

THE IMPACT OF THE WELFARE CASH TRANSFERS IN POOR MUNICIPALITIES IN BRAZIL

*O IMPACTO DAS TRANSFERÊNCIAS GOVERNAMENTAIS DE
PROGRAMAS SOCIAIS SOBRE MUNICÍPIOS POBRES NO BRASIL*

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Abstract

This article analyzes the impact of welfare transfers upon the economic activity of poor municipalities in Brazil. Short and long-term impacts pointed out in the literature are reviewed and contrasted with an empirical analysis based on 44 poor municipalities in the country. The analysis in the was carried out via two different approaches: the GDP approach, in which the consumption, investment and government expenditures channels of impact were assessed, taking into consideration the concepts of Marginal Propensity to Consume and the multiplier effect of expenditures; and the formal enterprises and employment approach, in which the dynamics of these two variables were analyzed based on the habits of consumption of poor families in Brazil.

Keywords: Income distribution; Poverty; Economic growth.

Resumo

Este artigo analisa o impacto das transferências governamentais de programas sociais sobre a atividade econômica de municípios pobres no Brasil. Impactos de curto e longo prazo levantados na literatura foram revisados e contrastados com uma análise empírica baseada em 44 municípios brasileiros. O método de análise baseou-se tanto na mensuração do impacto das transferências de renda no PIB – em que se utilizaram o conceito de propensão marginal a consumir e o multiplicador keynesiano dos gastos – quanto na avaliação da dinâmica dos postos de trabalho e do número de estabelecimentos formais nesses municípios, tomando-se por base o hábito de consumo das famílias pobres no Brasil.

Palavras-chave: Distribuição de renda; Pobreza; Crescimento econômico.

1

INTRODUCTION

The construction of safety nets as one of the tools in the pursue of development has been gaining more and more relevance internationally (UNITED NATIONS INVESTING IN DEVELOPMENT..., 2005; RODRIK, 2006; COMMISSION ON GROWTH AND DEVELOPMENT, 2008), but in Brazil they are far from being widely accepted. This fact may be illustrated by an article written by a professor of sociology at the University of São Paulo, in which the Bolsa Família programme was summarized as “an official programme for buying votes”, approved by the politicians in a “pact with parasitism” (MARTINS, 2009).

This negligence in respect to the degraded conditions of the poorer off in Brazil could be understood as in line with the lack of interest to change this situation within the political, social and economical elite in the country (MEDEIROS, 2007). Sérgio Buarque de Holanda (1936), one of the most renowned Brazilian sociologists, would perhaps go even further, once he understood the Brazilian as a very anarchic society – therefore, any heavy intervention of the state in the economy would be, a priori, a bad intervention.

However, the Brazilian society seems to need more than moral motives to support the development of the existing safety nets in the country. This article will investigate whether the welfare cash transfers have an impact on the economic activity of poor municipalities in Brazil. The working hypothesis is that the welfare programmes are a type of public intervention that has the strength to ameliorate the socioeconomic environment in the country and to crowd private investment in within the poor municipalities.

In this research, the literature related to the impact of the welfare transfers in the economic activity in Brazil was revised and contrasted to the results of an empirical investigation based on 44 poor municipalities in Brazil.

2

METHODOLOGY

In order to analyze the impact of the government welfare transfers in the economic activity of poor municipalities, it was necessary to distinguish the

impact resulted by the transfers from the impact resulted from exogenous factors such as a general rise in the national income, changes in competitiveness due to international aggregate demand and volatility of the exchange rate, just to name a few.

For that reason, the municipalities selected were those that were classified by the national bureau of statistics in Brazil, the Instituto Brasileiro de Geografia e Estatística (IBGE), as Local Centers, both in their entrepreneurial and governmental approaches, in their study *Região de influência das cidades* (2008). According to this classification, the selected municipalities were only those that were seldom visited by citizens of other municipalities for shopping, leisure, or to deal with issues related to education, transport or health, the distribution of final products of any kind, among other criteria. From these municipalities were selected only the ones that in that same study had no reference as a destiny for buying final goods or services, nor intermediary goods for the agricultural sector. In other words, these municipalities are isolated from other economies on a very high level. It is important to note that even such a selection does not completely isolate the economic activity of these municipalities, but it does minimize the exogenous influences not analyzed in this article.

Once the focus of this thesis is on poor regions, the municipalities selected were only those that poverty embraced more than 30% of their families and which the *per capita* GDP was lower than R\$ 6.000,00 (US\$ 2.5 thousand¹) in the year 2005, which corresponded to approximately one half of the *per capita* GDP in that year.

Were also excluded from the sample those municipalities with incomplete data regarding the amount of transfers received between the years 2004 and 2006 related to the selected federal welfare programmes analyzed, which are: *Bolsa Escola*, *Bolsa Família*, *Benefício de Prestação Continuada* (BCP), *Auxílio Gás* and *Bolsa Alimentação*.

■ 2.1 The collection of data

The analysis referred to the nominal GDP as well as of the general characteristics of each municipality, apart from the data regarding the formal enter-

1 The average exchange rate in 2005 was 2,4344 R\$/1 US\$, according to Ipea. More information at www.ipeadata.gov.br.

prises and employment, is based on the data provided IBGE, either in the above mentioned study *Região de influência das cidades* (INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA, 2008) or on their web site. In this set of data is included: Total GDP; value added by the public administration on the GDP; the classification of the centrality level of the municipality; local tax revenue; and poverty incidence on the population.

The data referred to the formal enterprises, employment and salaries was extracted from the micro data provided by the Labor Ministry, which is compiled from the information transmitted annually by the formal enterprises in Brazil². It's important to note that, according to this Ministry, this information is provided by around 97% of the formal companies in Brazil (FILIPPINI; OLIVEIRA, 2007).

