



European
University
Institute

DEPARTMENT OF POLITICAL AND SOCIAL SCIENCES

EUI Working Papers

SPS 2009/02

DEPARTMENT OF POLITICAL AND SOCIAL SCIENCES

FEDERALISM AND PLACE-EQUALITY POLICIES:
A CASE STUDY OF POLICY DESIGN AND OUTPUTS

Marta Arretche

EUROPEAN UNIVERSITY INSTITUTE, FLORENCE
DEPARTMENT OF POLITICAL AND SOCIAL SCIENCES

*Federalism and Place-Equality Policies:
A Case Study of Policy Design and Outputs*

MARTA ARRETCHE

This text may be downloaded for personal research purposes only. Any additional reproduction for other purposes, whether in hard copy or electronically, requires the consent of the author(s), editor(s). If cited or quoted, reference should be made to the full name of the author(s), editor(s), the title, the working paper or other series, the year, and the publisher.

The author(s)/editor(s) should inform the Political and Social Sciences Department of the EUI if the paper is to be published elsewhere, and should also assume responsibility for any consequent obligation(s).

ISSN 1725-6755

© 2009 Marta Arretche

Printed in Italy
European University Institute
Badia Fiesolana
I – 50014 San Domenico di Fiesole (FI)
Italy
www.eui.eu
cadmus.eui.eu

Abstract

This paper aims at exploring the relationship between federalism and place-equality policies. It examines the origins, rules, and outcomes of national policies toward place equality in federal polities by means of a case study on Brazil.

An extensive data set of all local government revenues and expenditures between 1996 and 2006 is examined, spanning two local government terms (1997-2000 and 2001-04), as well as the most recent period (2005-2006).

The paper argues that mistrust in local elites' commitment to citizen rights can play as important a role as weak territorial identities on state-building paths that empower the federal level to regulate state-level and local government policies. It provides evidence that federal states which entitle the centre to regulate lower-level government's policies create mechanisms that push toward place-equality. Yet the ability of lower-level governments to disagree provides a countervailing force toward policy divergence. As a result, federal states that combine central-level regulation and local-level autonomy tend to produce a sort of "bounded place-inequality". This outcome is explained by two apparently contradictory tendencies, namely, the regulation and redistribution role performed by the central government pushes toward uniformity, while local government autonomy pushes toward policy divergence. This interaction implies that place-inequality tends to vary, but within certain intervals.

Keywords

federalism, place-equality, redistribution, federal regulation, public policy

Federalism and Place-equality policies: a case study of policy design and outputs¹

Marta Arretche²

This paper aims at exploring the relationship between federalism and place-equality policies³. Place-inequality, defined as socioeconomic inequality among subunits within a nation-state, may (or may not) translate into unequal access to collective goods, since it critically depends on whether and how the spatial distribution of public services reinforces or reduces a given spatial distribution of wealth. Social services delivery and urban infrastructure policies may either reproduce spatial inequality, by providing less and worse services to poorer jurisdictions, or diminish it by de-linking public policy service provision from residents' income or from a jurisdiction's tax base. Therefore, place-inequality policies can be as critical a component of citizens' well-being as policies aimed at reducing income-inequality.

Although research on welfare regimes has largely been focused on the relationship between institutions, policies and inequality-reduction among *individuals*, policies toward reducing inequality among *jurisdictions* have quite recently become the subject of systematic cross-country comparison (Banting and Corbett, 2002; Obinger et alii, 2005; Greer, 2006). Indeed, important theoretical contributions have emerged from comparative research on the inputs to territorial politics, particularly the role of public attitudes (Jeffery, 2006; Banting, 2006), electoral rules (Garman et alii, 2001), and party politics (Colomer, 1998; Jeffery, 2008). This paper, however, explores a different dimension of social justice: the outputs of territorial policies, and in particular, how place-equality policies affect the inequality of citizen's access to public services.

The main theoretical arguments regarding the relationship between federalism and place-equality parallel the propositions of the *welfare regimes* literature, which argues, briefly, that comprehensive policies addressed at reducing income-inequality critically depend on how institutions concentrate political authority (Immergut, 1992; Pierson, 1995; Weaver and Rockman, 1993). In fact, historical institutionalism and the public choice literature sharply diverge in their normative perspectives on the desirability of national policies toward place-equality. Nevertheless, the proposition that there is a trade-off between place-equality and the centralization of policy-decision making is compatible with both theoretical

1. The research on which this paper was based is part of a comparative project called III International Metropolitan Observatory. Preliminary versions were presented at the Conference "Metropolitan Governance and Social Inequality in a Global Perspective", held on January 2009, in Los Angeles, as part of the III IMO Project, and at the Workshop "Federalism, Devolution and Territorial Justice", held at the European University Institute, in Fiesole, on April 2009. I would like to thank Daniel Vazquez and Edgard Fusaro for their indispensable collaboration to the elaboration and treatment of statistical data. I would also like to thank Jefferey Sellers, Daniel Kubler, Matthew Taylor, Charles Jeffery, Carmen Navarro, Michael Keating, and Alex Wilson for their valuable comments. The research on which this paper was based is supported by FAPESP.

2. Associate Professor of the Department of Political Science, University of São Paulo, and research director of the Center for Metropolitan Studies (www.centrodametropole.org.br). Visiting fellow at the Department of Political and Social Sciences, European University Institute, from Sep-2008 to June-2009.

E-mail: arretche@usp.br.

3. Place-equality policies are defined as those designed to 'equalise' differences among jurisdictions within a nation-state.

approaches. This paper provides empirical support for this theoretical assumption, but also goes further and explores the “black box” of national policies toward place-equality, particularly their sources, rules and outcomes.

Addressing this question requires that we depart from the conventional analytical strategy adopted by the welfare state literature, which quite often takes the national level as the appropriate unit of analysis. Indeed, income policies have quite often remained a central government responsibility (Banting, 2006), which might justify this methodological choice. However, decentralization reforms have primarily addressed public services. As a result, nowadays, public service delivery critically depends, among other factors, on decisions made by lower-level governments, which happen to have discretion in policy implementation. Hence, the appropriate unit of analysis for exploring this research problem seems to be the level of government in charge of policy-making.

Still, the decentralization of policy-making is compatible with the centralization of decision-making (Sellers and Lidstrom, 2007; Obinger et alii, 2005), since decentralization reforms have been combined with different vertical decision-making arrangements. Thus, a conceptual distinction between policy decision-making authority and policy-making competences (Rodden, 2004; Sellers and Lidström, 2007; Stegarescu, 2005) is necessary to capture the mechanisms and incentives that explain lower-level governments’ decisions regarding the amount and quality of public services they provide. Indeed, local/regional/meso-level governance is deeply affected by systems of central-local relations (Sellers and Lidström, 2007; Razin, 2007), and lower-level governments’ policy priorities can be highly influenced by upper-level arrangements.

A case study of Brazil promises to contribute greatly to this research agenda. Besides being a federal system, with high place-inequality, Brazil has a number of political institutions that the literature suggests create incentives for centrifugal tendencies in both policy decision-making and policy-implementation: presidentialism, an open list proportional representation system to elect members of the lower house of Congress, and a highly fragmented party system. Moreover, both state and local governments are in charge of collecting and spending a high proportion of the national budget. Additionally, local governments are the main providers of social services. Primary education, primary health care, enrollment of welfare recipients, housing, urban infrastructure, garbage collection, and public transportation are all implemented at the level of local governments. As a result, most scholars argue that Brazil is among the most decentralized federations in the world (Shah, 2006; Desposato and Scheiner, 2008).

However, this interpretation does not take into account both the regulatory and place-redistribution roles of the federal government in Brazil. The conceptual distinction between the assignment of policy responsibilities and decision-making autonomy leads me to a different conclusion than most scholars. Although local governments have an important role in the delivery of strategic public policies, their decisions on tax-collection and expenditure-allocation are under federal government supervision. Unlike most federations, Brazilian municipal governments are regulated mainly by the central government, which means they are not creatures of the states, as in Canada, India, the United States and Switzerland, for example.

Regulation by the federal government, though, is policy-specific. From the early 1990s to 2006, it was used to strictly regulate local governments’ expenditures on

redistributive⁴ policies – namely, health and education – whereas local governments were much less regulated regarding whether and how to implement their own infrastructure policies (Peterson, 1995), in areas such as housing, urban infrastructure, and public transportation. Therefore, Brazil is a particularly appropriate case to examine the relationship between place-equality policy rules and their outcomes. On the one hand, by assuming municipalities are unequal and measuring place-inequality before and after the “treatment” provided by national policies toward equality, it is possible to identify the inequality-reducing effects of policies and connect them to policy rules, and in doing so, to identify the outcomes of the redistributive role performed by the federal government. On the other hand, by assuming municipalities are equal as units of policy delivery, the fact that each one⁵ is submitted to different “treatments”, namely centrally regulated and non-regulated policies, it is possible to explore the effects of the regulatory role performed by the federal government on the internal affairs of local governments.

In sum, this paper uses the Brazilian case to examine the regulatory and redistributive impact of national policies toward place equality in federal polities. Interactions between central and local governments are examined to analyse their effects on revenue and spending inequality among Brazilian municipalities⁶. An extensive data set of all local government revenues and expenditures between 1996 and 2006 is examined, spanning two local government terms (1997-2000 and 2001-04), as well as the most recent period (2005-2006).

The paper argues that, from the perspective of the origins of centralizing decision-making authority, mistrust in local elites’ commitment to citizen rights can play as important a role as weak territorial identities on state-building paths that empower the federal level to regulate state-level and local government policies. Secondly, the paper disentangles different dimensions of policies and institutions in order to understand the mechanisms that explain both place-inequality reduction and policy diversity. Hence, it provides evidence to argue that federal states which entitle the centre to regulate lower-level government’s policies create mechanisms that push toward place-equality. Yet the ability of lower-level governments to disagree provides a countervailing force toward policy divergence. As a result, federal states that combine central-level regulation and local-level autonomy tend to produce a sort of “bounded place-inequality”. This outcome is explained by two apparently contradictory tendencies, namely, the regulation and redistribution role performed by the central government pushes toward uniformity, while local government autonomy pushes toward policy divergence. This interaction implies that place-inequality tends to vary, but within certain intervals.

