

Reforming institutions from inside: federalism and inequality in Brazil

Gabriel Cepaluni¹

Many countries, such as the United States, India and China, have seen increased levels of economic inequality in recent decades. In contrast, as an IMF study argues, “Brazil reduced inequality significantly from the early 1990s through a focused set of transfer programs that have become a model for many around the world.” Martin Ravallion, Director of the Development Research Group of the World Bank, argues that Brazil’s growth has been less impressive than that of fast-growing nations such as China and India,² yet he claims Brazil has much to teach those countries in terms of inequality reduction (Ravallion, 2010).

The Brazilian case is striking because some authors say that federal systems induce and perpetuate inequality, whereas Brazilians were able to significantly reduce inequality in recent years. How was this possible since it contradicts the alleged inequality trends of federal systems? To answer this question, we have to keep in mind that federalism is a broad concept. Federal systems implement many different policies. Some policies might improve inequality while others might make it worse. The Brazilian case, however, illustrates that it is possible to have a federal system and at the same time

¹The author wrote this article as part of the Federalism and Inequality in the Global South Project, an initiative supported by Brown University’s Alumni Network, funded by Santander Universities. Earlier versions of this paper were presented at the 2013 Latin America Studies Association International Congress in Washington, DC, at the 2013 Federalism and Inequality in the Global South and at the 2004 IPSA 23rd World Congress of Political Science in Montreal, Québec. The author thanks Lorena Moscovich, Richard Snyder, Carlos Pereira and Rodrigo Rodrigues for their very helpful comments. Murilo Junqueira contributed to an earlier version of this paper.

²Similarly to the Chinese and Indian growth of today, Brazil also grew around two digits annually during the presidency of Emílio Garrastazu Médici (1969-1973). This period is known as the Brazilian economic miracle (or “milagre econômico brasileiro”).

reduce inequality. Of course, Brazil is still one of the most unequal countries in the world, but there is still plenty of space for improvement.

Social policies targeting the poor, such as Bolsa Família, are an important cause for the reduction of inequality in Brazil. The Luiz Inácio “Lula” da Silva administration is responsible for taking many Brazilians out of poverty through its social policies. Social policies are tools for reducing inequality, but they are not the only ones. Multiple paths lead to inequality. Here we focus only on inequality as an outcome of some public policies, especially collection of taxes, conditional cash-transfer programs and spending on education. There are still many complaints about how Brazilian taxes favor the rich. For that reason, we also focus on the less debated but equally important relationship between the Brazilian tax system and inequality reduction. We discuss how federal spending toward the poor has helped to reduce inequality in Brazil, whereas the tax system has been an obstacle in turning Brazil into a more equal and efficient country. We also show that, while Brazil has invested more on education, there is still a lot of room for improvement.

The typology of inter-jurisdictional transfers³ we propose – inequality reducing transfers, status quo (or ambiguous) maintaining transfers, and inequality increasing transfers – assume that it is possible to counter-balance the potential harmful effects of federal systems (e.g. higher inequality) while preserving its potential positive effects (e.g. higher economic growth). We believe that the Brazilian case brings lessons to other countries that also wish to reduce inequality. Reforming federalism is easier in a democratic system than replacing it. The 1988 Brazilian Constitution, for instance, establishes federalism as an entrenched clause. Thus, studies that discuss ways to

³ Not every form of inter-jurisdictional transfer of resources induced by the State is an intergovernmental transfer. There may be inter-jurisdictional transfers aimed directly toward individuals (such as *Bolsa Família* and social security) or induced by the tax system (such as source taxation).

reform federalism are more useful from the policy point of view than the ones that criticize federalism without proposing a clear solution to their critiques.

Federalism and Inequality

Many historical institutionalists work at the level of mid-range theories (Rueschemeyer, Stephens, & Stephens, 1992; Karl, 1997). They empirically test, refine and generate new theories and hypothesis focusing on a limited number of case studies (Skocpol, 1979; Collier & Collier, 1991). The issue of micro-foundations is typically cited as distinguishing historical institutionalism from rational choice institutionalism (Thelen, 1999, p. 367). Rational choice focuses on the individual's strategic actions and behaviors. In contrast, historical institutionalism analyzes macro-historical phenomena and large social transformations (Tilly, 2006; Pierson, 2004). Clearly, microanalysis does not preclude dealing with collectivities, since many rational choice works deal with collective actors (Olson, 1965; Bates, Greif, Levi, & Rosenthal, 1998). Our main contribution toward this debate is to reinforce the idea that endogenous and incremental public policy reforms can have a large macro-impact in terms of inequality reduction over time.

Moreover, an influential body of literature says that federalism induces inequality between different regions and citizens within a nation-state. As Wildasky (1986) argues, "Uniformity is antithetical to federalism. The existence of states free to disagree with one another and with the central government inevitably leads to differentiation." The outcome is driven by the following mechanism: federal institutions implement a varied set of public policies and also taxes subnational units differently. Competition between subnational governments for better public policies might help economic growth, but also creates inequality (Buchanan, 1995; Weingast, 1995). Federal

institutions are seen as economic markets where individuals and firms freely choose where to establish themselves or where to allocate their resources to get better services and taxes. If they are not happy with their location, they can move elsewhere. A “federal market” is commonly flawed. There are asymmetries of resources and information inside a country, where lower class individuals and small firms tend to have less free-will than richer individuals and larger firms. As in a market economy, inequality between individuals and firms is an outcome of the competition between unequal parts. Inequalities accumulate unless institutions and policies are designed to reduce them.

Sometimes federalism presents a barrier to implement much-needed public policies. Wibbels (2000) argues that federalism adversely affects the macroeconomic performance of countries. Both federal and subnational units diverge in terms of desired public policies. For example, the federal government wants to reform its tax system to reach a fiscal balance, whereas subnational governments boycott the reform because few local businessmen oppose it out of self-interest. Contrarily, subnational governments also limit “bad” policies coming from the Union.

A more nuanced view says that federalism tends to produce inequalities between regions and citizens within a nation-state, but centralization of policy decision-making in certain areas, such as public health, can counter-balance inequalities produced by federal institutions (Obinger, Leibfried, & Castles, 2005; Banting & Corbett, 2002). If this is true, it is possible to combine federal competition that enhances economic development with public policies that help the poorest segments of society. Institutions interact with other factors that shape policy choices and social outcomes. States, such as Germany and Canada, are able to combine federalism with public policies that counter-balance “inequality inducing federalist institutions” (Linz & Stepan, 2000). Banting and Corbett (2002) also point out that “federal states tend to resemble non-federal ones, in

which inequalities are less marked across regions than between urban and rural areas within regions”.