The data referred to the tax transfers from the regional to the local governments were collected one by one in the web site of the Finance Secretary of each State.

The data referred to the welfare transfers was collected and compiled from the web site of the Development Ministry in Brazil³.

■ 2.2 Final remarks on the methodology

This study is based on the empirical analysis of 44 municipalities throughout four of the five big geographical regions in Brazil, distributed in 12 of the 26 States in the country. Their nominal GDP in 2005 ranged from R\$ 3.8 million (Santo Antônio dos Milagres) to R\$ 106 million (Viçosa do Ceará), with an average of R\$ 37 million, while the nominal GDP growth from 2003 to 2006 ranged from 11.7% (Cândido Sales) to 60% (Santo Antônio do Retiro), with an average of 39%. It's also relevant to note that poverty embraced on average 51% of the population in these municipalities, with incidences as high as 84.6% in Tarrafas and as low as 31.9% in Cristália.

It should be noted that the results of this study will be based on the average performance in the sample. This was done in order to minimize the influence of some particularities of each municipality that have not been captured by

2 For more information, see www.rais.gov.br.

3 The data and related information can be accessed at <http://aplicacoes.mds.gov.br/sagi/mi2007/home/index.php>.

the model utilized, such as the differences in value added to the GDP by the different sectors of the economy, for example. Although these and other variables that have not been treated in this study may still change the results achieved here, it will be assumed that this influence is negligible.

The sample analyzed embraces the following municipalities: Adrianópolis (PR), Altamira do Paraná (PR), Anajatuba (AM), Barra do Chapéu (SP), Betânia do Piauí (PI), Bodocó (PE), Borba (AM), Brejo da Madre de Deus (PE), Buriti dos Montes (PI), Cândido Sales (BA), Cariaçu (CE), Cedro (CE), Chã de Alegria (PE), Chã Grande (PE), Chaval (CE), Cristália (MG), Felizburgo (MG), Francisco Santos (PI), Frecheirinha (CE), Gameleira (PE), Graça (CE), Itatira (CE), Jaqueira (PE), Jatobá (PE), Lagoa do Carro (PE), Laranja da Terra (ES), Malhada (BA), Malhada dos Bois (SE), Mirandiba (PE), Nossa Senhora Aparecida (SE), Parambu (CE), Pedrinhas (SE), Santa Brígida (BA), Santana do São Francisco (SE), Santo Antônio do Retiro (MG), Santo Antônio dos Milagres (PI), São Domingos do Capim (PA), São Joaquim do Monte (PE), Socorro do Piauí (PI), Tarrafas (CE), Telha (SE), Tomar do Geru (SE), Tupanatinga (PE) and Viçosa do Ceará (CE).

3

LITERATURE REVIEW

■ 3.1 Short-term impacts

One of the traditional discussions on the benefits that welfare brings to society is based on the disincentive to work it supposedly creates among individuals – not only among the ones receiving the benefits but also among the ones contributing to the financing of the programme. The study of Matos and Oliveira (2008) point out the absence of this problem in the case of the Bolsa Família cash transfers in Brazil. Furthermore, Medeiros, Britto and Soares (2008) found out that the *Bolsa Família* and BCP programmes not only do not cause disincentive to work, but that they actually *incentive* the participation of the welfare beneficiaries in the labor market. Although their study doesn't state a clear explanation behind it, part of this explanation may be

linked with what was at the end of this section defined as the long-term effect of the welfare transfers.

Several studies stressed the great increase in consumption in poor regions of Brazil resulted by welfare programmes (FBES, 2006; CHIARA, 2009; MEDEIROS; BRITTO; SOARES, 2008). Once the the municipalities' GDP is calculated as the summation of consumption, investment and government expenditures, plus the difference between exports and imports in the municipality, it would be reasonable to expect that such a great increase in consumption would lead to an increase in the GDP. Especially because the Marginal Propensity to Consume (MgPC) within the beneficiaries of the welfare programmes are extremely high (CYSNE, 2006; MARQUES, 2005; PIRES; LONGO, 2008; ROCHA; KHAN, LIMA, 2008) and because families in severe poverty are very likely to spend their welfare benefits within few weeks (ZANDI, 2008, p. 4), the municipalities' GDP should capture the monthly transfers of the Brazilian welfare programmes in the same year that they are effected. Nevertheless, that was not empirically found by the study of Rosa Maria Marques (2005), who concludes that the Bolsa Família Programme has an impact on the municipalities' *per capita* GDP only with the lack of one year.

One possible explanation for this is that, in her study, inflation was neglected. The data used in her work were related to the years 2003 to 2005, in which the official inflation rates in the country were 9.3%, 7.6% and 5.7% (IPEA, 2009). Even though there is no data for the inflation rates in municipalities in Brazil, this should make a significant difference for econometric regressions, especially in such a big country with so many contrasting characteristics among its various regions; therefore, its results should be interpreted carefully.

Another conclusion in her study is that an increase in the number of beneficiaries of the programme would have a greater impact on *per capita* GDP than an increase in the value of the benefit (MARQUES, 2005). That might be very risky to assert – especially based on a cross data study that ignores the long-term effects of such transfers. In the short-term, the impact of the transfers on the *per capita* GDP is related to the MgPC of the beneficiary families of the programme. Therefore, if the increased group of beneficiaries has on average a lower MgPC than the original group would have with a higher welfare, the short-term impact on the GDP will be smaller. And that is very likely to happen because the programme already attend the worse off in society (INS-

TITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA, 2008) and because the amount of the benefit is indeed very small (MEDEIROS; BRITTO; SOARES, 2008; MATOS; OLIVEIRA, 2008).