4. The distinction between redistributive and developmental policies has been introduced by Peterson (1995), in order to distinguish policies addressed to poor people from policies oriented to attract firms and wealthier residents.

5. All Brazilian municipalities enjoy the same legal status as well as each one has its own elected legislature and executive branches, whose elections happen on the same day and under nationwide electoral rules. The mayor and municipal council members are selected directly by voters for a four-year term, being the number of councillors defined by the municipality’s population, according to a nation-wide formula established by a federal law.

6. Expenditures are assumed to be a reliable *proxy* of service provision. In fact, Esping-Andersen (1985) has convincingly challenged this assumption arguing that similar spending levels may provide for sharply different policy patterns given variations in entitlement rules. As we shall see, though, the entitlement rules of the policies analyzed in this paper do not vary throughout the country, given the nature of central-local relations in Brazil. Entitlement to education and health policies implemented by local governments, for example, is free and universal all over the country. Thus, although it is still a proxy, variation in the amount of expenditures can be taken as a reliable measurement of policy priorities.

The paper is organised into four sections, in addition to this introduction and the conclusion. The first section presents existing theories regarding the relationship between federalism and place-inequality. The second explores the origins of centralized policy decision-making, by presenting critical dimensions of the Brazilian state-building process. The third section maps current spatial inequalities in Brazil and demonstrates that the poor -- and thus, the demand for public services -- are concentrated in metropolitan areas. The fourth section describes national policies toward place-equality, both on the revenue and expenditure side, and examines its inequality-reduction effects, taking into account policy-specific variations.

1. Expectations of existing theories

According to mainstream theories, three distinct outcomes can be expected from federal polities regarding place-inequality. One theory argues that federalism means inequality. Given that “(...) *uniformity is antithetical to federalism. (...), there is no escape from a compelling truth: federalism and equality of result cannot coexist*” (Wildavsky, 1984: 57-68).

This outcome would be driven by a single mechanism: federal institutions guarantee the possibility for subunits to disagree. Therefore, the possibility of disagreement encourages policy diversity. Since jurisdictions can disagree with one another or with the central government, the inevitable outcome is inequality of the policies implemented by different jurisdictions.

A second school, the public choice literature, has developed an ideal-type of federation, based on Tiebout's (1956) proposition, according to which efficient and accountable local governments compete for a mobile citizenry. Based on the Tiebout model, Weingast (1995) and Buchanan (1995) have proposed an ideal model of the *national* state, one in which (1) policy decision-making authority should be highly decentralized and (2) the redistributive role of the central government should be strongly limited. According to them, it is not realistic to expect central governments to efficiently perform redistributive tasks. Distributive policies do not achieve place-inequality reduction, because they inevitably tend to end up as pork, which will be addressed to the clientelistic interests of powerful regionally-based coalitions.

The theoretical propositions of this school allow us to expect two possible outcomes from federal polities. The first is the probable outcome in the presence of national distributive policies. In such contexts, transfers will be addressed to those districts which elect powerful regional politicians. These are not necessarily the neediest districts, and as a result, so-called redistributive policies will not achieve place inequality-reduction. A second possibility relates to polities where there is competition among jurisdictions for mobile citizens and firms. This context will lead to a “race to the bottom” in redistributive policies, because local government's dominant strategy will be to get rid of the poor in order to attract firms and wealthy tax payers (Peterson, 1995). Thus, in neither case will federalism lead to place-equality policies. Therefore, according to this theoretical reasoning, we should not expect either to find place-equality outcomes in the presence of distributive policies or to find place-equality policies in federations whose institutions decentralize decision-making authority.

Finally, a third theory argues that place-equality is not antithetical to federalism, which means that federalism can produce place-equality. However, it requires centralization of policy decision-making. “*Substantial redistribution can be effectively achieved only at the national level*” (Obinger, Leibfried, and Castles, 2005: p. 352), and so it is “*the specificity of*

the central framework and the strength of the interregional redistribution [that] set the structural underpinnings of the balance between social citizenship and regional diversity” (Banting and Corbett, 2002: p. 22).

As a result, where policies are framed by the central government and where there is a national system of inter-regional transfers, we can expect to find equality of outcomes among jurisdictions. However, this commitment is only possible for federations with weak territorial cleavages, that is, those whose citizens share a common identity of membership in a national community. So, according to this theory, the regulatory and redistributive role performed by the centre is the necessary mechanism through which place-equality can be achieved.

However, achieving this goal has a price. This tends to be a zero-sum game; that is, if the centre wins decision-making authority, and so is entitled to regulate lower-level government policies, local governments lose this authority and their decision-making authority will be limited.

Note that the expectations of these two last theories are compatible, given that they are based on the shared theoretical assumption that there is a trade-off between redistribution – and so, place-inequality reduction – and the centralization of authority.

2. Sources of centralization: state-building and normative beliefs

In some federations, the process of state-building went along with a commitment to uniform nationwide policy rules. Like Germany (Manow, 2005) and Austria (Obinger, 2005), the Brazilian federation has significantly concentrated decision-making authority as well as spending and regulatory powers at the central level. Indeed, dominant normative values tend to rank commitment to uniform nationwide policy rules higher than constituent unit’s claims for autonomy. Throughout the 20th century, authoritarian regimes (1930-45 and 1964-82) went so far as to suppress the political autonomy of subnational governments for long periods. These initiatives were justified on the grounds that local politics was mainly the domain of corruption and clientelism⁷. Thus, far from Buchanan’s view of federalism, the notion that federal intervention in local politics could be an efficient way to free citizens from short-minded and exploitative local elites is deeply rooted in the country’s history; indeed, it has been supported even by progressive reformers (Almeida, 2005).

Uniform nationwide rules do not mean necessarily equal outcomes, though. Different factors have accounted for spatial and social inequality in Brazil. First of all, economic growth has historically been concentrated in some southern and southeast areas. As the spatial concentration of economic growth implies great variation in the tax base of subnational governments, taxing capacities vary enormously throughout the country. Although acknowledgement of this fact has long justified the centralization of revenue-collection at the

7. Authors known as “the 20’s authoritarians”, influenced among others by Benedetto Croce, provided for normative justification to the authoritarian regime installed in 1930 on the grounds that states’ political autonomy was mainly an instrument through which short-minded regional oligarchies manipulated and exploited illiterate voters and hindered the initiatives of a modernizing, urban-based central government (Mota, 1982). Combating corruption and clientelism at the state and local-levels was also presented as a moral justification to the suppression of states’ political autonomy by the authoritarian military regime installed in 1964 (Carvalho, 2001). Finally, federal legislation regulating subnational government finances adopted from the mid-990s on was justified on the grounds that such matters were so important that their decision-making process should not be put into the hands of local politicians (Arretche, 2007).

federal level, shared-revenue policies guaranteed only limited compensation for inequality in subnational governments' self-generated revenues.

Moreover, since their very inception in the early 30s, nation-wide social policies were clearly inspired by the normative goals of the "conservative" model of welfare state (Esping-Andersen, 1990), meaning that they aimed primarily at status preservation. Citizen social rights have been stratified according to citizens' position in the formal labour market, and entitlements have been allocated according to workers' contributions and earnings. In a context of high unemployment and income inequality, these entitlement rules have reinforced exclusion and segregation, rather than reducing social inequality.

The Brazilian developmental state gave high priority to economic development. The role of the federal government in planning and funding economic activities has contributed to the centralization of political authority. High rates of economic growth, though, went along with highly uneven spatial distribution of wealth, as well as informality in the job market. This developmental state had provided its own unique answer to social problems, substituting social rights for democratic and civil rights, and using social rights to divide citizens along corporatist lines. Finally, the developmental state's centralization of revenue collection enabled it to devote significant resources to compensation between places, as a way of addressing spatial inequalities. As a result, central oversight of subnational government finance and policies has been deeply rooted in the process of state-building in Brazil (Arretche, 2005).

Current policies toward place equality are the result of a combination of this centralizing historical background with social and fiscal reforms approved under democratic rule after 1988. The Bismarckian traits of social policies have been significantly changed toward *decommodification* principles⁸: health care and education services became universal and free, and a means-tested pension has been guaranteed to poor citizens on a non-contributory basis. By the same token, as we shall see, federal regulation and supervision of subnational government affairs expanded considerably, binding subnational governments to prioritize health and education spending along with fiscal discipline (Arretche, 2007). In other words, embedded strategies of central government coordination have again been employed to compensate for spatial and social inequality.

Therefore, alongside a shared belief in membership in a national community, mistrust in the capability of local elites to implement citizens' rights can be a powerful force toward the centralization of policy decision-making. Under these circumstances, even progressive elites favoring decentralized policies tend to prefer that the central government regulate how policies are implemented, in order to tie the hands of (allegedly conservative and clientelistic) governors and mayors⁹.

3. Mapping current spatial inequalities

Three distinct dimensions of spatial inequality are visible in Brazil. The first regards metropolitan areas vis-à-vis non-metropolitan ones. In 2000, 82% of the country's population

8. The concept of *decommodification* refers to the degree to which individuals, or families, can uphold a socially acceptable standard of living independently of market participation. (See Esping-Anderson 1990).

9. Ziblat (2006) argues that Italian and German divergent paths under a concomitant process of state-building and unification are largely explained by different central elites' perception on the respective regional government capacities to perform governing roles.

lived on 1.12% of its territory (Ojima, 2007: 283), mainly in metropolitan areas, which concentrate nearly all of the economic activity and the populations of their respective states. Further, urban sprawl accompanied socioeconomic inequality, with wealthy gated communities, poor bedroom cities, and downgraded downtown areas all common traits of the Brazil urban landscape. Within metropolitan areas, the central-city¹⁰ concentrates economic activities while core¹¹ and large cities¹² surrounding it shelter larger concentrations of poor people. Thus, great disparities both between and within urban cities are superposed on the traditional spatial division between poor rural and affluent urban areas. Finally, high levels of income inequality are displayed within all metropolitan areas, although their values are higher in central cities.