Much in line with the arguments presented in this paper, Beramendi (2012, 10) says that the view that federalism induces inequality has its limits. There is a trade-off between the pursuit of equality and the protection of political autonomy of subnational units in a federal system. Political units organize their fiscal systems according to one of three designs: a centralized design (C), in which national governments control income taxes, transfers and the allocation of resources across regions (e.g. Spain in the aftermath of its democratic transition); a decentralized design (D), in which regions control income transfers and taxes and there is little redistribution between regions (the European Union); and, finally, a hybrid design (H), in which a partially decentralized system of interpersonal redistribution coexists with significant levels of interregional redistribution (Germany during the post-war period).

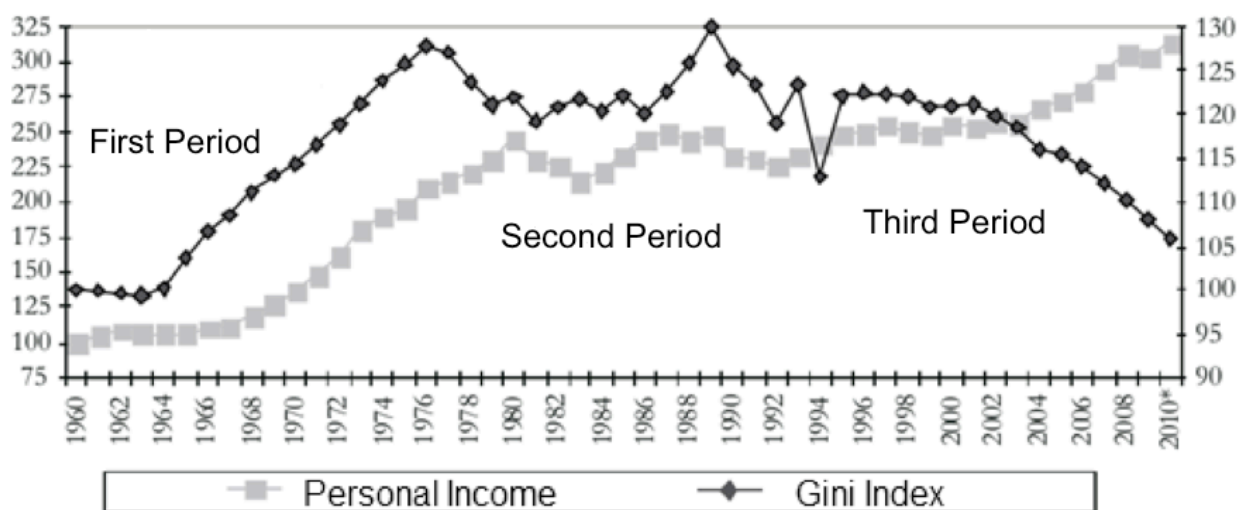
Our article contributes to a more fine-grained view of the relationship between federalism and inequality. Brazil has combined relatively high levels of economic growth with the reduction of social inequalities. Brazil’s federal spending has targeted the poor, but the country has a complex tax system that perpetuates inequality. The recent reduction of social inequalities in Brazil is motivated mainly by social policies (such as Bolsa Família – a conditional cash transfer program), but much remains to be done in other areas. Brazil has to further reform its economic and political institutions in order to maintain grow and reduce inequality at the same time.

Historical Context

As Figure 1 shows, the socioeconomic history of Brazil in the last 50 years can be characterized by three distinct periods. The first (1960-80) encompasses most of the

Brazilian military dictatorship (1964-1985). During this period, the country experienced rapid per capita income growth. The pioneering works of Williamson (1965) and Kuznets (1955) show that the beginning of the industrialization and urbanization process concentrates income. Beyond the typical effects of the Brazilian infant industry on inequality, the military government gave low priority to social spending. The real value of the minimum wage (minus inflation) dropped 1.6% on average per year, from 1964 to 1980 (Pochmann, 2011), thanks to the military's belief that economic growth was mainly driven by investments in physical capital – not in human capital (Pastore & Zylberstain, 1990; Barros, Carvalho, Franco, & Rosalem, 2012).

Figure 1: Historical Evolution of National and Personal Income per capita (Gini) between 1960 and 2009 (1960 = 100)



Source: Based on Pochmann (2011), IBGE.

From the federalist standpoint, the military sharply reduced the autonomy of both states and municipalities to concentrate resources in the hands of the Union. For example, the central government transferred only 5% of income tax and the same 5% of the federal

value-added tax (VAT) to states and municipalities. Note that, in 1967, Brazil became one of the first countries in the world to adopt VAT. Two VATs were created: one at the federal level and the other at the state level. Even the delivery of these transfers only occurred after a series of requirements had been imposed by the central government. The Union could define subnational tax rates, the collection of taxes of subnational governments and subnational tax exemptions. The tax reform of 1967 was designed to allow maximum economic growth. The Union controlled the federal distribution of tax instruments. This tax centralization allowed the federal government the freedom and flexibility to create incentives for development. The Brazilian military regime shows that centralization does not necessarily lead to greater equity. By creating two VATs, the military transferred resources from poor regions and individuals to wealthy regions and individuals in order to promote industrialization.

Another important innovation was the creation of the state VAT, replacing multiple state taxes that existed until then. The tax adjustment was uniform throughout the country and was fully charged by the producing state, favoring industrialized and richer states, such as São Paulo.

The second period (1980-1994) goes from the last military government to the administration of President Itamar Franco. This period is marked by strong economic and political instability. Brazil had low economic growth and maintained its high level of social and regional inequalities. Civilian governments sought to increase social spending, but high inflation and fiscal deficits prevented stronger government action. The new 1988 Constitution was the most important event in the period. It created new social rights, such as universal and free health care, retirement for rural workers (the previous system was only effective for urban workers), and aid to disabled workers. There was a strong decentralization of revenue because states and municipalities had the right to 45% of income tax and federal VAT (22.5% for states and 22.5% for

municipalities). The Union was forbidden to withhold or impose conditions on the above-mentioned transfers, which began to be fully controlled by subnational governments. The Union also strengthened subnational taxes. Many high value products that were taxed exclusively by federal taxes became part of the state VAT – such as electric power, mining, fuel, transport, and communication (Varsano, 1997).