Although, this would not be true if the amount of money saved is somehow channeled to investment. An increase in investment is what a society really wants: if made by the families receiving the benefits, this is the desired way in which they leave and stay out of poverty; if made by a third party, it can employ more people, generate income and also crowd-in more investment. Nevertheless, with the value of the monthly transfers ranging from R\$ 20,00 to R\$ 182,00 per family (MEDEIROS; BRITTO; SOARES, 2008), which correspond roughly to US\$ 8.22 and US\$ 74.76 in 2005⁴, it is hard to imagine that many of them are able to invest part of the benefit that was not consumed. Thus, an increase in the amount of the benefit should have a bigger impact on the GDP than an increase in the amount of beneficiaries of the programme.

■ 3.2 Long-term impacts

Discussing the impact of the *Bolsa Família* and BPC benefits in Northeast Brazil, Cláudio Dedecca (FBES, 2006) affirms that despite the great increase in consumption resulted by these programmes, production was not much impacted in that region because a great part of what is consumed there is produced in outside regions, such as São Paulo.

In the same line, Fábio Romão suggests that most of jobs created as a consequence of these programmes are in the Trade Sector, but due to its high degree of informality, this increase doesn't appear in the numbers of formal employment (FBES, 2006). In the case study of this thesis the total number of formal enterprises and employment has increased respectively 17% and 26% between the years 2003 and 2006. It will be argued in that chapter that this increase is positively linked with the welfare transfers.

Márcia de Chiara (2009) pointed out some studies indicating that the large increases in enterprises revenue in the Northeast Brazil, occasioned by the effects of the *Bolsa Família*, is spurring investment from the Trade sector in

4 According to Ipea (2009) the average exchange rate in 2005 was R\$ 2,43/US\$.

that region; while Ogier (2007) found out the same reason behind the investments of manufacturing companies such as Nestlé and Pepsi.

Apart from the impacts in production within the municipalities, the long-term effect of income distribution must be taken into proper consideration, especially in a country where around half⁵ of the population doesn't have enough to eat (INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA, 2004).

At the second half of the XIX century Jevons (1970, p. 98-99) wrote that

That class or race of men who have the most foresight will work most for the future. The untutored savage, like the child, is wholly occupied with the pleasures and the troubles of the moment; the morrow is dimly felt; the limit of his horizon is but a few days off. The wants of a future year, or of a lifetime, are wholly unforeseen. But, in a state of civilization, a vague though powerful feeling of the future is the main incentive to industry and saving. The cares of the moment are but ripples on the tide of achievement and hope. We can safely call that man happy who, however lowly his position and limited his possessions, can always hope for more than he has, and can feel that every moment of exertion tends to realize his aspirations. He, on the contrary, who seizes the enjoyment of the passing moment without regard to his coming times, must discover sooner or later that his stock of pleasure is on the wane, and that even hope begins to fail.

Bearing this in mind, this lack of hope and the feeling of being excluded from society may respond for a significant part of the astonishing criminality and social unrest that is spread throughout Brazil. That's also the opinion of Pochmann et al. (2005, p. 10) who see in Brazil a “tendency of social polarization between rich and poor that is daily exposed by the violence in the big metropolitan areas, making the country not sustainable as a nation”. Therefore, the support from the State can indeed make a real difference to the entire society⁶ – and in the perspective of this

5 According to the Instituto Brasileiro de Geografia e Estatística (2004) share of families reporting alimentary insufficiency in Brazil reaches 60% in the North and Northeast, 43% in the Southeast, 30% in the South and 39% in the Central-West Region in the country.

6 It is relevant to show the magnitude of this problem in Brazil: in the year 2006 the number of homicides in Brazil reached approximately 47 thousand people – an improvement in relation to 2003, when this number reached approximately 51 thousand and the increasing trend seems to have effectively reversed (WAISELFISZ, 2008).

thesis, the welfare transfers may help to create the appropriate environment inherent in the so called institutions needed to foster private investment.

And it does, indeed: a healthy and educated population is a precondition for the high sustained growth in a country (COMMISSION ON GROWTH AND DEVELOPMENT, 2008, p. 5-6). In that line, the Bolsa Família was pointed out for instance as a very important factor behind the decrease in infant malnutrition from 13.5% in 1996 to 6.8% between 2006 and 2007 (NUOMURA, 2009); to the positive impact on the enrollment rate of children in the primary school (GLEWWE; KASSOUF, 2008); and the promotion of human capital accumulation among poor households (VALE, 2008; RAWLINGS; RUBIO, 2003; ROCHA; KHAN; LIMA, 2008).

It should be stressed that this long-term effect of the government support is linked with the habits and behavior standards of each society. According to Veblen (MONASTERIO, 1998), the longer a society is used to behaving in a specific way, the more such behavior is embedded in the society. Therefore, the violence and lack of hope, which have been characteristic in the country for a long while, must be a standard behavior that will be reverted only gradually. And as a consequence, the impact it has on the economic activity in Brazil should be stronger in a longer period of time than these few years of analysis upon which all the studies on the subject have been based.

4

EMPIRICAL ANALYSIS

■ 4.1 The GDP approach

In the first part of this section a brief overview on the Keynesian multiplier will be given. Its concepts will be adapted to the context of poor regions in Brazil, which bear some characteristics that are assumed to impose limitations on the multiplier process. In the second part of this section a method to approximate the multiplier effect in these regions will be proposed and described, in order to establish the framework to estimate both direct and indirect

impacts of the welfare transfers on the GDP of these municipalities. These calculations will be made on the last part of this section.