Graph 1 displays information on the concentration of poor populations, according to two distinct categories of cities within metro regions: the central city and the large outlying metropolitan areas around them. It reveals a similar pattern shared by nearly all metropolitan areas. Within metropolitan regions – MRs –, ¹³, central cities concentrate economic activity and population while cities around them shelter larger concentrations of the poor. Neighbouring metropolitan areas display higher rates of poverty concentration¹⁴ than those of the central city. In general, in the North and Northeast MRs (those on the right side of the graph), large urban concentrations contain well above 50% of their population below the poverty line. More economically developed regions (on the left side of the graph) present lower levels of poverty concentration. In any case, larger concentrations of the poor are found in those outlying areas that neighbour the central one.

However, the interpretation of this pattern of spatial inequality should take scale into consideration. Low relative values in big cities nonetheless represent a large number of people. Despite their lower percentage values, central cities still shelter large absolute volumes of needy people. Thirteen per cent of the people living in a city with 6 million inhabitants, like Rio de Janeiro, is a considerable number of people demanding social services.

Finally, income inequality is also a central issue *within* municipalities. Graph 2 presents Gini coefficients according to categories of cities within metropolitan areas. It reveals that highly privileged and highly disadvantaged communities are not separated by municipal boundaries, as it is in contexts which do not constrain residential fragmentation and

10. Central city is defined as the city which shelters official MRs. With few exceptions, it is the largest city in population. This definition follows IMO's (International Metropolitan Observatory) research protocol.

Brazilian metropolitan areas are composed of numerous municipalities surrounding one central metropolitan municipality. For example, the country's largest MR, São Paulo, is in fact made up of 39 municipalities, being Sao Paulo city the central one. So, the city's population is around 11 million, but once all of the contiguous outlying metropolitan municipalities are included, the São Paulo metropolitan area swells to nearly 18 million population.

11. Core cities are defined as towns with a population of half or more of the largest city's population. This definition follows IMO's (International Metropolitan Observatory) research protocol.

12. Large urban concentrations are defined as towns with a population above 100,000. This definition follows IMO's (International Metropolitan Observatory) research protocol.

13. There are 29 Brazilian official metropolitan regions, created by state-level laws. Their boundaries, though, does not always coincide with the metropolitan phenomena. Available data though allow us to work with official metropolitan regions - MRs.

14. Poor people concentration is defined as the share of the total population whose family incomes are below the poverty line. In Brazil, this line is defined by the national minimum wage, which was around US\$200 a month in 2006.

sorting.¹⁵ Instead, in Brazil, the rich and the poor are separated by spatial segregation within municipalities, with the lowest municipal Gini coefficients of around 0.5. Income inequality, though, is systematically higher in central cities than in neighbouring cities pertaining to metropolitan regions. The Gini coefficient for income in MR central cities varies from 0.510 to 0.677, whereas in core and large cities, it is a little bit lower, varying from 0.470 to 0.642.

In sum, Brazil presents clear patterns of socioeconomic place-inequality. Metropolitan areas concentrate wealth, since they are poles of economic development. Within them, central cities shelter a large amount of poor people along with high levels of income inequality, whereas neighbouring municipalities around them shelter larger portions of the poor. In any case, income inequality also divides citizens within municipalities. Thus, concentration of wealth goes along with spatial inequality, both between and within metropolitan areas. All shelter large amounts of poor people and display high income inequality.

4. National policies towards place-equality

Brazil is usually described as a highly decentralised federation (Shah, 2006). Among other evidence, this interpretation is based on the fact that local governments were declared autonomous federal units by the 1988 Federal Constitution. In addition, this interpretation rests on a widespread measurement of decentralisation employed in the comparative analysis of public finances, namely, the share of subnational government expenditures or revenues. Finally, the decentralisation process — begun in the 1980s —, which has assigned a number of policy responsibilities to local governments, provides support for this viewpoint.

Nevertheless, the conceptual distinction between assignment of policy responsibilities and actual decision-making authority (Rodden, 2004; Sellers and Lidström, 2007; Stegarescu, 2005) permits us a more nuanced interpretation of central-local relations in Brazil. The tax-generating and expenditure decisions of subnational governments — both states and municipalities — are limited by national laws. Moreover, both expenditures and service provision are largely affected by federal government oversight. As a result, although they are entitled to implement taxation and service delivery policies, local-level affairs are highly affected by the redistributive and regulatory role performed by the federal government. Therefore, understanding citizens' access to social services requires taking national policies into account.

4.1. National Policies toward Revenue Inequality Reduction

Homogeneous nationwide rules define the way subnational units exert their powers of taxation in the Brazilian tax system. Local governments are not allowed to introduce any tax their citizens would accept paying. Far from a Tieboutian world, Brazilian municipalities are authorised to tax only urban real estate, service provision, and property transfers. Although this might seem a broad potential tax base, their powers are limited to the authority to define

15. Unlike most federations that established that municipalities are state-level creatures, the process of creating a municipality is also regulated by national norms such as publishing municipal viability studies and approval by a plebiscite of the population of the original municipality, including the area to be emancipated.

tax rates; (re-)defining tax bases requires legislation passed by the national Congress. In other words, local tax autonomy is limited to tax rates and does not include tax bases, which means a more limited notion of local tax autonomy (Stegarescu, 2005)¹⁶.

Local government revenues in Brazil are also affected by a second layer of national legislation, aimed at reducing revenue inequality. The rules governing allocation of federal transfers driven by two criteria: the size of the tax base and collective needs. Revenue-sharing is constitutionally mandated and obliges the federal government to transfer a share of its own taxes to all municipalities¹⁷. The Municipalities' Participation Fund (FPM) receives a 23.5% share of revenues from two federal taxes: the income tax and the tax on industrialised products. Ten per cent of this amount is set aside to be divided among the capitals of states, with each city's individual quota calculated by a formula which is directly related to population and inversely related to state's per capita income. The remaining 90% are divided by a formula that favours less populated municipalities (Afonso e Araújo, 2006: 396). States are also obliged by the federal constitution to share with their municipalities at least 25% of the total revenues from their value-added tax, as well as 50% of the revenues of their motor vehicle tax (Souza, 2003). According to the constitution, 75% of these transfers may take the form of rebates, that is, must be calculated on the basis of municipalities' contribution to the each tax's receipts. Thus, this kind of constitutional transfers is not oriented toward reducing revenue inequality.

Shared-revenues date to the 1946 Constitution, and so they have long been an important component of the Brazilian federation (Arretche, 2005). Yet, the 1988 Constitution introduced the highest rates of tax-sharing ever adopted in the history of Brazil's fiscal system.

Universal earmarked transfers¹⁸, by their turn, were introduced in the 1990s and constitute a third layer of the national regulation of local government revenues. Hence, universal earmarked transfers are a very recent component of the policies toward place- equality revenues. They are policy-specific, though. In health policy, they became universal because they have been channelled to all municipalities since 1998, with the conclusion of the long process of municipalities' voluntary adhesion to the Unified National Health System (SUS – Sistema Unico de Saúde), which started in 1990. Federal transfers are earmarked for local government health services and calculated on a per capita basis. They are earmarked according to the adoption of pre-defined forms of spending and granted only if these programmes are implemented¹⁹. The redistributive goal of health transfers is different from that operating in the shared-revenue system, because the former favours the largest municipalities (because it is calculated per capita), whereas the latter favours smaller ones.

In education policy, earmarked transfers are universal because all subnational governments are bound by the same constitutional rules, although there is redistribution at the state level. Every year,

16. Accordingly, it is up to the national legislation to define what "services" means, meaning that if a certain "service" activity is not clearly mentioned by the federal law, it cannot be taxed by any municipality. Moreover, if, for example, citizens want to pay a municipal tax to improve the quality of education services, they are forbidden to.

17. In the first version of the 1988FC, federal government shared-revenues were conceived to operate like block grants in the sense that they would not be earmarked to any kind of expenditure. Yet, constitutional amendments introduced since the mid-1990s have changed this original principle.

18. Universal earmarked transfers are conditional grants the federal government provides to all municipalities provided they perform pre-established policy tasks. In health and education, they have become universal because nearly all municipalities have adhered to whereas they all called earmarked because they are attached to specific policies.

19. These programmes include: basic health care; hiring of doctors, nurses and health providers; provision of medicines, vaccination surveillance, and neonatal care.

20% of state and municipal revenues are automatically retained in a state-level fund²⁰. Within each state, revenues are redistributed among state and municipal governments according to the number of school slots offered yearly. Differently from the policies described so far, these earmarked transfers are not calculated either on a population basis or according to redistributive goals, but rather transfers entitlement is linked to slot provision (Oliveira, 2001; Vazquez, 2003).

Note that neither equalisation system – neither constitutional nor earmarked ones – provides transfers to municipalities that are integrated into official metropolitan regions. Those capitals of states that happen to be the central municipalities of their MRs receive revenues from the capitals' 10% share of the FPM. Yet, they are entitled to because they are capitals of states and not because they play a central role in their surrounding network of municipalities.

3.1.1. Inequality-reduction effects

Available data allows us to measure the impact of these national policies on local government revenues. Graph 3 presents information on sources of local government revenues from 1996 to 2006. As can be seen, shared revenues and universal earmarked transfers have a great impact on municipal revenues, since on average self-generated revenues represent only a small share of their budgets, whereas constitutional transfers add a substantial amount of revenues.

Graph 4 presents the Gini coefficients on local per capita revenues by source from 1996 to 2006.²¹ The axis "y" presents the Gini values according to different revenue sources. It shows that revenue inequality among Brazilian municipalities would be much greater if they were to rely solely on their self-generated tax receipts. Transfers have a great impact in reducing revenue inequality. In the absence of shared-revenues and universal earmarked transfers, municipalities' revenues would be highly unequal. Local self-generated taxes display by far and systematically the highest coefficient values: 0.527 in 2006, in spite of a slightly falling trajectory from 2000 on. Yet, there is a sharp reduction in revenue inequality once shared-revenues (from the federal government and state governments toward municipalities) are added to local self-generated revenues. When all Brazilian municipalities are considered, the Gini coefficient for self-generated + constitutional transfer revenue falls to around 0.320. Universal earmarked transfers, by their turn, had a small additional inequality-reduction effect once they came into effect in 1998.