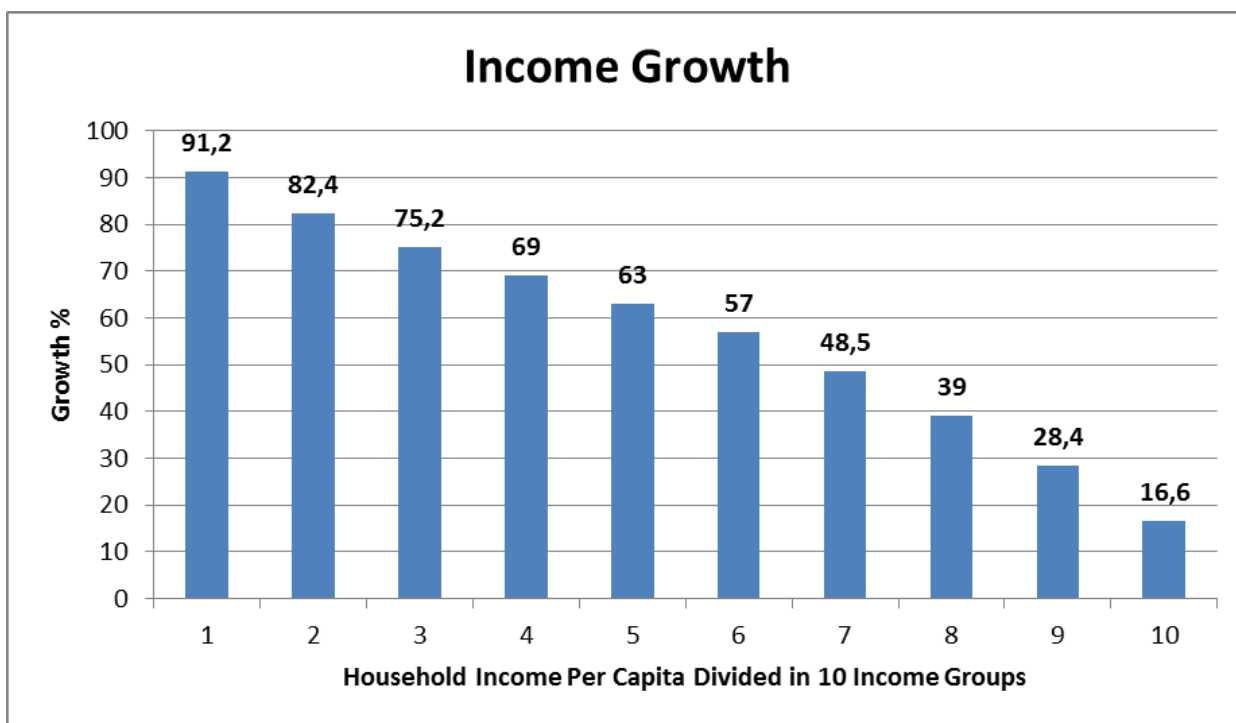
Nowadays, the central government has little room to intervene in subnational taxes. The new Constitution has prohibited, for example, that the Union grants exemptions or tax concessions with subnational taxes. States began to enjoy great autonomy, using tax breaks to attract investments, in what has been described as a “tax war” or “race to the bottom”⁴ (Prado & Cavalcanti, 2000). Municipalities also benefited from the increase in transfers. In addition to the aforementioned federal transfers, they had the right to 25% of state VAT. The legislators of the 1988 Constitution believed that the previous system was too centralized, causing strong financial dependence upon local levels of government. Consequently, the 1988 Constitution promoted strong revenue decentralization.

The 1988 Constitution also created the Social Security Budget, its aim to finance health, social security and welfare. It consists of tax instruments called “social contributions.” Social contributions are taken from company profits, its earnings and formal workers’ wages. Unlike taxes, they are an exclusivity of the Union and are not shared with states and municipalities. The 1988 Constitution says that the Union must share 20% of any tax that it creates with states, but the rule does not apply to social contributions.

⁴Tax war or race to the bottom is a socio-economic phenomenon in which governments deregulate the business environment or taxes to attract or retain economic activity in their jurisdictions.

Finally, the last period goes from 1994 to the present. Economic stability following the Real plan immediately created a sharp drop in inequality by recovering the purchasing power of low paid workers. Income growth, however, only started to gain momentum after 2004, the second year of the Lula government, when there was a sharp drop in inequality. According to Neri and Souza (2012), average income grew by 40% between 1996 and 2011, with Brazil being one of the few countries where income grew faster than the GDP per capita (27.7%). Growth, however, was not uniform across all income levels. Unlike the global trend of rising inequality (APSA, 2008), Brazil is less unequal because the income of the poorest increased proportionately more than that of the richest. The income of the poorest 10% grew by 91.2% from 1996 to 2011, similar to the Indian income growth in the same period, while the income of the richest 10% rose to 16.6%. The Brazilian Gini index fell by 12%, going from 0.5987 in 1995 to 0.5274 in 2011. As a result, the Sen's social welfare function (Sen, 1997), which measures the increase in income multiplied by the Gini index, increased by 65.12%.

Figure 2: Growth by Household Income Per Capita Divided into 10 Income Groups in Brazil (2001-2011)



Source: Neri and Souza (2012), PNAD.

Growth in Brazil favored almost all vulnerable groups (Neri & Souza, 2012). The income of Afro-Brazilians and mixed-Brazilians (whites and blacks) grew by 66.3% and 85.5% respectively, from 1996 to 2001, while that of whites increased by 47.6%. Household incomes headed by illiterate providers increased by 88.6%. Household incomes headed by those who have 12 or more years of education increased by 11.1%. The Northeast (the country's poorest region) grew by 72.8%. The richer Southeast grew by 45.8%. Agricultural, domestic and informal workers – historically ill-paid jobs – increased by 86%, 62.4% and 60.3% respectively. From 1995 to 2011, Brazil's GDP grew by 3.15%. From 2003 to 2011, the period that coincides with most of the Lula's administration (2003-2010), Brazil's growth routinely surpassed that of the world (see Figure 3). In 2010, Brazil's growth reached its peak of 7.53% (World Bank, 2013). More important than

economic growth itself, Brazil has recently shown a great ability to turn wealth into well-being by reducing inequality.