■ 4.2 The Keynesian multiplier

Keynesian economic theory asserts that the purchase of goods and services in an economy will on the one hand increase the income of their providers⁷, who will spend part of their increased income purchasing more goods and services in the economy and so on. On the other hand, the purchase of consumption goods are linked with the production of intermediary goods, which will be also affected by the first purchase and will further impact other firms and individuals in the economy. This process, referred to as the Keynesian multiplier, has the effect of increasing the expenditures in the magnitude of $1/(1-MgPC)$ (HARTWIG, 2008, p. 11)⁸.

A different view of the multiplier is exposed by Cogan et al. (2009), who incorporates in its estimation the theory of rational expectations, in which the increase in government spending may crowd out private investment and consumption. In this thesis this hypothesis is ruled out especially because neither private consumption nor private investment was discouraged within the sample of municipalities receiving welfare transfers – to the contrary, they significantly increased as it will be seen in the analysis of formal enterprises and employment on the following section. This is expected since the amount of money injected in these economies is very high and directed to poor families' consumption (MARQUES, 2005).

It is important to note that although the multiplier effect should not be negative in these municipalities, they also shouldn't have the full strength as originally proposed by Keynes due mainly to the two following reasons: 1. because these municipalities, although relatively isolated from the national and international economies, are not closed economies, so there are leakages in their economies; and 2. because the subsistence and barter must still play an important role in these municipalities' economies which must limit the multiplier process as it was described in the first paragraph of this section.

7 The providers of goods and services are here referred to both the entrepreneurs as well as their employees, to the extent that they have to work more hours to be able to produce enough to attend the higher demand for their goods and services or/and to the extent that more employees have to be hired.

8 It should be noted that according to Hartwig (2008), "any public expenditure which creates income for somebody, has the same multiplicative effects as private investment expenditures".

While the first reason mentioned above is straight forward to understand and accept, the second one requires further elaboration: the assumption that the subsistence and barter economies must still be significant in this economies are based on the fact that all those welfare programmes have been implemented after 1996 (MARQUES, 2005), which means that before this year the families living in these areas had to survive without those resources⁹. This argument is corroborated by a study which indicates that the average non-monetary share of income is 23% of the total in rural areas in Brazil (INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA, 2004), which must be close to the situation of the municipalities studied in this thesis.

Bearing that in mind, it would be necessary to develop a method to estimate the multiplier effect in these municipalities that incorporates the particularities of those regions in Brazil, what is beyond the scope of this study due to the limitations of space imposed to this article. Instead of that, the maximum value that the multiplier could assume in each municipality was calculated – that is, each multiplier was estimated assuming that there were no leakages nor other exogenous impacts in the municipalities' GDP, based on the following equation:

$$M_m^y = (GDP_m^y) / (G_m^y + T_m^y) \quad (1)$$

where M stands for the maximum value the multiplier may possibly achieve in the year y and municipality m , G for the local public administration expenditures in the year y and municipality m , and T stands for the welfare transfers effected in the year y and municipality m . Via this equation the maximum value the multiplier may possibly assume is, on average, 2,1 in the years 2004 to 2006.

■ 4.3 Channel of impact I: consumption and investment

Based on the framework described above, the impact of the transfers on the municipalities' GDP via the channels of consumption and investment may be estimated by multiplying the welfare transfers to each municipality in the year y by the multiplier M reached by the equation number 1.

9 It should be noted that the BCP program responded in 2004 to approximately 30% of the total transfers (own calculation), and the other programmes were implemented only in the early 2000s (FILIPPINI, 2005). Therefore, even ten years ago the amount of money being transferred to the city was much smaller than in 2004, reinforcing the argument that the barter and subsistence economies must still play an important role in these areas.

It's noteworthy to remind that it was assumed that the in- and outflows of consumption and investment goods, as well as other exogenous effects, were negligible in the municipalities studied in this thesis. If this assumption holds, the approximated multiplier effect in each municipality assume the values reached by that equation, and the average contribution of the welfare transfers to the municipalities GDP would be around 10.3% in the period of analysis.

However, it is prudent to relax the assumption that the leakages and other exogenous factors in these economies are negligible and let the multiplier effect take only 70% of the maximum value it is possible to assume, so there is more room for exogenous influences. In this case, the impact of the welfare transfers in the municipalities GDP would decrease to 7.2% which may still be considered a high impact.

■ 4.4 Channel of impact li: local government expenditures

Now that the impact of the welfare transfers via the channels of consumption and investment was estimated, a third channel of impact should be briefly discussed, namely the local government expenditures channel of impact.

It is reasonable to expect that an increase in government revenue, especially regarding the revenue of the local governments, has a positive impact on government expenditures – and that this additional expenditure is positively linked with the economic activity of the involved regions. Therefore, another channel of impact of the welfare transfers is the share of the local government expenditures resulted by the increase in its budget related to the consumption increase of the beneficiary families and the remaining agents that were affected by the multiplier effects discussed in the previous section. In this section an estimation of this channel of impact will be made. Although it is already included in the value added by the public administration in each municipality GDP, this estimate should be added to the estimated impacts via the consumption and investment channels in order to capture more of the full impact of the welfare transfers on the economy.

The increase in consumption resulted by the direct and indirect effects of the welfare transfers generate taxes to the three spheres of government in the country. Its main impact will be seen in the collection of the *Imposto sobre Circulação de Mercadorias e sobre Prestações de Serviços* (ICMS), that according to Portal Tributário (2009) is a value added tax on consumption goods which is under the competence of the regional government; an impact will also be reflected in a higher collection of the *Imposto sobre Serviços de Qual-*

quer Natureza (ISS), which is a tax on the consumption of goods and services that is under the competence of the local governments (PORTAL TRIBUTÁRIO, 2009). The revenue related to federal taxes are certainly affected as well by both direct and indirect mechanisms, but because the amount that is transferred back to the municipalities suffer too many distortions, such as the volume of exports of each state, they will be left aside¹⁰.