Graph 5²² and graph 6 show data about total revenues – that is, all transfers plus self-generated taxes – according to city population²³. Given the huge variation in population size among Brazilian municipalities – from 800 citizens to 11 million inhabitants –, the data had to be separated into two graphs. Graph 5 displays information about municipalities whose population is above 100,000, whereas graph 6 presents data about the remaining ones, that is, with population below 100,000. Graphs clearly show that the Brazilian system of place equality favours less populated cities. After transfers, the larger the municipality, the smaller its per capita budget tends to be.

Note that the fact that the relationship between municipality size and total revenues is highly curvilinear is very interesting, since it reveals there is a relatively small part of the curve where most of the effect is concentrated, particularly cities with population below 20,000. In fact, as the per capita values on the axis "y" of both graphs show, in spite of the inequality-reduction effects produced by transfers, there is still significant variation in the per capita spending capacities of municipalities, which is negatively related to size.

20. In fact, there are 27 state-level funds. From 1998 to 2006, earmarking to education involved 15% of state and municipal-level governments. In 2006, a constitutional amendment increased this share to 20%.

21. N varied between a minimum of 4,257 municipalities in 1996 and a maximum of 5,285 in 2001, out of 5,564 municipalities.

22. Two outliers have been taken out: Sao Paulo (11 million) and Rio de Janeiro (6 million).

23. Thanks to Tiago Peixoto the suggestion of presenting this data this way.

Indeed, as graph 7 shows, within metropolitan regions, transfers end up increasing revenue-inequality. Although the gap in inequality indexes – before and after transfers – is not so huge as those involving all municipalities (see graph 4), the fact that transfers favour mostly smaller municipalities implies that the per capita revenues of central and larger cities tend to be even comparatively smaller after revenue inequality-reduction policy takes place.

In short, the spending capacities of Brazilian municipalities — and, by extension, their capacity to deliver public policies — would be highly unequal were it not for the national policies towards revenue place-equality, namely shared revenues (in particular, federal transfers) and universal earmarked transfers. Shared revenues have had a much more significant effect on inequality reduction. But less populated municipalities are mostly favoured by the Brazilian regime of place equality, as a result of the constitutional formula through which federal transfers are distributed. In other words, the spending capacity of Brazilian municipalities is less an outcome of the redistributive role performed by the federal government and more an outcome of policy distributive rules.

3.2. National Policies towards Local Government Expenditures

Constitutional rules that earmark subnational governments' revenues to specific policies are a main component of national policies toward place inequality. They limit the decision-making autonomy of local governments regarding spending in redistributive policy areas, namely education and health. This kind of constitutional mandate may be quite rare in cross-national perspective, since it is not mentioned by different comparative studies measuring decentralized governance and national supervision (like Stegarescu 2005 and Sellers and Lidström 2007).

These rules, though, are not an entirely new component of the federal regulation of local government finances in Brazil. In fact, binding local government revenues by means of constitutional mandates was first adopted by the 1946 Constitution, which earmarked a small share of local government resources to development policies (Arretche, 2005). Moreover, the 1988 Constitution had already obliged subnational governments to spend 25% of their revenues on education, updating former constitutional rules.

Therefore, the novelty of the rules implemented in the 1990s relates both to policy areas selected and to rates of revenue binding. As mentioned above, at least 40% of local government revenues must be addressed to redistributive policies. In education policy, a constitutional rule had obliged states and municipalities to spend at least 15% of their revenues on primary education from 1998 to 2006. In 2006, this earmarking rate was elevated to 20%. In addition, 60% of such expenditure should be used entirely to pay teachers actually teaching. As for the health policy, a constitutional rule has obliged municipalities and states to spend, respectively, at least 15% and 12% of their total revenues on health since 2000.

In short, national regulation of local government affairs on the expenditure-side is policy-specific. In the domain of housing, urban infrastructure and transport), national regulation is rather limited, except for those programmes in which local governments employ federal grants to build popular housing and sanitation systems. These are neither universal nor frequent, though. Municipalities also have a high level of discretion regarding culture, recreation and sports policies. Nevertheless, in the domain of redistributive policies (health and education), the expenditure decisions of local governments are quite limited both by universal earmarked transfers and constitutional rules earmarking their expenditures. Their decision-making autonomy is even more limited regarding the delivery of health services, since the federal government health ministry's transfers are targeted to specific programmes.

Therefore, policies implemented by local governments can be divided into two types:

(a) regulated: those in which the federal-level legislation defines a national framework and those toward which the constitution earmarks local governments revenues (health and education);

(b) non-regulated, that is, those which local governments are much less regulated by federal legislation (housing, urban infrastructure, and public transportation).

4. Local government expenditure priorities and inequality

So far, the main contours of Brazil policies toward place equality have been presented. Shared revenues and universal earmarked transfers increase local government revenues and substantially reduce revenue inequality, even as they favour mostly smaller municipalities. Moreover, although politically autonomous, municipalities are bound by constitutional mandates to spend their current budgets on health and education.

Do these policies affect local government spending decisions? Do they reduce spatial inequality in the provision of public services? Available data allows us to measure the effect of these national rules on local government policy priorities.

First, Brazilian municipalities give more priority to redistributive policies than to infrastructure policies, namely housing, urban development, and transportation. Graph 8 shows a box-plot displaying the share of redistributive (education + health²⁴) expenditures over total expenditures for all municipalities for 1996-2006. Graph 9 presents a box-plot of the share of infrastructure (housing + urban development + public transport²⁵) expenditures over total expenditures for all municipalities during the same period. As can be seen, the median for development policies is below 20%,²⁶ whereas it is around 50%²⁷ for redistributive policies.

Note in both graphs that the introduction of earmarked transfers toward redistributive policies in 1998 has had a substitution effect on local government policy priorities. The participation of education and health expenditures on total outlays started a slope increase while development spending gently declined. Therefore, it seems clear that the federal regulation entails a mechanism that clearly affects local governments' spending decisions. Municipalities clearly give priority to regulated policies, whereas this decision implies lower priority given to non-regulated policies, in spite of the fact that municipal governments are in charge of implementing both policies.

On the other hand, as can be seen in graphs 8 and 9, there is also a good deal of variation within these similar patterns of policy priorities. Although half of all municipalities spend around 50% of their revenues on redistributive policies – since this box is quite small -- there is also a good deal of variance, given that 25% of them spend much more than 50%, and 25% of them seem to spend less than constitutional mandates oblige them to. A similar pattern can be seen regarding infrastructure policies. Although half of the municipalities

24.The indicator for redistributive policies is a proxy, for it was only from 2002 on that the official publication of municipal expenditures began to disaggregate education from culture and health from sanitation. Hence, expenditures on education include culture whereas health spending includes sanitation as well. This procedure was adopted to allow the comparison between two periods: before and after 1998, the point in time when the earmarking of redistributive policies was introduced. Furthermore, spending on culture is very small, and so it has little effect on education expenditure values. In health policy, though, the very fact that sanitation expenditures are included might affect expenditure levels.

25.This indicator of infrastructure policies is also a proxy, for popular housing is included in urban infrastructure expenditures.

26.At the top end, above 40%, the number of outliers varies between 24 (in 1996) and 67 (in 2001).

27.At the bottom end, below 25%, the number of outliers varies between 19 (in 2006) and 48 (in 2001). At the top end, above 70%, the number of outliers varies between 7 (in 2002) and 40 (in 1999).

spend less than 20% of their total revenue on these policies, there is a good deal of variance, either by spending more than the median or spending much less.

Therefore, the regulatory role performed by the federal government pushes toward uniformity or place-equality whereas local governments' possibility of taking another path pushes toward diversity or place-inequality. As a result, a sort of "bounded inequality" seems to be highly probable in contexts which combine centralized decision-making along with decentralization of policy-making in federal states.

Additionally, regulated and non-regulated policies display different patterns of place inequality. Graph 10 presents data about the Gini coefficients of local government per capita expenditures on these selected policies for 1996-2006. It reveals that development policies (housing, public transport and urban infrastructure), in which central government supervision is low and local governments exert their policy competencies with great autonomy, display the highest indexes, indicating that inequality in per capita spending on these policies is very high among Brazilian municipalities. In contrast, redistributive policies (education and health), in which the level of central government supervision is high and local governments' expenditure decision-making is limited, display much lower Gini coefficients. In fact, expenditure inequality on public transport has indeed increased throughout the period, while inequality on urban infrastructure spending remained high and stable.

Education and health policies do not only display the lowest Gini coefficient values. In fact, in both policy areas, these indexes declined from 1998 on. In health, the Gini coefficient displayed yet another reduction in 2000. The decline of the two curves coincides in time with the introduction of both universal earmarked transfers and the constitutional earmarking of local government revenues, which, as we have seen, are addressed at both education and health.

Therefore, place-inequality in public expenditures is policy-specific. It is higher in non-regulated policies and lower in regulated ones. This outcome is the result of the juxtaposition of two mechanisms. First, it is a result of the place-inequality-reducing role of both constitutional and conditional transfers on municipalities' revenue-side. Second, this outcome is a result of the federal-level regulation of local government spending. While constitutional and conditional transfers impact local governments' revenues, regulated policies affect local government's spending decisions. Therefore, given that central-level regulation channels a great portion of local government revenues toward health and education, it ends up also affecting the overall pattern of spending, because fewer resources are thus available to spend on infrastructure policies.

However, as we have seen, the redistributive role performed by transfers tends to favor mostly smaller municipalities, which means that larger municipalities tend to get fewer per capita revenues. Therefore, similar patterns of policy-spending priorities – that is, a similar expenditure share on a given policy – imply significant variation in per capita expenditures. As a result, given that large MR's municipalities end up with fewer per capita revenues, their capacity to assist poorer populations' needs tends to be weaker than that of smaller municipalities. In other words, even though central or large MR's municipalities give high priority to redistributive policies, they will still tend to spend less than small municipalities. This outcome is a result of the rules governing place-inequality reduction on the revenue-side. Given that regulation of local government's expenditures is universal, that is, it applies equally to all municipalities, it tends to reflect the place-inequality outcomes on the revenue-side.