Figure 3: Annual GDP Growth Rates (%) - Brazil versus World



Source: World Bank (2013).

One aspect that calls attention when Brazil is compared to other federations is the composition of revenues of Brazilian municipalities. Revenues collected in municipalities represent 20% of their total revenues, while federal and state transfers represent 65% of municipalities' revenues. The ratio of its own revenues and the total revenues in Canada in the same period was 43% and the ratio between transfer and total revenues was 39%. In Australia (2001), they were 38% and 17%. In Germany (2002), the ratios were 37% and 35% (Arvate, Mattos, & Rocha, 2013). Therefore, balancing

economic growth and social equality is not an impossible task, albeit a difficult one. Therefore, we have to create incentives within the federal system to counter-balance the federal tendency to generate inequality, since replacing federalism with other forms of government is a much more difficult task.

Case Studies and Typology

In recent years, Brazil has combined relatively high economic growth with inequality reduction (The Economist, 2011; Berg & Ostry, 2011; Ravallion, 2010). Brazil stands out as an important outlier in terms of inequality reduction between BRIC nations (Russia, India and China) (Canuto, 2013) and in comparison with developed countries as the United States (Atkinson & Stiglitz, 1980; Piketty & Saez, 2003). Of course, Brazil is still a highly unequal society and Brazilians have to overcome many obstacles to remain on the same path. Brazil has to reinforce its inequality reduction trajectory if it wants to continue reducing inequality. After all, public policy changes have a limited temporal effect.

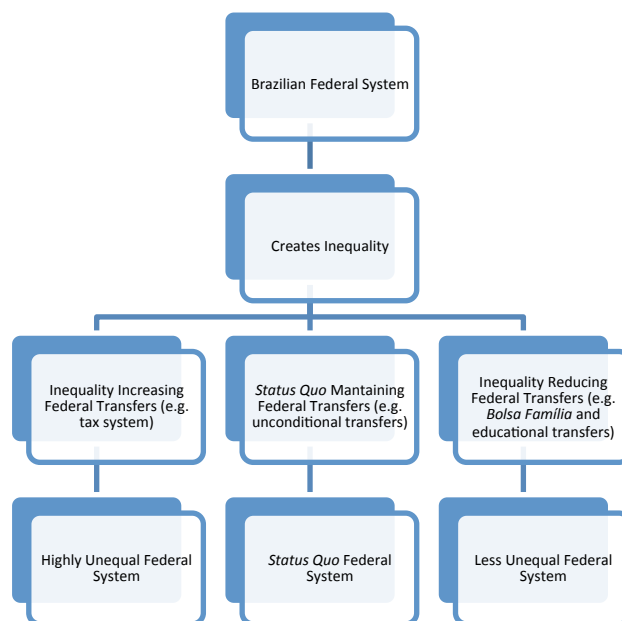
We selected cases in an inequality reducing scale: decreasing inequality, preserving the status quo, and increasing inequality. Federal transfers are our independent variable and their impact on social inequality is our dependent variable. In this paper, Bolsa Família is our best example of an inequality reducing transfer, followed by the changes in Brazilian public spending with regards to education. Unconditional transfers present ambiguous results in terms of inequality reduction. Finally, the Brazilian tax system is a major source of inequality. In Brazil, the most efficient inequality reducing transfers are directed toward individuals, rather than regions. Bolsa Família is a good example. Poor regions have a higher proportion of low class individuals among its inhabitants. As a result, fighting inequality between

individuals helps to reduce inequality between subnational units. The Brazilian tax system, on the other hand, is a cumbersome and complex inter-governmental transfer that promotes unequal competition between subnational units (“tax war”) to attract company investments, since subnational units collect taxes at the source.

With our research design, we cannot overstretch our conclusions to other federal countries (Goertz, 2006; Sartori, 1970). As our hypothesis was generated using non-random case studies sampled from a single political system, further analysis (employing other methodologies, such large-N studies) are necessary to test the generalization of our conclusions against other political systems. Selecting subnational cases allows us to increase the number of observations and to have more controlled comparisons, since they are extracted from the same political unit, where there is less context variation (Snyder 2001). With a subnational comparison, we can therefore mitigate problems that are characteristic of a small-N research design (King, Keohane and Verba 1994). More importantly, we want to build a framework of analysis and we expect that researchers make adjustments when applying our framework to other countries.

Inequality reducing public policies are important in a federal system, which is said to create economic growth at the expense of higher inequality. In recent years, Brazil was able to reduce inequality to a large extent because it reformed its federal system implementing inequality-reducing transfers, such as Bolsa Família, National Education Funds and National Health Services. Most transfers can be improved, better administered and monitored, this, however, goes beyond the scope of this paper. Figure 4 shows the relationship between federal transfers and social inequality within a federal system – that is said to generate social inequality.

Figure 4: Balancing Federalism and Equality



Probably the most powerful single explanation for inequality reduction in the framework of the Brazilian federal system is related to the changing nature of Brazilian public spending in the last decade. In the next section, we examine different types of federal transfers (or public spending) and their consequences on inequality.

Reducing Inequality through Social Spending

The 1988 Constitution established a “division of labor” within Brazilian federalism: the federal government takes care of targeted public spending and subnational governments deal with universal services. The division of labor mitigates the problem of race to the bottom within the federation (Peterson & Rom, 1990; Peterson P. , 1995), because social programs funded by the federal government aid the poor. Per capita social spending more than doubled from 1995 to 2009, rising from 11.24% to 15.80% of the GDP. From 1995 to 2009, spending on retirement and pensions increased by 156%,

from 5% to 7.28% of the GDP (Castro, Mostafa, & Souza, 2011). The increase in spending happened because of the increase in the minimum wage, which corresponds to two-thirds of all retirement pensions and benefits to workers unable to work. During 2009, only 3% of the extremely poor were retired and less than 1% were employed in the formal sector (IPEA, 2011).