According to AEMERJ (2009), the regional governments must transfer to the local ones 25% of their total revenue with ICMS, from which 75% is necessarily transferred according to the contribution of the municipality in its collection and the remaining share must respect their own laws. Neglecting this latter share, a mathematical expression to estimate more or less precisely the impact could be deduced.

However, due to the lack of data publicly available regarding the different quotas of both taxes in most municipalities, both terms of the expression above are going to be estimated according to the contribution the transfers made to the municipalities' GDP in 2006, which is the year where data regarding the ICMS quotas transferred to the municipalities were mostly available.

The data regarding the ISS collection for the year 2006 was not found for most municipalities; therefore, the ISS collected in 2006 was estimated based on the assumption that its rate of growth followed growth rates of the ICMS transfers between 2006 and 2007. Such an assumption is made upon the idea that the tax revenues are usually positively linked to the levels of economic activity in a region of analysis. It's noteworthy that this method didn't prevent the exclusion of a few municipalities from the sample because the lack of data related either to the ICMS or to the ISS¹¹.

Together, the ISS and ICMS represent on average 3.5% of the municipalities GDP in 2006. If it is assumed that all this revenue is spent in the municipality in the same year of analysis; and applying the multiplier calculated by equation number 1, this average would increase to 7%.

If it is further assumed that the impact of the transfers on the tax revenues followed the pattern of their impact on GDP; that is, if only around 10% of the tax revenues was explained by the welfare transfers, through increase in con-

10 For more information, see Fundo de Participação dos Municípios (FPM) and Imposto sobre Produtos Industrializados (IPI) at <http://www.aemerj.org.br>.

11 The excluded municipalities were Mâncio Lima (AC), Porto Acre (AC), Cacimbinhas (AL), Gavião (BA), Teofilândia (BA), Colares (PA), Cacimbas (PB), Cuité de Mamanguape (PB), Sobrado (PB) and Santa Maria (RN).

sumption, the contribution of this channel to the municipalities' GDP would be on average, then, around 0.7%.

With that, it may be assessed that the impact of the government welfare transfers in the economic activity of this sample of poor municipalities in Brazil was indeed very important, being responsible for around 8% of their GDP, on average, in the period of analysis.

■ 4.5 The formal enterprises and employment approach

In this section it will be analyzed if the increase in production to absorb the higher demand derived from the welfare transfers was reflected in the formal enterprises and employment of these municipalities. As it was described in the Methodology, the data analyzed in this section was extracted by the author from the micro data provided by the Labor Ministry in Brazil.

It should be noted that due to the general increase in the number of formal enterprises and employment during the period, the analysis will be mostly based on the comparison of the growth rates among the different sectors of the economy.

In the following tables are found the structures of the formal enterprises and employment in the municipalities studied in this thesis, as well as their evolution from 2003 to 2006, according to the classification of establishments into four sectors: a) manufacturing; b) trade; c) service; and d) agriculture¹².

According to previous studies (INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA, 2004; ROCHA; KHAN; LIMA, 2008, MATOS; OLIVEIRA, 2008), most expenditures of the poor families are based on alimentary goods and school items for the families' children and teenagers – especially for the beneficiaries of the Bolsa Familia programme. Therefore, if the welfare transfers have a significant impact on the economic activity of these municipalities, the economic sectors related to the trade and production of these goods are expected to show a higher growth of rate.

It should be noted that the public administration is responsible for the employment of a great contingent of citizens in these poor municipalities. Therefore, to better observe the response of the private sector to the increase in con-

12 The IBGE official classification of establishments and employment in five big sectors was utilized in this analysis. The sectors Manufacturing and Civil Construction were merged to facilitate the analysis. For more information, see Concla (2009).

sumption derived from the welfare transfers, the public administration¹³ was excluded from the data collected data exposed on the following tables.

Table 1

The structure of the formal employment per sector, without public administration* (%)

Sector	Municipalities**			Brazil		
	2003	2006	% change	2003	2006	% change
Manufacturing	17.7	21.3	20.3	30.4	31.0	2.0
Trade	30.1	35.0	16.3	22.4	22.8	1.8
Service	29.1	22.8	-21.7	40.2	39.6	-1.5
Agriculture	23.1	20.9	-9.5	6.9	6.7	-2.3

* Which correspond to the division 75 related to the CNAE95 classification.

** Weighted average.

Source: Author's elaboration based on Rais/MTE.

The employment at the Service sector grew at the lowest rate when compared to the other three sectors of the economy, as it may be observed on the previous table. In spite of that, in absolute numbers the rate of growth reached 68%. This high increase suggests that the multiplier effect derived from the transfers, together with the direct and indirect impacts derived from the consumption and investment made by the other agents in these economies spilled over to the Services sector as well.

The increase in investment in these municipalities can be clearly seen based on the information of both the previous and the next tables. If the increase in consumption were mainly concentrated in goods and services produced in other municipalities, the Manufacturing sector would probably not have increased at such a higher rate than the other sectors, both in terms of employment and the number of enterprises. The Agriculture Sector is clearly increasing relatively rapidly in the perspective of number of enterprises, although its importance decreases significantly in terms of employment – what may probably be explained by productivity gains easily attained in an economy where the subsistence and barter are in the transition to a trade economy, as it was discussed in the previous section.

13 Referred to the section L of the Isic Rev.3.1, which does not include public education. For more information, see <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17>.

Table 2

The structure of the formal enterprises per sector, without public administration* (%)

Sector	Municipalities**			Brazil		
	2003	2006	% change	2003	2006	% change
Manufacturing	7.9	8.4	6.3	12.2	12.3	0.4
Trade	48.2	45.9	-4.7	44.9	44.2	-1.6
Service	37.6	39.1	4.0	37.6	38.2	1.6
Agriculture	6.3	6.6	4.8	5.2	5.3	1.8

* Which correspond to the division 75 related to the CNAE95 classification.

