Economic Commission for Latin America and the Caribbean (Brasilia), and the *Instituto Brasileiro de Geografia e Estatística* (IBGE); and, primary research, conducted in Brazil, including interviews with beneficiaries and non-beneficiaries of the *Bolsa Escola* program, as well as with officials from the organizations cited above. Other than field research, possible data sources include:

Conditional Cash Transfers:

There is an extensive academic literature on both CCTs in Latin American and the *Bolsa Escola* specifically in Brazil. An overview of some of these studies is provided above; considerable data has been collected on Latin American programs, both in terms of the programs' impact on immediate poverty alleviation through increased consumption, and on long term human capital accumulation measured by increased school enrollment and attendance. Furthermore, an extensive amount of information on the *Bolsa Escola* program's parameters, goals, and outcomes is available through the *Ministério do Desenvolvimento Social e Combate à Fome*.

Labour Market Data:

• Pesquisa Nacional por Amonstra de Domicilio (PNAD): an annual survey of approximately 100,000 households, collecting basic demographic and labour market data including education and labour market earnings of all individuals over the age of 10

• Instituto Brasileiro de Geografia e Estatística (IBGE): the Brazilian national institute of statistics; collects data on a broad range of topics including unemployment and labour market participation

• Pesquisa Mensal de Emprego (PME): a monthly survey of the Brazilian labour force and wages

• Ministério do Trabalho: federal government ministry; provides information of government policy (including extensive publications on policies against workplace discrimination) and collects data on labour-related topics (ex: wages, employment by industry, unemployment etc…)

• Economic Commission for Latin American and the Caribbean (CEPAL): UN organization that collects extensive economic data

• Instituto de Pesquisa Econômica Aplicada (IPEA): government organization that has conducted extensive research and provides many reports on social policy, education, poverty and inequality, and labour markets

There is also a considerable literature on the role of discrimination as a determinant of labour mobility in Brazil, particularly with regard to race and gender. Numerous academic studies have conducted analyses of the level of intergenerational transmission of poverty through the labour force in Brazil, the most important of which are cited in previous sections.

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