The greatest innovation in terms of social spending in Brazil is Bolsa Família, which transfers benefits to poor families according to the number of members, provided that families' children attend school and take vaccines (Soares, Ribas, & Osório, 2010). Women are the holders of the benefit, causing abrupt changes in poor families' patriarchal gender relations. Similar programs to Bolsa Família were pioneered by the municipality of Campinas in 1994, under mayor José Roberto Magalhães Teixeira (PSDB), and by the Federal District (Brasília), under governor Cristovam Buarque (PT) (Ferro & Kassouf, 2005). The Cardoso administration brought the program to the federal government, and the Lula government gave it its current format. Municipalities and states register the beneficiary families. As the resources and norms of Bolsa Família are from the federal government, we do not have the problem of race to the bottom. Federal spending on social policy programs, including Bolsa Família, grew from 0.08% in 1995 to 1.08% of the GDP in 2009, a 2,212.50% increase (Castro, Mostafa, & Souza, 2011). Bolsa Família alone reached about 0.4% of the GDP in 2011. Experts estimate that Bolsa Família was responsible for 13% of Brazil's fall in inequality, i.e., a 0.009 drop in the Gini coefficient between 2001 and 2011 (Neri & Souza, 2012).

Public Spending on Education

The 1998 Constitutional reform changed education spending in Brazil. The federal government began to withhold part of the unconditional funds transferred to states and

municipalities, restricting its release to school enrollment. National education funds – the Fundef from 1998 to 2006 and Fundeb, starting in 2007 – were created by a constitutional amendment. Each state fund receives federal transfers and redistributes the capital according to the number of students in each government (either state or municipality). As a result, the federal government transformed part of the unconditional transfers into conditional transfers. The transformation created a competition for resources between states and their respective municipalities. Competition allows that a certain level of government divert resources from another level so that the first level can increase enrollments quickly. The practical consequence of the policy was the universalization of basic education enrollments (Bruns, Evans, & Luque, 2012). There was another reform in 2006. The politics of education funds changed the payoffs of subnational governments, making the creation of school places a source of revenue. The 2006 reform increased the amount of withheld resources for education funds and expanded its reach to early childhood education (up to six years old) and high schools. In addition, the federal government supplemented the poorer states' education budget to make them achieve a national minimum spending per student. The national education fund is the only Brazilian intergovernmental redistribution fund with truly equalizing criteria. The education funds work as follows: the government allocates resources to a state fund according to a ranking of each state's monetary value per student, favoring those states that have lower values. The process is repeated until the government spends all of its annual resources for state funds. Therefore, the poorer the State is, the greater the federal government supplementation of those poorer states' education budgets is. The new dynamics of federal education transfers caused a fast increase in federal spending. From 2006 to 2009, federal spending on education increased by 48.94%, from 0.81% to 1.03% of the GDP (Castro, Mostafa, & Souza, 2011).

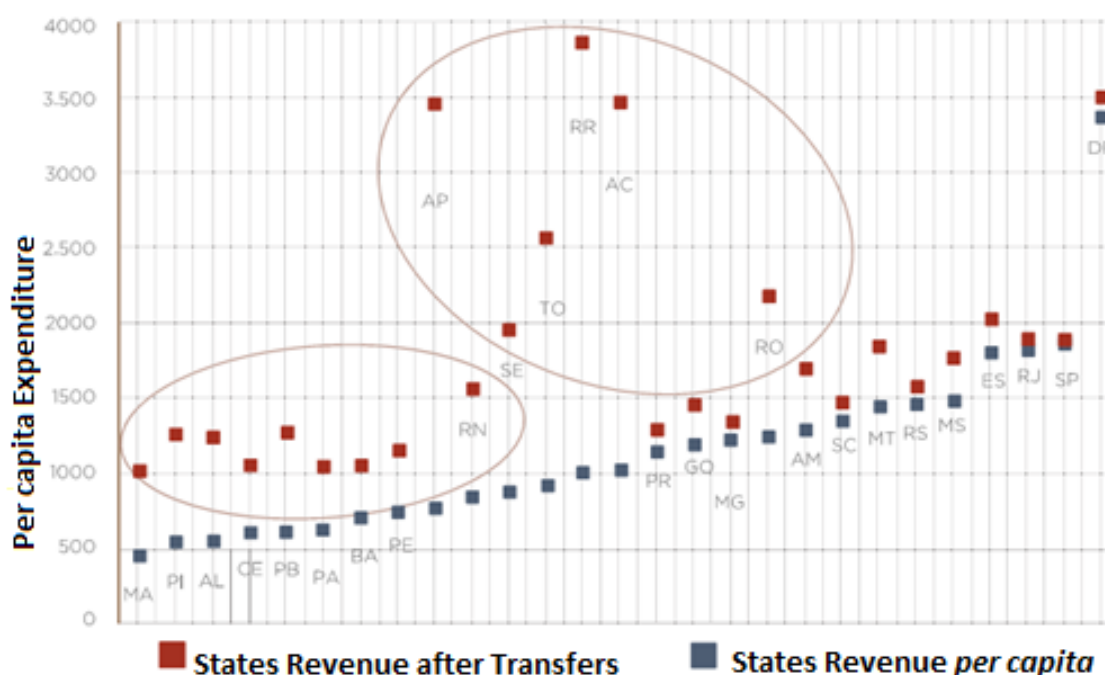
The national education fund is one of the most successful Brazilian public policies of the last few decades. However, it still has many problems. As resources were redistributed according to a simple quantitative criterion (the number of enrollments), improving the quality of education was secondary. Despite the inclusion of virtually all children in schools, the quality of education in Brazil is still very poor (Bruns, Evans, & Luque, 2012). Current Brazilian growth has benefited from the increasing number of somewhat educated workers that have recently entered the labor market. After all, it is better to have some education than no education at all. Education funds were one of the main reasons for the improvement of the Brazilian education system. Nowadays, it is common sense in Brazil that the country has to improve the quality of its education to sustain its current economic growth. If not, Brazil will have a shortage of educated people in strategic areas for development, such as engineering and medical science.

Unconditional Transfers: Keeping the Status Quo

Another characteristic of Brazil's federalism is the unconditional intergovernmental transfers. They have grown substantially since the 1988 Constitution. It reached 6% of the GDP in 2006 (Mendes, Miranda, & Cosio, 2008). Because of ill-defined rules in the distribution of resources, they have had limited impact on inequality reduction when compared to social spending. The largest fund of unconditional transfer to states consists of 22.5% of both value-added tax and federal income tax. The rule for distribution of resources between states should have been established in 1989 – one year after the promulgation of the new Constitution. Legislators, however, were unable to reach an agreement on the rule. As a result, the percentage of the previous year was established as a temporary distributional rule until they agree on a better criterion. Figure 5 shows the Brazilian states ranked according to their per capita revenue. In

Figure 5, we can also compare state revenue before and after government transfers. We can see that the end result of distributions favors circled states with average per capita revenue, rather than low per capita revenue states. For example, the respectively poorer states in Figure 5, Maranhão (MA), Piauí (PI), Alagoas (AL), Ceará (CE), Paraíba (PB), Pará (PA), Bahia (BA) and Pernambuco (PE) have benefited less than Sergipe (SE), Tocantins (TO), Roraima (RR), Acre (AC) and Rondônia (RO). As expected, richer states such as Rio de Janeiro (RJ) and São Paulo (SP) have not benefited much from the transfers.