5. Conclusions

There does indeed seem to be a trade-off between place-equality and local governments' full discretion in policy-making. The redistributive role performed by the federal government appears to be

a condition to reduce revenue inequality among jurisdictions and provide them the means to deliver public services. As we have seen, in the absence of upper-level transfers, Brazilian municipalities' capacity to provide social services would be highly unequal. Additionally, regulation by upper-level governments seems to be a condition to bind independent subunits around a given national goal, whatever this may be. The expenditure pattern of Brazilian local governments -- that is, high priority and low inequality in regulated policies along with low priority and high inequality in non-regulated ones -- clearly shows the impact of federal regulation on lower-level government affairs.

This is not necessarily a zero-sum game, though, because each level of government has distinct roles. While the center binds local governments to certain policy goals by means of its regulatory authority, local governments still retain authority over policy-making. Moreover, their political autonomy entails the possibility of disagreement. As a result, even under central regulation, there is still room for local decisions, derived either from political autonomy or from discretion associated with policy-making. Instead of a zero-sum game, the combination of upper-level regulation with the possibility of disagreement at the lower-level entails a sort of bounded disagreement, that is, the extent of disagreement tends to be constrained by central regulation whereas the possibility of disagreement explains variation. Upper-level regulation pushes toward place-uniformity while local government autonomy pushes toward place-variation.

The Brazilian case provides evidence that local government policy priorities can be highly predictable under systems of central-local relations that entitle the centre to regulate local policies, even in polities which guarantee political autonomy to local governments. If central governments bind local/regional governments to redistributive policies by means of constitutional provisions or conditional grants, the expected "race to the bottom on social expenditures" a federal state would be expected to entail does not necessarily follow.

As a result, bounded place-inequality tends to be a probable outcome. That is, inequality among jurisdictions regarding the public services they provide to their citizens tends to vary within certain boundaries, within certain bounded intervals. Bounded place-inequality therefore is a probable outcome in contexts where both central-led regulation and the possibility of local disagreement are combined.

Interpreting policies toward place-equality as pork, though, tends to underevaluate their nature, origins, and outcomes. As for their origins, the kind of policies this study examined are associated with the achievement of national goals, be it economic development or social rights. Indeed, they are a core institution of Brazil's state-building process, much like other federations such as Germany and Austria. In order to achieve national goals, place-inequality reduction policies have long been attached to constitutional rules aimed at binding current and future heads of local governments. Instead of freeing them to please their constituencies at will, federal regulations are aimed at limiting their room to spend their own revenues according to short-minded concerns. Hence, regulated policies reflect central-level authority to guarantee that local government revenues will indeed be addressed to accomplish specific policy goals. Therefore, place-equality policies usually restrict the full discretion of local governments regarding the allocation of the grants they receive.

What then, are the driving forces behind centralizing decision-making? Why do certain federal states entitle the federal government to legislate over lower-level government policies? Although centralization of authority is taken for granted in unitary states, it has only recently been acknowledged in comparative studies of federalism. Territorial identity -- namely, a shared sense of belonging to a national community -- has been accounted for as a powerful reason for citizens to give support to political institutions that create conditions for public goods to be provided as a matter of national rights. As a result, it appears that, as far as this commitment is preserved, federations tend to depart from the Tieboutian view of the world.

This paper argues that, besides territorial identity, mistrust in local elites can also play a role in the centralization of decision-making authority within nation-states. Deeply rooted concerns regarding local politicians' will to cooperate with a given national goal create

powerful incentives to limit lower-level governments' decision-making autonomy, although it may be compatible with attributing local governments' policy-making competences. In such conditions, it is possible that vertical arrangements will emerge that combine the centralization of decision-making with the decentralization of policy-making. Again, this is not a zero-sum game, since each level of government is entitled to some share of political authority, although in different roles.

Yet the actual effects of policies toward place-equality on the spatial distribution of social services critically depend on policy rules. This paper provided evidence that understanding place-inequality reduction requires that we look not only at central-local relations, but also that we closely analyze the rules governing place-inequality compensation, since redistributive policies do not always necessarily transfer income from the wealthiest toward the needy.

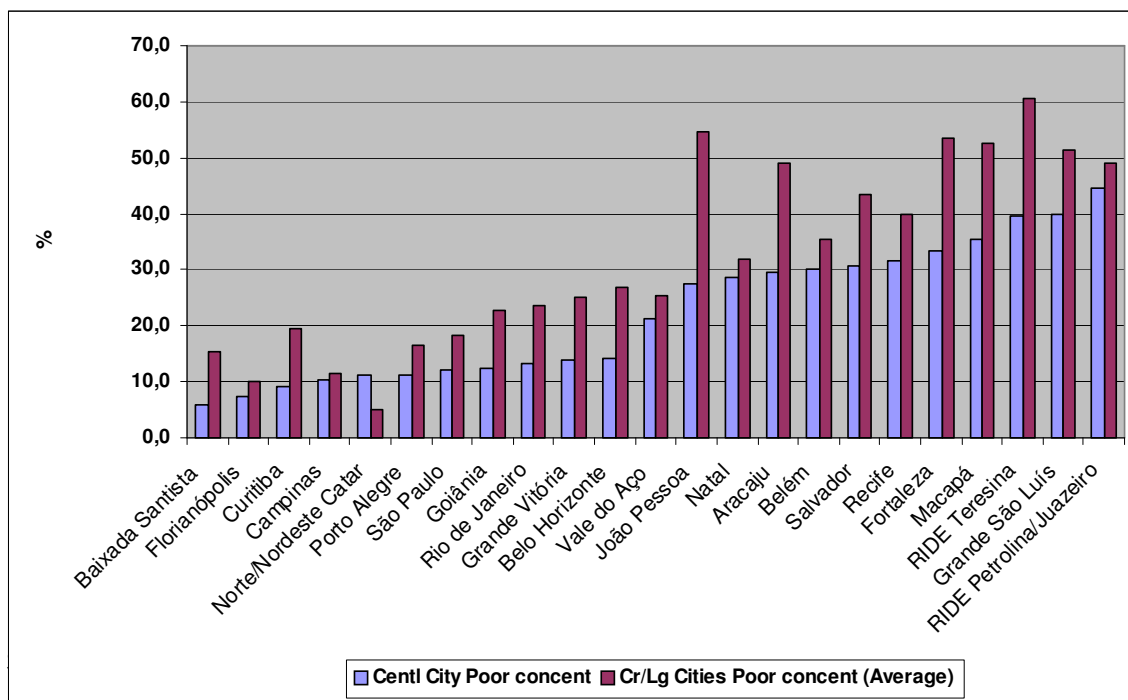
As we saw, the redistributive impact of policies toward place equality is critically dependent on the understanding of what need means. In the Brazilian case, current rules of revenue compensation are based on the notion that the neediest populations are concentrated on small cities, whereas in fact they are concentrated in the large and central cities of metropolitan areas. Mechanisms to compensate revenue inequality among places protect small cities, leaving uncovered those cities where the poor are concentrated. Once shared-revenues are added to self-generated local taxes, they favour mostly small cities and so, large and central cities of metropolitan areas end up with lower per capita budgets.

References

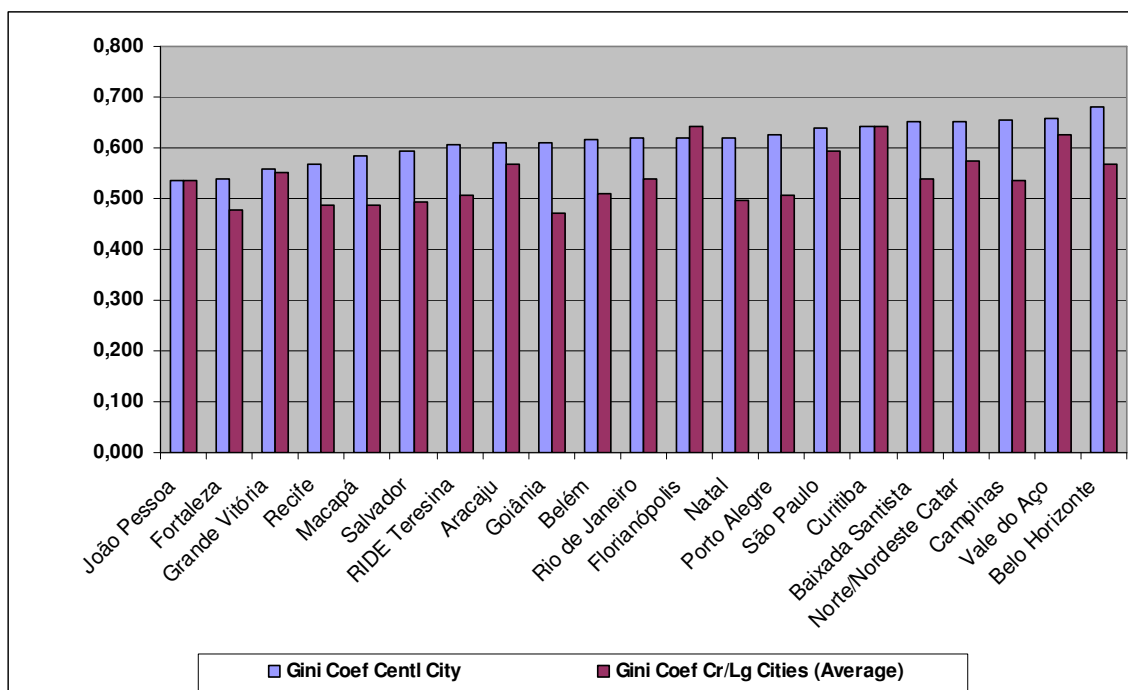
- Afonso, José Roberto Rodrigues and Erika Amorim Araújo (2006). "Local Government Organization and Finance: Brazil", in: Shah, Anwar (ed.) (2006). *Local Governance in Developing Countries*. Washington: The World Bank.
- Almeida, Maria Hermínia Tavares de (2005). "Recentralizando a federação?". *Revista de Sociologia e Política*, 24: 29-40.
- Arretche, Marta (2005). "Quem taxa e quem gasta: a barganha federativa na federação brasileira", in: *Revista de Sociologia e Política*, no. 24: 69-86.
- Arretche, Marta (2007). "The Veto Power of territorial governments in Brazil: political institutions and representatives voting behaviour", in: *Brazilian Political Science Review*, 2: 40-73.
- Arretche, Marta and Vazquez, Daniel (2007). "Public Finances in Brazil". Presentation at the II Workshop of the International Advisory Committee. São Paulo, 18th of December 2007.
- Banting, Keith and Stan Corbett (2002). "Health Policy and Federalism: an introduction", in: Banting, Keith and Stan Corbett (ed.) (2002). *Health Policy and Federalism: A Comparative Perspective on Multi-level Governance*. Queen's University: Institute of Intergovernmental relations.
- Banting, Keith (2006). Social Citizenship and Federalism: Is a Federal State a contradiction in terms?", in: Greer, Scott (ed.) (2006). *Territory, Democracy, and Justice. Regionalism and Federalism in Western Democracies*. London: Pallgrave Macmillan. P. 44-66.
- Buchanan, James M. (1995) "Federalism as an Ideal Political Order and an Objective for Constitutional Reform" *Publius*, Vol. 25, No. 2 (Spring), pp. 19-27.
- Carvalho, José Murilo (2001). *Cidadania no Brasil*. São Paulo, Civilização Brasileira.
- Colomer, Josep. M. ((1998). "The Spanish 'State of autonomies': Non-institutional federalism", *West European Politics*, 21(4): 40-52.
- Desposato, Scott and Ethan Scheiner (2008). "Governmental Centralization and Party Affiliation: Legislators Strategies in Brazil and Japan", *American Political Science Review*, 102(4), november: 509-24.
- Esping-andersen, G. (1985). *Politics against Markets*. Princeton: Princeton University Press.
- Esping-andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.
- Garman, C.; Haggard, S.; and Willis, E. (2001). "Fiscal Decentralization: A Political Theory with Latin American Cases", *World Politics*, 53 (January): 205-236. r
- Greer, Scott (ed.) (2006). *Territory, Democracy, and Justice. Regionalism and Federalism in Western Democracies*. London: Pallgrave Macmillan.
- Immergut, Ellen M. (1992). *Health politics : interests and institutions in Western Europe*. Cambridge [England] ; New York, NY, USA : Cambridge University Press.
- Instituto Brasileiro de Geografia e Estatística (2005). *Research on the Municipalities Information*.
- Jeffery, Charles (2006). "Devolution and Social Citizenship: Which Society, Whose Citizenship?", in: Greer, Scott (ed.) (2006). *Territory, Democracy, and Justice. Regionalism and Federalism in Western Democracies*. London: Pallgrave Macmillan. P. 67-91.
- Jeffery, Charles (2008). "Devolution in the United Kingdom: Problems of Piecemeal Approach to Constitutional Change", in: *Publius: The Journal of Federalism*. P 1-25.
- Manow, Philip (2005). "Germany: co-operative federalism and the overgrazing of the fiscal commons", in: Obinger, Herbert; Stephan Leibfried and Francis Castles. (ed.) (2005). *Federalism and the Welfare State. New World and European Experiences*. Cambridge: Cambridge University Press.