** Weighted average.

Source: Author's elaboration based on Rais/MTE micro data.

Table 3

Distribution of formal employment and enterprises per micro sectors, without public administration*

Micro sector**	Enterprises			Employment		
	2003***	2006***	Change	2003***	2006***	Change
Retail trade, except of motor vehicles and motor- cycles; repair of personal and household goods	44.1	41.7	-5.3	22.1	26.1	18.1
Activities of membership organizations n.e.c.	24.3	25.7	5.8	5.9	6.4	8.5
Agriculture, hunting and related service activities	5.9	6.1	3.4	20.8	20.3	-2.4
Education	3.3	3.9	18.2	1.4	1.4	0.0
Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	2.7	2.9	7.4	4.2	6.6	57.1
Manufacture of food products and beverages	2.2	2.4	9.1	2.9	4.3	48.3
Hotels and restaurants	1.8	1.8	0.0	1.6	1.1	-31.3
Construction	1.7	1.7	0.0	4	6.6	65.0
Other business activities	1.6	1.6	0.0	2.3	0.6	-73.9
Wholesale trade and commission trade, except of motor vehicles and motorcycles	1.4	1.3	-7.1	3.3	1.6	-51.5

* Only the 10 most representative in relative number of enterprises.

** Division CNAE95 (CONCLA, 2009).

*** Weighted average.

Source: Author's elaboration based on micro data provided by Rais/MTE.

The arguments related to the increase in production in these municipalities are also corroborated by the comparison with the dynamics of employment and enterprises' structure in national scale, as pictured by the latter table: the goods and services production sectors (Agriculture, Manufacturing and Service Sectors) are increasing in a much higher rate, in relative terms, in the selected municipalities than in the country as a whole.

On the following table is found information related to the dynamics of the ten most representative micro sectors of these municipalities' economies.

Table 4

Distribution of Formal Employment and Enterprises per Micro Sectors, without Public Administration¹

Micro Sector ²	Enterprises			Employment		
	2003 ³	2006 ³	Change	2003 ³	2006 ³	Change
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	44,1	41,7	-5,3	22,1	26,1	18,1
Activities of membership organizations n.e.c.	24,3	25,7	5,8	5,9	6,4	8,5
Agriculture, hunting and related service activities	5,9	6,1	3,4	20,8	20,3	-2,4
Education	3,3	3,9	18,2	1,4	1,4	0,0
Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	2,7	2,9	7,4	4,2	6,6	57,1
Manufacture of food products and beverages	2,2	2,4	9,1	2,9	4,3	48,3
Hotels and restaurants	1,8	1,8	0,0	1,6	1,1	-31,3
Construction	1,7	1,7	0,0	4	6,6	65,0
Other business activities	1,6	1,6	0,0	2,3	0,6	-73,9
Wholesale trade and commission trade, except of motor vehicles and motorcycles	1,4	1,3	-7,1	3,3	1,6	-51,5

Notes: 1 – Only the 10 most representative in relative number of enterprises 2- Division CNAE95 3- Weighted average

Source: Author's elaboration based on micro data RAIS/MTE.

The Retail Trade micro sector, that represents on average more than 40% of the formal enterprises in these municipalities, are the type of establishments where the beneficiary families should spend part of their income. As it may be observed in the Table 4, its rate of growth is significantly smaller than most other micro sectors in terms of number of enterprises, but in terms of employment it is growing at a relative high rate. This fact suggests that it still absorbs a significant part of the money in circulation in these municipalities. Comparing the Table 4 with tables 2 and 3, it seems the relative loss in importance of the Trade sector described in the previous paragraphs are derived mainly by losses in the micro sector Wholesale Trade, corroborating the argument that production is increasing within these municipalities.

The micro sector Hotels and Restaurants, which in the context of these municipalities are not much represented by hotels but by restaurants and similar establishments is certainly not the kind of enterprise that the beneficiary families would spend much of their money – although it is directly connected with goods and services of primary necessity. If on the one hand this micro sector maintains its relative importance in terms of number of establishments, their decrease in importance related to the absorption of the labor force suggests again that the welfare transfers cause a significant impact in these municipalities' economies in terms of variety of job posts to the economic active population.

The higher rate of growth of the micro sector related to motor vehicles, motorcycles and automotive fuel, in both perspectives, may be a counterargument to the discussion in last paragraph. But its performance may have also been spurred by the gradual integration of these municipalities to the regional and national economies that may be taking place.

The Construction micro sector will be left aside from the analysis because it is very often financed by the government and, therefore, it would be hard to distinguish private from public consumption.

The Activities of Membership Organizations is mainly compounded by non-governmental organizations, but it also included political and religious activities. While the first two former have little to add in the analysis of this thesis, the latter may be an activity that absorbs a significant part of people's income, perhaps even from the poorer off in society, once the Brazilian society is very religious. But due to the lack of studies relating the amount of money spent in these activities per different groups of income in Brazil, this micro sector will also be left aside for future studies.

5 CONCLUSIONS

In this article, in order to evaluate whether there is an impact from the welfare transfers in the economic activity of poor municipalities in Brazil, it was made use of a literature review and an empirical study.

Both short and long-term impacts were analyzed in the literature review. In the former, it was stressed that the transfers do not create disincentive to work among the beneficiary families of the programmes, which is usually the main concern among politicians and academics when deciding about income redistribution in a community. The reason suggested is that the low value of the benefits is unable to create disincentive to work within the economically active population in the country.