Figure 5: Per capita Federal Spending and State Revenue



Source: (Prado S. , 2012).

As for municipalities, the criterion for resource distribution of federal transfers, created in 1967, provides more resources per capita to municipalities with less population.

Regardless of their level of development, large cities receive fewer resources per capita and small municipalities receive more resources per capita. As a result, the distribution of resources is neutral regarding the HDI (Human Development Index), which creates great social injustices by benefiting rich small municipalities and punishing poor big ones (Mendes, Miranda, & Cosio, 2008).

State transfers to municipalities are composed of 25% state value-added tax. As 75% of the amount must be distributed according to the value generated in the jurisdiction of the municipality. State value-added tax has become highly regressive. Most industrialized cities, especially those with a small population, benefit the most. The poorest municipalities are penalized. Mendes, Miranda and Cosio (2008, p. 49) showed that the higher the HDI, the greater the chance of municipalities receiving state transfers. As a consequence, state transfers increase regional inequality, rather than decreasing it.

Oil royalties have the same effect. During 1988, the Brazilian government started to charge royalties to compensate for the environmental damage caused by oil extraction. Royalties were either intended for producer states or municipalities. Such transfers have grown enormously in recent years. New oil reserves were discovered and the government taxed the oil sector even more. The values generated by such transfers became massive. They also became a significant portion of the revenue of some states, especially in Rio de Janeiro and Espírito Santo. The effect of royalties benefited only two already rich states and a few municipalities. There is also evidence that oil resources neither ameliorate social indicators nor the environmental management of recipient governments. They were basically appropriated by local elites (Afonso, Soares, & Castro, 2013).

Finally, high unconditional transfer volumes create negative incentives on the behavior of subnational governments. Unconditional transfers tend to diminish the

accountability and fiscal responsibility of governments that do not have to do much for getting their money from federal transfers (flypaper effect). They also discourage the efficient management of resources, because they reduce the symmetry between local contributions and local public benefits (Wyckoff, 1988; Strumpf, 1998). Therefore, besides their limited redistributive effect, unconditional transfers may be hindering the efficiency of the Brazilian public sector in several states and municipalities.⁵

Tax System: the Dark Side of Brazilian Federalism

As shown earlier, the changes in Brazilian public spending are key to the current economic development of Brazil. The impact on economic development was mainly because of the impact of public spending on aggregate demand. Brazil still faces major obstacles to expand the supply of goods and services. As a result, its GDP growth is still weak when compared to other fast-growing nations such as China and India. Among the various constraints facing the country to increase its GDP, we highlight one: the tax system.

The Brazilian social welfare system created after the 1988 Constitution is expensive in fiscal terms. From 1987 to 2008, the tax burden went from 23.8% to 34.8% of the GDP, an increase of 43.21%. Around 65% of tax increases are due to federal taxes, while 23.63% are due to increases in state taxes, and 10.90% are due to increases in municipal taxes (Palos, 2011). “Social contributions” (a kind of federal tax) increased in this period because they are not shared with subnational governments. As a result, the weight of indirect taxes also increased, making the tax system more regressive. In other

⁵There is a lot of variation in federalism in the developed world. In terms of health policies, for example, Australia has many conditionalities for their transfer programs from the Federal government to States, while Germany adopts a more decentralized system and Canada leaves most of the big policy decisions to provincial governments (Banting and Corbett 2002).

words, Brazil's constitutional finance regulation induces the federal government to increase more regressive taxes.

According to some authors, the state value-added tax accounts for slightly over half of all indirect taxes, being the main responsible factor for the regressivity of Brazil's indirect taxes (Siqueira, Nogueira, & Souza, 2010). Indirect taxes are regressive, since they tend to place a greater burden on poorer households. The poor consume a large share of their income, instead of saving or investing it. Brazil is a rare case of a federal country where the largest value-added tax is at the state-level. Brazil's uniqueness raises a series of problems, for instance, the "source/destination problem". All goods have a production location and a location of consumption. Eventually, a commodity can be consumed in the same location where it is produced, but the consumption in the same location is not the rule when we think of tradable goods. In terms of equity, the best solution would be to tax the jurisdiction of consumption because consumers are more scattered than producing centers. Under the principle of symmetry between local contributions and local public spending, the destination principle is the most desirable one – usually who bears the tax burden is the consumer, once companies transfer the tax cost onto the price of goods. The source principle implies that consumers of an industry should pay a tribute to the jurisdiction where the industry is located. In Brazil, the most industrialized regions are the richest ones. Source taxation is a type of hidden inter-jurisdictional transfer. It transfers resources from poorer and rural regions to richer and more industrialized ones. The source principle has at least one advantage: it is easier to charge. The dilemma does not exist in countries where value-added tax is at the national level. Federal government levies the source taxation (where it is easier) and redistributes within the destination of the taxation (where it is fairer). In countries that have a federal value-added tax, the source and destination jurisdiction is always the same: the national community.

According to the World Bank's Doing Business project (2013), Brazil is the country where companies have the highest compliance cost, i.e., the time required to prepare, file and pay taxes. It takes 2,600 hours on average only to pay taxes.⁶ More than half of the time to pay taxes in Brazil (1,374 hours) is due to state value-added tax (Doing Business, 2013). As the state value-added tax is partly monitored by the source state and partly by the destination state, businesses are under dual authority in interstate transactions. A company with national sales must deal with 27 different laws, one for each state (including the Federal District). In general, Brazilian tax laws are not uniform. Often a law from one state conflicts with a law from another state. Autonomy from state value-added tax encourages poorer states to attract investments to their jurisdictions by means of tax exemptions. Loser states counterattack by creating special laws to nullify the effects of policies promoted by poorer states. As a result, the system as a whole has become extremely complex and inefficient.