- Mota, Carlos Guilherme (Org.) (1982). *Brasil em Perspectiva*. São Paulo: DIFEL. v. 1.
- Obinger, Herbert (2005). "Austria: strong parties in a weak federal polity", in: Obinger, Herbert; Stephan Leibfried and Francis Castles. (ed.) (2005). *Federalism and the Welfare State. New World and European Experiences*. Cambridge: Cambridge University Press.
- Obinger, Herbert; Stephan Leibfried and Francis Castles. (ed.) (2005). *Federalism and the Welfare State. New World and European Experiences*. Cambridge: Cambridge University Press.
- Ojima, Ricardo (2007). "Dimensoes da Urbanizacao dispersa e uma proposta metodologica para estudos comparativos", *Revista Brasileira de Estudos Populacionais*, 24(2): 277-300.
- Oliveira, Fabrício Augusto (2001). *FUNDEF e Saúde: duas experiências (virtuosas?) de descentralização*. Research report. Project: Fiscal Decentralization and Intergovernmental Financial Cooperation. EBAP/Konrad Adenauer Stiftung.
- Peterson, Paul (1995). *The Price of Federalism*. Washington D.C.: Brookings Institution.
- Pierson, Paul (1995). "Fragmented Welfare States: Federal Institutions and the Development of Social Policies." *Governance: An International Journal of Policy and Administration*. 8(4): 449-78.
- Razin, Eran (2007). "Introduction: Deconcentration of economic activities within metropolitan regions: A qualitative framework for cross-national comparison, in: Razin, Eran et al. (eds.) (2007). *Employment Deconcentration in European Metropolitan Areas*.
- Rodden, Jonathan (2004). "Comparative Federalism and Decentralization: on meaning and measurement", *Comparative Politics*, 36(4): 481-500.
- Sellers, Jefferey M. and Anders Lidström (2007). "Decentralization, Local Government, and the Welfare State", *Governance*, 20(4): 609-32.
- Stegarescu, Dan (2005). "Public Sector Decentralisation: Measurement Concepts and Recent International Trends", *Fiscal Studies*, 26(3): 301-33.8
- Shah, Anwar (ed.) (2006). *Local Governance in Developing Countries*. Washington: The World Bank.
- Souza, Celina (2003). *Brazil's System of Local Government, Local Finance, and Intergovernmental Relations*. Paper prepared for the research project Building Municipal Capacity for Finance Budgeting. School of Public Policy, University of Birmingham, UK.
- Tiebout, Charles (1956). «A Pure Theory of Local Expenditures», *The Journal of Political Economy*, Vol. 64, No. 5 (Oct., 1956), pp. 416-424
- Vazquez, Daniel Arias (2003). *Educação, Descentralização e Desequilíbrios Regionais: os impactos do FUNDEF*. Master's dissertation: Institute of Economics, UNICAMP (University of Campinas).
- Weaver, K.R. & Rockman, B (1993). *Do institutions matter?* Washington: Brookings Institution.
- Weingast, Barry R. (1995). "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development", in: *Journal of Law, Economics, & Organization*, Vol. 11, No. 1 (April), pp. 1-31
- Wildavsky, Aaron (1984). "Federalism means inequality: Geometry, Political Sociology, and Political Culture", in: Golembiewski, Robert T. and Aaron Wildavsky (ed.) (1984). *The Costs of Federalism*. New Brunswick/London: Transaction Books. p. 55-69.
- Ziblatt, Daniel (2006). *Structuring the state: the formation of Italy and Germany and the puzzle of federalism*. Princeton: Princeton University Press.

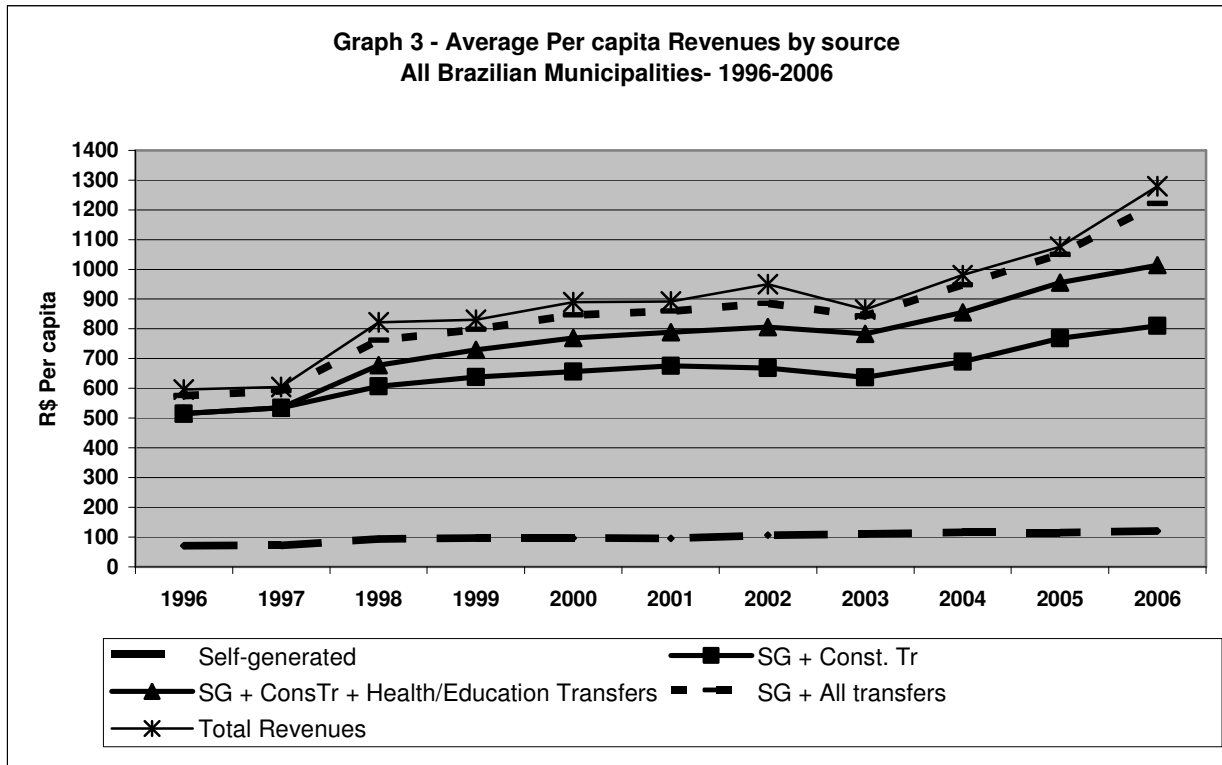
Graph 1
Poverty Concentration in Metropolitan Areas
Brazil - 2000