A great increase in consumption in the poorer regions of Brazil is another short term impact pointed out in the literature. In spite of that, the literature asserted that production within these regions was not much impacted. It was also affirmed that the investment made as a result of these transfers were concentrated in the Retail Trade Sector, which employs mainly informal workers and, as a consequence, formal employment had not been increased. These results, however, are in conflict with the findings in this study. In the empirical analysis it is clear that investment, employment and production were spurred by the welfare transfers.

Therefore it is possible to add a reason not explored by the literature behind the findings of no disincentive to work, which is the creation of employment opportunities resulted in the medium and long term by these investments and production increases indirectly fostered by the transfers.

Also regarding the long-term impact, it was discussed the improvement of institutions, especially by decreasing the motives for social unrest and by enhancing the poor population perspectives for a better life – not only due to the increase in employment opportunities by itself, but also by increasing the foresight capability of the poor people, further reinforced by their health and educational improvements.

It's noteworthy that these improvements may also be added to explain the no disincentive to work previously mentioned: under better socioeconomic conditions, resulted directly and indirectly by the welfare transfers, it is very likely that many people who were previously precariously or unproductively working, as well as people working in all kinds of illegal activities, return to the labor market.

Such better economic conditions spurred by the welfare transfers were assessed via two approaches in the empirical analysis: the GDP approach, in which the consumption, investment and government expenditures channels were investigated and calculations were made, pointing out that the transfers have an impact on the economy of around 8% of their GDP; as well as by an analyzes on the dynamics of the formal employment and enterprises, which showed that enterprises that provide most goods consumed by the poor were increasing more rapidly than the average, both within the municipalities and in comparison with the dynamics in national scale.

Therefore, it can be asserted with confidence that there is a positive impact from the welfare transfers in the economic activity of poor regions in Brazil.

References

- AEMERJ. Transferências constitucionais – ICMS: Imposto sobre Circulação de Mercadorias e sobre Prestações de Serviços. Disponível em: <http://www.aemerj.org.br/aemerj/constitucional/areas_tecnicas.asp?iIdAssuntoSite=5833>. Acesso em: 15 maio 2009.
- CHIARA, M. Mercado nordestino cresce 19% e acirra disputas de supermercados. *O Estado de S. Paulo*, São Paulo, 23 abr. 2009. Disponível em: <http://www.estadao.com.br/estadaodehoje/20090423/not_imp358982,0.php>. Acesso em: 29 abr. 2009.
- COGAN, J. F. et al. New Keynesian versus old Keynesian government spending multipliers. *European Central Bank*, Sept. 2009. (Working Paper 1090). Disponível em: <<http://www.ecb.int/pub/pdf/scpwps/ecbwp1090.pdf>>. Acesso em: 25 Maio 2009.
- COMISSÃO NACIONAL DE CLASSIFICAÇÃO (Concla). Classificações estatísticas e a comissão nacional de classificação. IBGE (on-line). Disponível em: <<http://www.ibge.gov.br/concla/default.php>>. Acesso em: 25 maio 2009.
- COMMISSION ON GROWTH AND DEVELOPMENT. The Growth Report: strategies for sustained growth and inclusive development. 2008. Disponível em: <http://www.growthcommission.org/index.php?option=com_content&task=view&id=96&Itemid=169>. Acesso em: 30 jun. 2009.
- CYSNE, R. P. Sobre queda de juros e aumento de investimentos. *Valor Econômico*, São Paulo, 24 nov. 2006. Disponível em: <http://www.fgv.br/professor/rubens/HOMEPAGE/ARTIGOS_E_REPORTAGENS_DE_POL_ECON/Artigos_Publicados/2006/Sobre_Queda_de_Juros_e_Aumento_de_Investimentos_original.pdf>. Acesso em: 29 abr. 2009.
- FBES. Bolsa Família e a geração de trabalho no Nordeste. 19 set. 2006. Disponível em: <http://www.fbes.org.br/index2.php?option=com_content&do_pdf=1&id=1269>. Acesso em: 30 jun. 2009.
- FILIPPINI, I. *Renda mínima: discussão, evolução das idéias e extensão para o caso brasileiro*. 2005. Monografia (Graduação)–Universidade Presbiteriano Mackenzie, São Paulo, 2005.

FILIPPINI, I.; OLIVEIRA, M. P. A dinâmica do mercado de trabalho de Osasco. In: GUERRA, A.; CAZZUNI, D.; COELHO, R. (Ed.). *Atlas da exclusão social de Osasco: alternativas de desenvolvimento, trabalho e inclusão*. Osasco: SDTI/PMO, 2007.

GLEWWE, P.; KASSOUF, A. L. *O impacto do Programa Bolsa Família no total de matrículas do ensino fundamental, taxas de abono e aprovação*. Centro de Estudos Avançados em Economia Aplicada, 2008. Disponível em: <http://www.cepea.esalq.usp.br/pdf/Cepea_ImpactoBolsaFamilia_Premio.pdf>. Acesso em: 22 abr. 2009.

HARTWIG, J. Three views of the multiplier. In: GNOS, C.; ROCHON, L. (Ed.). *The Keynesian multiplier*. New York: Routledge, 2008.

HOLANDA, S. B. de. *Raízes do Brasil*. São Paulo: José Olympio, 1936.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. *Pesquisa de Orçamentos Familiares – POF*. Em 30 anos, importantes mudanças nos hábitos de consumo dos brasileiros. 19 maio 2004. Disponível em: <http://www.ibge.gov.br/home/presidencia/noticias/noticia_impresao.php?id_noticia=171>. Acesso em: 20 maio 2009.