Concluding Remarks

Brazil has been successful in reducing inequality in the last decade. Many have argued that it is difficult to balance economic growth and inequality reduction unless the country promotes some sort of technological or institutional change. Balancing the two desired goals seems to be even more difficult since Brazil is a federation. Most authors

⁶ "Time is recorded in hours per year. The indicator measures the time taken to prepare, file and pay 3 major types of taxes and contributions: the corporate income tax, value-added or sales tax, and labor taxes, including payroll taxes and social contributions. Preparation time includes the time to collect all information necessary to compute the tax payable and to calculate the amount payable. If separate accounting books must be kept for tax purposes—or separate calculations made—the time associated with these processes is included. This extra time is included only if the regular accounting work is not enough to fulfill the tax accounting requirements. Filing time includes the time to complete all necessary tax return forms and file the relevant returns at the tax authority. Payment time considers the hours needed to make the payment online or at the tax authorities. Where taxes and contributions are paid in person, the time includes delays while waiting" (Doing Business Methodology. Paying taxes <http://www.doingbusiness.org/methodology/paying-taxes>).

that have researched the relatively unexplored relationship between federalism and inequality believe that federalism causes inequality (Wildasky, 1986; Linz & Stepan, 2000), albeit the literature is not uncontroversial about the effect of federalism on economic growth (Weingast, 1995; Wibbels, 2000).

In this paper, we explored the institutional changes in Brazilian federalism. We argue that Brazil has reduced inequality by spending on the poor. Social programs such as Bolsa Família and better spending on education have helped Brazil to decrease its social inequalities. The chaotic and inefficient Brazilian tax system is still an obstacle that has to be overcome for Brazil to keep its growing and decreasing inequality.

Federal transfers (or spending) have three different effects: decreasing inequality, preserving the status quo, and increasing inequality. Bolsa Família and spending on education helped Brazil to reduce inequality. Unconditional transfers to States and municipalities have had a much more ambiguous effect. Finally, the Brazilian tax system is still favoring the richest regions and individuals. Brazilian researchers and policy-makers should pay careful attention to the consequences of the cumbersome and inefficient tax system of Brazil. Similarly, Brazil should either design better unconditional transfers so as to promote socioeconomic equality, or get rid of them all together

Replacing federalism by other forms of government is a difficult task. The 1988 Brazilian Constitution established that federalism is an entrenched clause. In other words, replacing federalism in Brazil is almost impossible. Replacing federalism is also difficult in other countries, even if they do not have a federal entrenched clause as Brazilians have. It requires a large institutional change that normally happens in transitional periods (either to democracy or to dictatorship). Knowing, however, that a certain form of government creates systematic problems is useful to help to mitigate them. This is why it is more useful from the policy point of view to discuss ways to

reform federalism “from inside” than theoretically criticizing federalism without proposing any solution to solve the highlighted problem.

Figure 6 classifies inter-jurisdictional transfers according to our typology – inequality reducing transfers, status quo maintaining transfers, and inequality increasing transfers. Reforming federal monetary transfers (e.g. Bolsa Família) is one of the best formulas to fight inequality. Similarly, intergovernmental transfers on spending with high social and economic returns, such as Brazilian education funds, help to fight inequality. In addition, there are transfers such as the ones illustrated by the Brazilian tax system that perpetuate inequalities. In sum, reforming Brazilian institutions is almost mandatory to maintain the country on a prosperous path.

Figure 6: Evolution of Brazilian Inter-Jurisdictional Transfers through Time

	1960 - 1970	1980s	1990s	2000s
Inequality Reducing Inter-Jurisdictional Transfers		1988 Constitutional new social rights	Education Funds	Bolsa Família and increment of education funds
Status Quo (or Ambiguous) Maintaining Inter-Jurisdictional Transfers	Unconditional transfers: National-to-State transfer; National-to-Municipality transfer; and State-to-Municipality transfer	Increment of all intergovernmental transfers		
Inequality Increasing Inter-Jurisdictional Transfers	Tax System: Federal and State value-added taxes	Increment of State value-added tax	Increase of “social contribution”, “Tax War”	Oil Royalties

Bibliografia

Afonso, José Roberto Rodrigues, Julia Morais Soares, and Kleber Pacheco de Castro. Avaliação da estrutura e do desempenho do sistema tributário Brasileiro: Livro branco da tributação Brasileira. Banco Interamericano de Desenvolvimento - BIB. Disponível em: <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37434330> (acessado em 22/03/2013), 2013.

APSA. The Persistent Problem: Inequality, Difference, and the Challenge of Development. Report of the Task Force on Difference, Inequality, and Developing Societies, Washington, DC: The American Political Science Association, 2008.

Atkinson, Anthony B., and Joseph E. Stiglitz. Lectures on Public Economics. New York and London: McGraw-Hill Book Company, 1980.

Banting, Keith, and Stan Corbett. Health Policy and Federalism: A Comparative Perspective on Multi-Level Governance. Queen's University: Institute of Intergovernmental relations, 2002.

Barros, Ricardo Paes, Mirela de Carvalho, Samuel Franco, e Andrezza Rosalem. "Impacto do Projeto Jovem de Futuro." 2012: 214-226.

Beramendi, Pablo. The Political Geography of Inequality: Regions and Redistribution. Cambridge: Cambridge University Press, 2012.

Berg, Andrew G., and D. Jonathan Ostry. Inequality and Unsustainable Growth: Two Sides of the Same Coin? IMF Staff Discussion Note, Washington, DC: IMF, 2011.

Bruns, Barbara, David Evans, and Javier Luque. Achieving World-Class Education in Brazil. Washington, DC: World Bank, 2012.

Buchanan, James M. "Federalism As an Ideal Political Order and an Objective for Constitutional Reform." *Publius: The Journal of Federalism*, 25(2) de 1995: 19-27.

Canuto, Octaviano. Huffington Post. March 29, 2013. http://www.huffingtonpost.com/otaviano-canuto/bucking-the-trend-poverty_b_1574987.html (accessed March 29, 2013).

Castro, Jorge A, Joana Mostafa, and Pedro Souza. "Gastos com a Política Social: alavanca para o crescimento com distribuição de renda." Comunicado IPEA, 2011: 1-17.

Doing Business. Doing Business 2013, Brazil. Washington: Doing Business, World Bank Group. Disponível em: <http://www.doingbusiness.org/~media/giawb/doing%20business/documents/profiles/country/BRA.pdf>, 2013.