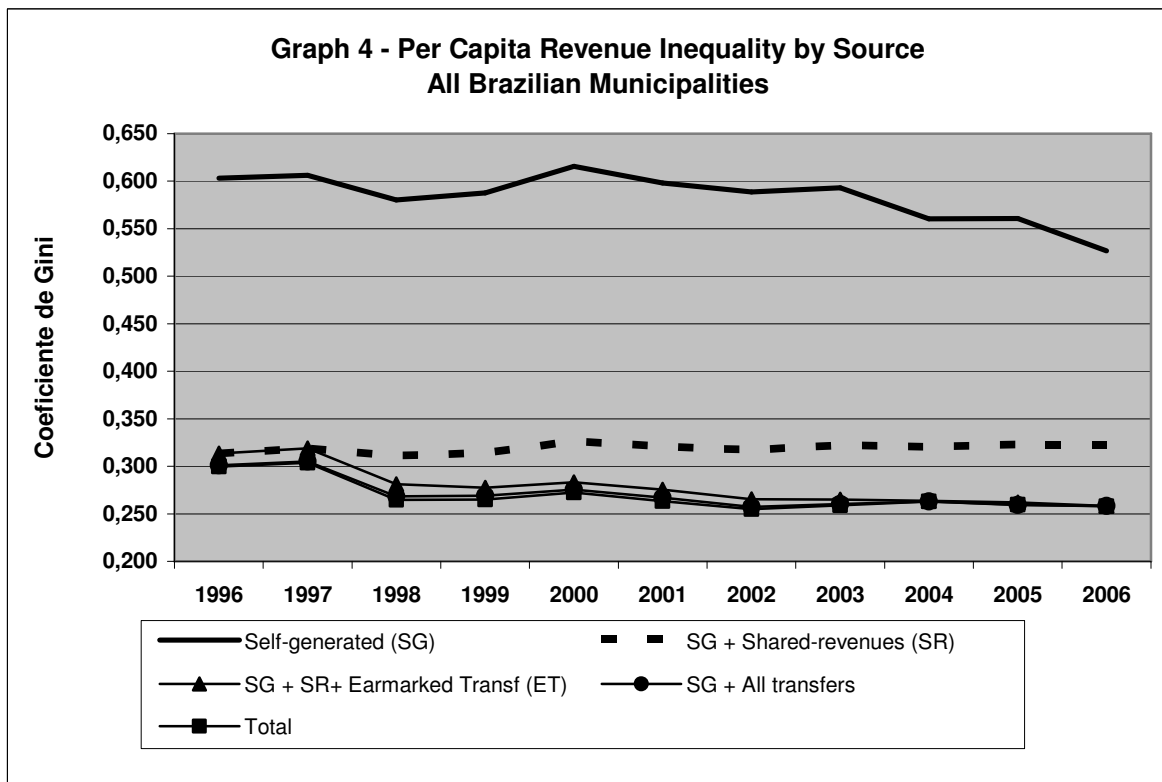
Graph 2
Poverty Concentration in Metropolitan Areas
Brazil - 2000



Source: CEM's Municipalities Information Database .

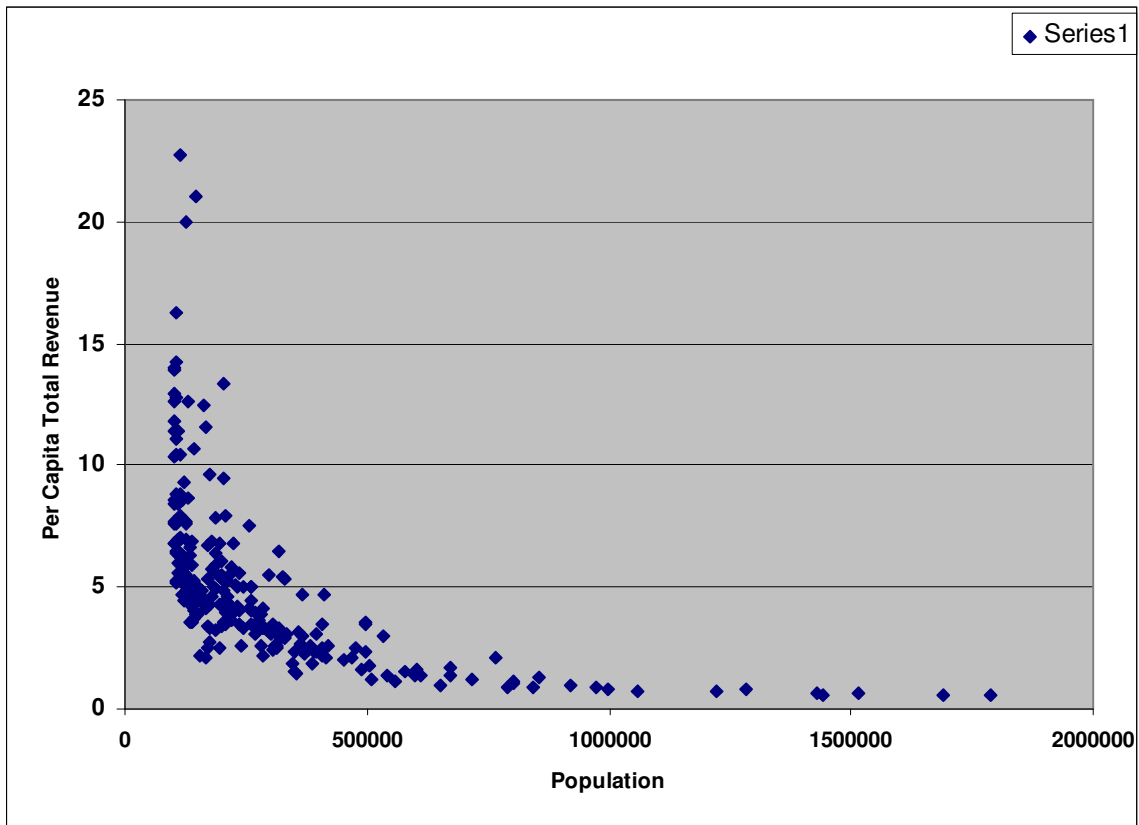


Source: CEM's Municipalities Information Database.



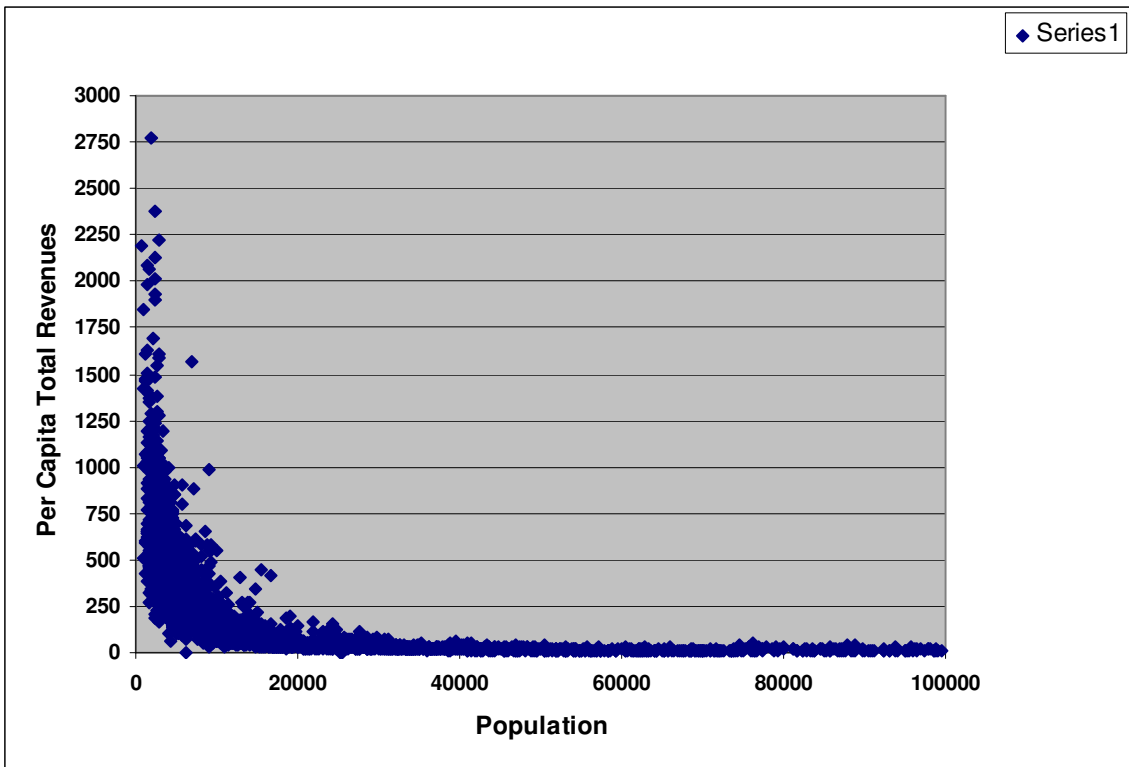
Source: CEM's Municipalities Information Database .

Graph 5 – Per Capita Total Revenues by Municipality Population
Municipalities above 100.000 inhabitants - 2006



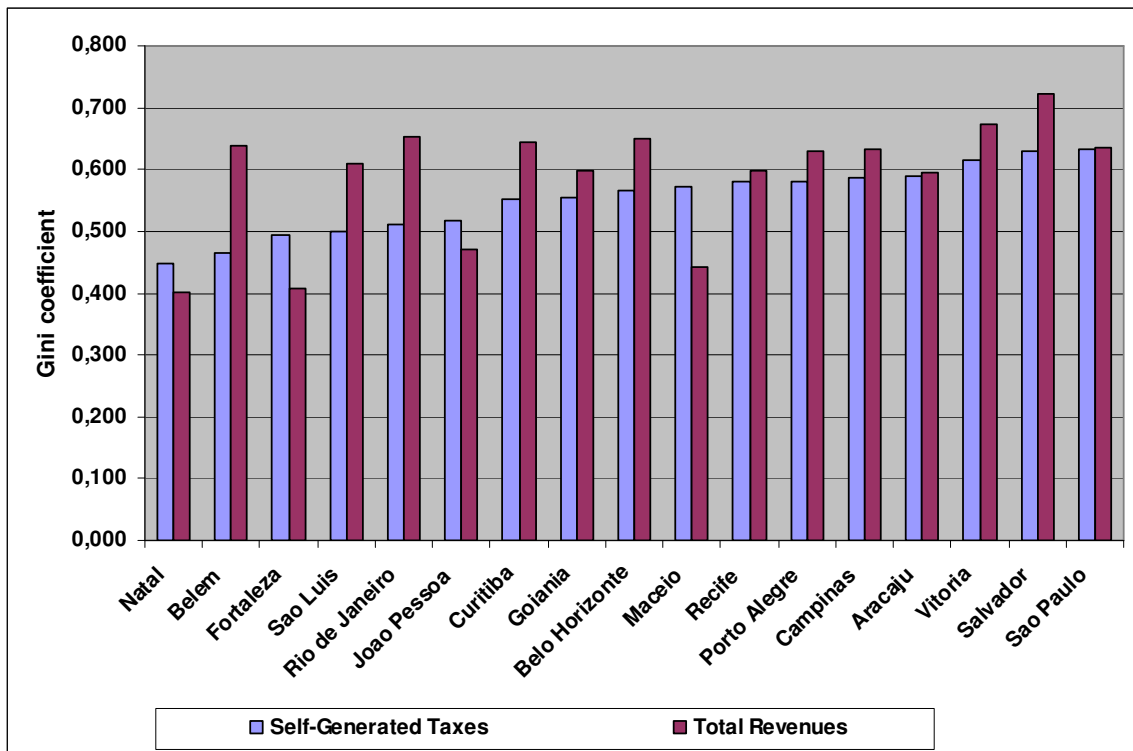
Source: CEM's Municipalities Information Database.