_____. *Região de influência das cidades*. Rio de Janeiro: IBGE, 2008.

_____. *Banco de dados*. Disponível em: <<http://www.ibge.gov.br/>>. Acesso em: 29 jun. 2009.

INSTITUTO DE PESQUISA ECONÔMICA APLICADA (IPEA). Banco de dados. Disponível em: <<http://www.ipeadata.gov.br/>>. Acesso em: 22 abr. 2009.

JEVONS, W. S. *The theory of political economy*. London: Pelican Books, 1970.

KEYNES, J. M. *The general theory of employment, interest and money*. London: Macmillan, 1960.

MARQUES, R. M. A importância do Bolsa Família nos municípios brasileiros. *Caderno de Estudos – Desenvolvimento Social em Debate*, Brasília, v. 1, p. 7-40, 2005.

MARTINS, J. S. A mutilação do Estado brasileiro. *O Estado de S. Paulo*, São Paulo, 7 mar. 2009. Disponível em: <http://www.estadao.com.br/suplementos/not_sup335246,0.htm>. Acesso em: 26 jun. 2009.

MATOS, P. C.; OLIVEIRA, G. G. *A ação do Programa Bolsa Família em comunidades rurais: o caso do Timbó, Bahia*. Biblioteca Virtual do Bolsa Família – Centro Internacional de Pobreza, 2008. Disponível em: <<http://www.ipc-undp.org/publications/mds/38P.pdf>>. Acesso em: 30 jun. 2009.

MEDEIROS, M. *Os ricos e a formulação de políticas de combate à desigualdade e à pobreza no Brasil*. Cypedia – Biblioteca Digital Aberta, 2007. Disponível em: <<http://www.cipedya.com/web/filedetails.aspx?idfile=101232>>. Acesso em: 25 jun. 2009.

MEDEIROS, M.; BRITTO, T.; SOARES, F. V. *Targeted cash transfer programmes in Brazil: BPC and the Bolsa Família*. International Poverty Center Working Paper 46, 2008. Disponível em: <<http://www.ipc-undp.org/pub/IPCWorkingPaper46.pdf>>. Acesso em: 30 jun. 2009.

MONASTERIO, L. M. *Guia para Veblen: um estudo acerca da economia evolucionária*. Pelotas: Edufpel, 1998.

NUOMURA, E. Obesidade infantil avança e atinge crianças do Bolsa-Família. *O Estado de S. Paulo*, São Paulo, 7 mar. 2009. Disponível em: <<http://www.estadao.com.br/noticias/vidae,obesidade-infantil-avanca-e-atinge-criancas-do-bolsa-familia,335131,0.htm>>. Acesso em: 29 abr. 2009.

OGIER, T. *Nordeste promete lucros para multinacional suíça*. Swissinfo.ch., 12 Feb. 2007. Disponível em: <http://www.swissinfo.ch/por/capa/Nordeste_promete_lucros_para_multinacional_suica.html?siteSect=105&sid=7519699&cKey=1171279402000&ty=st>. Acesso em: 11 maio 2009.

PIRES, D. C. A.; LONGO, L. A. F. B. *A implantação do Bolsa Família e sua relação com a pobreza nas regiões brasileiras no período de 2004 e 2006*. ABEP, 2008. Disponível em: <http://www.abep.nepo.unicamp.br/encontro2008/docsPDF/ABEP2008_1145.pdf>. Acesso em: 23 maio 2009.

POCHMANN, M. et. al. (Ed.). *Atlas da exclusão social*. São Paulo: Cortez, 2005. v. 5.

PORTAL TRIBUTÁRIO. *ICMS – Imposto sobre Circulação de Mercadorias e sobre Prestações de Serviços*. Disponível em: <<http://www.portaltributario.com.br/tributos/icms.html>>. Acesso em: 8 jun. 2009.

RAWLINGS, L. B.; RUBIO, G. M. *Evaluating the Impact of Conditional Cash Transfer Programs: Lessons from Latin America*. World Bank Policy Research Working Paper 3119. 2003. Disponível em: <http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/09/30/000094946_0309160409264/Rendered/PDF/multi0page.pdf>. Acesso em: 9 jun. 2009.

ROCHA, L. A.; KHAN, A. S.; LIMA, P. V. P. S. *Impacto do Programa Bolsa Família sobre o bem-estar das famílias beneficiadas no Estado do Ceará*. Economia do Ceará em Debate, 2008. Disponível em: <http://www2.ipece.ce.gov.br/encontro/artigos_2008/19.pdf>. Acesso em: 23 abr. 2009.

RODRIK, D. Goodbye Washington Consensus, Hello Washington Confusion? A review of the World Bank's Economic Growth in the 1990s: learning from a decade of reform. *Journal of Economic Literature*, v. 44, p. 973-987, Dec. 2006.

UNITED NATIONS INVESTING IN DEVELOPMENT..., 2005. Disponível em: <http://www.unmillenniumproject.org/reports/index_overview.htm>. Acesso em: 25 abr. 2009.

VALE, T. M. C. *A participação dos Programas Bolsa Família, PETI e BCP na redução da pobreza dos municípios do Rio Grande do Norte (2000-2007)*. Biblioteca Virtual do Bolsa Família, 2008. Disponível em: <<http://www.ipc-undp.org/publications/mds/23M.pdf>>. Acesso em: 30 jun. 2009.

WASELFISZ, J. J. *Mapa da violência nos municípios brasileiros*. 2008. Disponível em: <<http://pdba.georgetown.edu/Security/citizenssecurity/brazil/documents/mapaviolencia.pdf>>. Acesso em: 30 jun. 2009.

ZANDI, M. M. *Assessing the macroeconomic impact of fiscal stimulus 2008*. Moody's Economy.com, 2008. Disponível: <<http://www.freelunch.com/mark-zandi/documents/assising-the-impact-of-the-fiscal-stimulus.pdf>>. Acesso em: 22 maio 2009.