Ferro, Andrea R., and Ana L. Kassouf. "Avaliação do impacto dos programas bolsa-escola sobre o trabalho infantil no Brasil." Pesquisa e Planejamento Econômico 35, no. 3 (2005): 417-444.

Goertz, Gary. Social Science Concepts: A User's Guide. Princeton: Princeton University Press, 2006.

IPEA. Mudanças Recentes na Pobreza Brasileira. Comunicados do IPEA, Brasília: IPEA, 2011.

King, Gary, Robert O. Keohane, and Sydney Verba. Designing Social Inquiry: Scientific Inference in Qualitative Research. Princeton: Princeton University Press, 1994.

Kuznets, Simon. "Economic Growth and Income Inequality." American Economic Association, 1955: Vol. 45, No. 1 (Mar., 1955), pp. 1-28.

Linz, Juan J, and Alfred Stepan. Inequality Inducing and Inequality Reducing Federalism: With Special Reference to the 'Classic Outlier' — the U.S.A. First draft of paper for the XVIII World Congress of the International Political Science As, 2000.

Mendes, Marcos, Rogério B. Miranda, and Fernando B. Cosio. "Transferências Intergovernamentais no Brasil: diagnóstico e proposta de reforma." Consultoria Legislativa do Senado Federal (Textos para Discussão 40), 2008: 1-111.

Montinola, Gabriella, Yingyi Qian, e Barry Weingast. "Federalism, Chinese style: The political basis for economic success in China." World Politics (48.1), 1996: 50-81.

Neri, Marcelo Côrtes, and Pedro Herculano Cavalcanti Ferreira de Souza. "A Década Inclusiva (2001-2011): desigualdade, pobreza e políticas de renda." Comunicado IPEA, 2012: 1-43.

Oates, Wallace O. *Fiscal Federalism*. New York: Harcourt Brace Jovanovich, 1972.

Obinger, Herbert, Stephan Leibfried, and Francis Castles. *Federalism and the Welfare State: New World and European Experiences*. Edited by Herbert Obinger, Stephan Leibfried and Francis Castles. Cambridge: Cambridge University Press, 2005.

Palos, Aurélio Guimarães Cruvinel e. "A Constituição de 1988 e o Pacto Federativo Fiscal." Estudo - Câmara dos Deputados, 2011: Disponível em: http://www2.camara.leg.br/documentos-e-pesquisa/publicacoes/estnottec/tema10/2011_480.pdf.

Pastore, José, and Hélio Zylberstain. *Social mobility in Brazil 1973-1982: the role of education in status determination*. São Paulo: EDUSP, 1990.

Peterson, Paul. *The Price of Federalism*. Washington, DC: Brookings Institution Press, 1995.

Peterson, Paulo, and Mark Rom. *Welfare Magnets: A New Case for a National Standard*. Washington, DC: Brookings Inst Pr, 1990.

Piketty, Thomas, and Emmanuel Saez. "Income Inequality in the United States, 1913–1998." *The Quarterly Journal of Economics* 118, no. 1 (2003): 1-41.

Pochmann, Márcio. "Políticas sociais e padrão de mudanças no Brasil durante o governo Lula." *SER Social*, 2011: v. 13, n. 28, p. 12-40, jan./jun.

Prado, S., e E. G. C Cavalcanti. *A guerra fiscal no Brasil*. São Paulo; Brasília: FUNDAP; FAPESP; IPEA, 2000.

Prado, Sérgio. *Equalização e Federalismo Fiscal: Uma Análise Comparada*. Rio de Janeiro: Fundação Konrad Adenauer, 2006, 464.

Prado, Sérgio. *FPE: Equalização Estadual no Brasil, Alternativas e Simulações para a Reforma*. Rio de Janeiro: FGV Projetos e IDP, 2012.

Ravallion, Martin. "A Comparative Perspective on Poverty Reduction in Brazil, China, and India." *The World Bank Research Observer*, 8 de March de 2010: 71-104.

Sartori, Giovanni. "Concept Misformation in Comparative Politics." *American Political Science Review* 64, December 1970: 1033-53.

Sen, Amartya. *On Economic Inequality*. Oxford: Oxford University Press, 1997.

Siqueira, Rozane Bezerra de, José Ricardo Bezerra Nogueira, e Evaldo Santana de Souza. "Alíquotas Efetivas e a Distribuição da Carga Tributária Indireta entre as Famílias no Brasil." Concurso "Tópicos Especiais de Finanças Públicas" – Menção Honrosa, Secretaria do Tesouro do Brasil, 2010: Disponível em: http://www3.tesouro.fazenda.gov.br/Premio_TN/XVPremio/financas/MHtefpXVPTN/Tema_4_MH.pdf.

Snyder, Richard. "Scaling Down: The Subnational Comparative Method." *Studies in Comparative International Development* 36, no. 1 (Spring 2001): 93-110.

Soares, Fábio Veras, Rafael Perez Ribas, and Rafael Guerreiro Osório. "Evaluating the Impact of Brazil's Bolsa Família: Cash Transfer Programs in Comparative Perspective." *Latin American Research Review*, 2010: 173-190.

Strumpf, K. S. "A Predictive Index for the Flypaper Effect." *Journal of Public Economics*, 69, 1998: 389-412.

The Economist. Growth: Is inequality a hazard or an indicator? London, April 11, 2011.
Tiebout, Charles M. "A Pure Theory of Local Expenditures." *Journal of Political Economy*, October 1956: 416-424.

Varsano, Ricardo. "A evolução do sistema tributário brasileiro ao longo do século: anotações e reflexões para futuras reformas." *Pesquisa e Planejamento Econômico*, v. 27, n. 1, 1997: p. 1-40.

Weingast, Barry. "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development." *Journal of Law, Economics, and Organization*, April de 1995: 1-31.

Wibbels, Erik. "Federalism and the Politics of Macroeconomic Policy and Performance." *American Journal of Political Science*, 2000: 687-202.

Wildasky, Aaron. "Federalism Means Inequality." *Society*, 1986: 41-49.

Williamson, Jeffrey G. *Regional Inequality and the Process of National Development: A Description of the Patterns*. Chicago: The University of Chicago Press, 1965.

World Bank. "World Bank national accounts data, and OECD National Accounts data files." GDP growth (annual %) | Data | Table. 2013. <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries?display=default> (acesso em 17 de 03 de 2013).

Wyckoff, P. G. "A Bureaucratic Theory of Flyppaer Effects." *Journal of Urban Economics*, 1988: 115-129.