**Graph 6 – Per Capita Total Revenues by Municipality Population
Municipalities between 800 and 100.000 inhabitants - 2006**



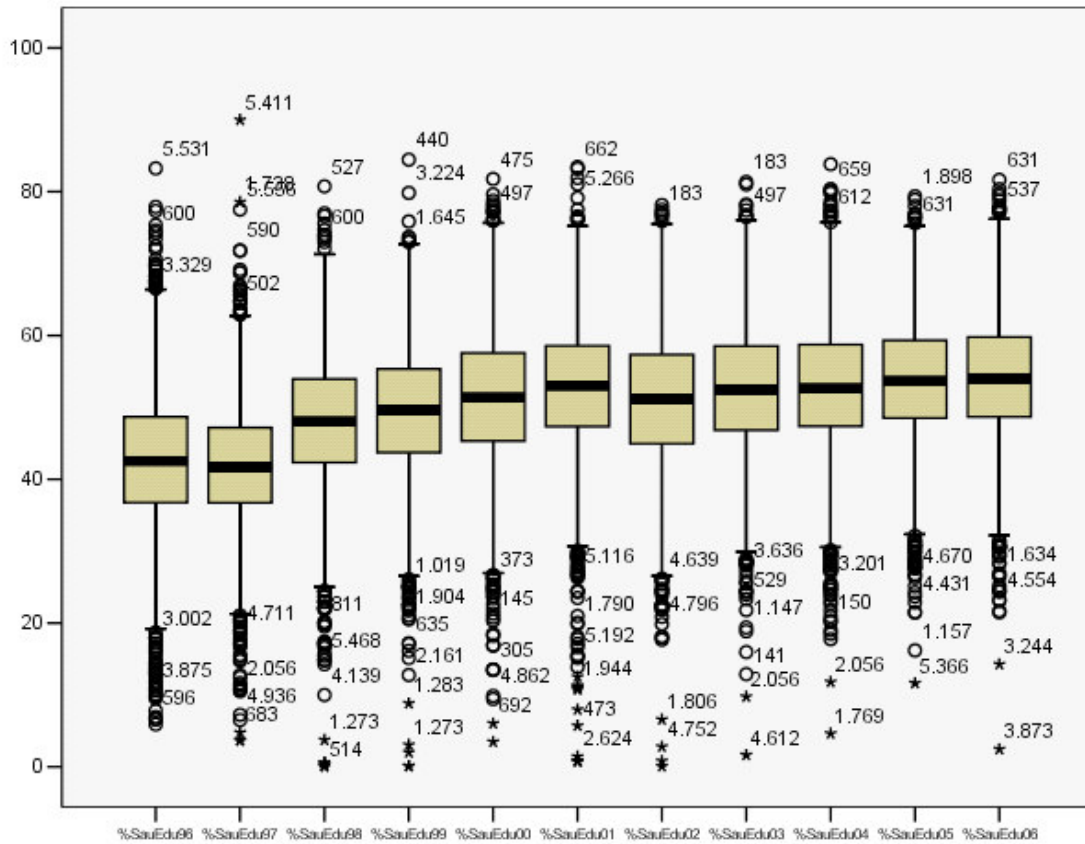
Source: CEM's Municipalities Information Database.

**Graph 7 - Per Capita Revenue Inequality by Source
Metropolitan Regions – 2004-6(Average)**

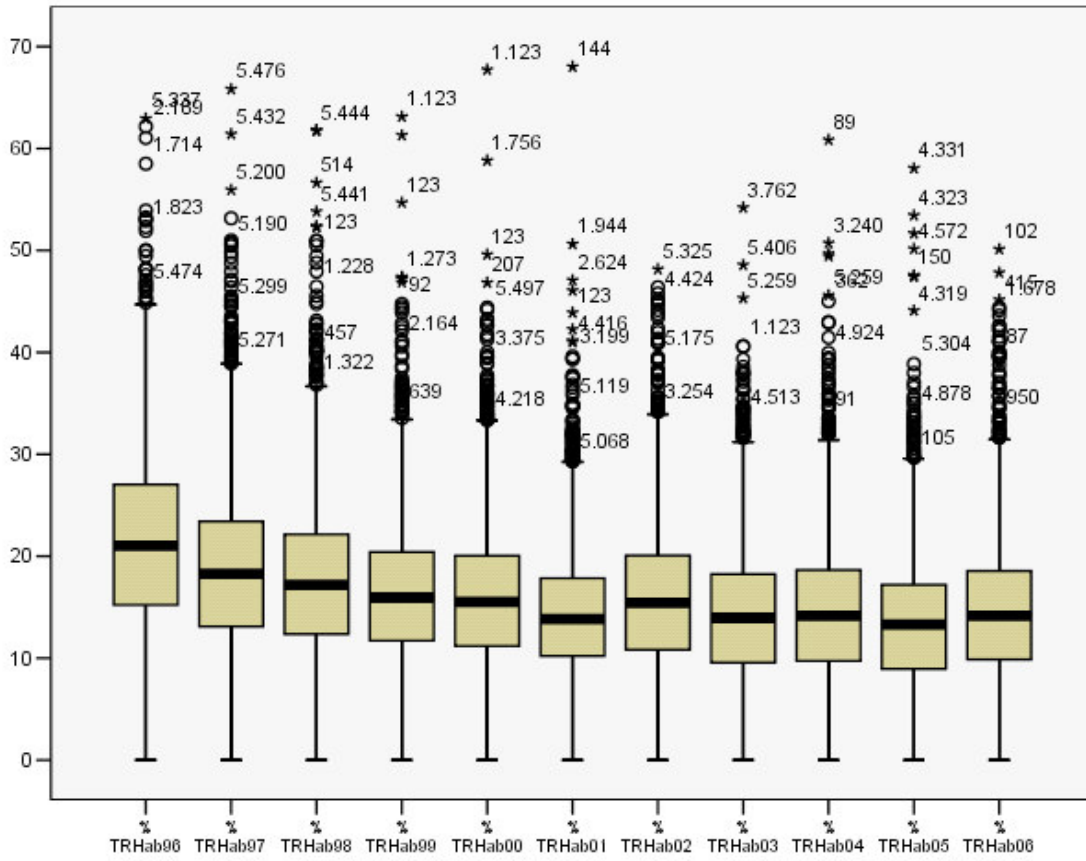


Source: CEM's Municipalities Information Database.

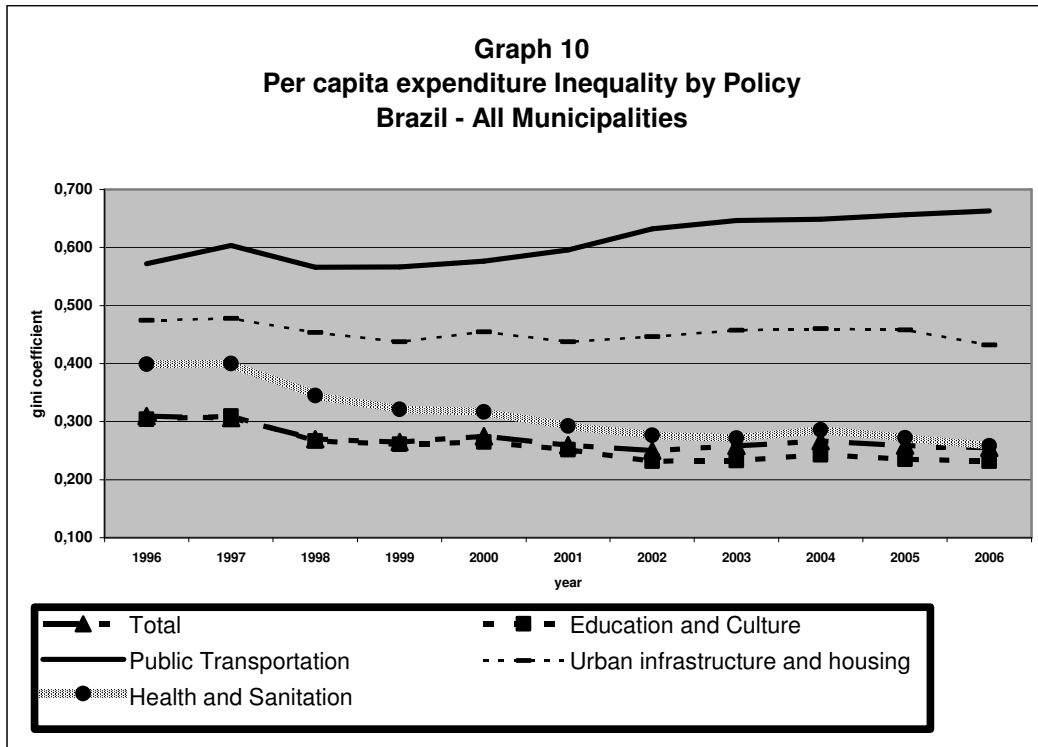
Graph 8
All Municipalities' share of redistributive expenditures
Brazil - 1996-2006



Graph 9
All Municipalities' share of development expenditures
Brazil - 1996-2006



Source: CEM's Municipalities Information Database.



Source: CEM's Municipalities Information Database.