The Urban Property Tax (IPTU) in Brazil: An Analysis of the Use of the Property Tax as a Revenue Source by Brazilian Municipalities

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Abstract

This paper analyzes the relative importance of the property tax as a revenue source for Brazilian municipalities. The paper, which was originally written in Portuguese in 2010, provides a diagnostic of property tax revenues in 2007 based a sample of 5,295 Brazilian municipalities (95% of the total). The paper describes the legal and administrative factors that affect property tax collections and concludes with an assessment of the potential to improve the performance of the tax. A case study of the municipality of Recife illustrates the analysis. The data show that countrywide the property tax in 2007 averaged US$46.50 per capita, although most municipalities report revenues below the national average. To a large extent, the national average reflects the property tax performance of the major cities. There are significant variations across municipality associated with city size; socioeconomic characteristics, local capacity to administer the tax; and regional attributes. Inter-government transfers also affect property tax revenues and the extent of the impact depends on the specific conditions of the municipality and on the mix of own-revenue sources at local level. Notwithstanding large differences across jurisdictions, the main sources of local tax revenues are the tax on services (ISS) and the property tax (IPTU) accounting respectively for 46 and 28 percent of total own-tax revenues. In most municipalities, an increase in property tax revenues would require better and more updated territorial cadastres and more reliable property valuations. The lack of political will to introduce tax reforms is one of the main obstacles improve the performance of the tax.

Key words: Determinants of property tax collections, public finances, municipal finances, Brazil

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List of Abbreviations and Acronyms

Abrasf	Associação Brasileira de Secretarias de Finanças das Capitais (Brazilian Association of Secretaries of Capital Finances)
BID	Banco Interamericano de Desenvolvimento (Inter-American Development Bank)
BNDES	Banco Nacional de Desenvolvimento Econômico e Social (National Bank for Economic and Social Development)
CTN	Código Tributário Nacional (National Tax Code)
FPM	Fundo de Participação dos Municípios (Municipal Participation Fund)
LDO	Lei de Diretrizes Orçamentárias (Budgetary Directives Law)
LOA	Lei Orçamentária Anual (Annual Budget Law)
LRF	Lei de Responsabilidade Fiscal (Fiscal Responsibility Law)
IBGE	Instituto Brasileiro de Geografia e Estatística (Brazilian Geographic and Statistics Institute)
Ipea	Instituto de Pesquisa Econômica Aplicada (Applied Economics Research Institute)
IPTU	Imposto Predial e Territorial Urbano. Competência Municipal (Urban Property Tax. Municipal Authority)
IR	Imposto de Renda. Competência Federal. Uma parte da receita é repartida com estados e municípios através dos fundos de participação (Income Tax. Federal Authority. Part of the revenue is shared with states and municipalities through participation funds)
IRPF	Imposto de Renda Retido na Fonte. Competência Federal (Income Tax Withheld at the Source. Federal Authority)
ISS	Imposto Sobre Serviços. Competência Municipal (Tax on Services. Municipal Authority)
ITBI	Imposto sobre Transmissão de Bens Imóveis. Competência Municipal (Real Estate Transfer Tax. Municipal Authority)
NFS-e	Nota Fiscal Eletrônica de Serviços (Electronic Fiscal Receipt for Services)
PIB	Produto Interno Bruto (Gross Domestic Product)
PMAT	Programa de Modernização da Administração Tributária (Tax Administration Modernization Program)
PNAFM	Programa Nacional de Apoio à Gestão Administrativa e Fiscal para os Municípios Brasileiros (National Support Program for Administrative and Fiscal Management by Brazilian Municipalities)
STN	Secretaria do Tesouro Nacional (National Secretariat of the Treasury)

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The Urban Property Tax (IPTU) in Brazil:
An Analysis of the Use of the Property Tax as a Revenue Source by Brazilian Municipalities

Introduction

The purpose of this study is to analyze the relative importance of the urban property tax (IBTU) as a source of revenue for Brazilian municipalities. In carrying out the analysis we studied the economic, legal, and administrative factors that affect the level of tax collection by local jurisdictions.

For all municipalities, the average IPTU revenue per capita was about US$ 46.50 in 2007. However, most municipalities did not reach the national average. In fact, IPTU revenues did not exceed US$ 5.00 per capita in more than half of the local jurisdictions.

Understanding the factors that contribute to this very uneven picture is the starting point for any attempt to increase the role of the IPTU in municipal tax revenues.

Brazilian cities are remarkably diverse in size and socioeconomic characteristics, as well as in taxing practices. The opportunities to expand local tax revenues reflect this heterogeneity. In many cities it is possible that IPTU revenues are constrained by the weak local economy, for instance. There may also be cases where local tax authorities are not interested in fully exploring the revenue potential of the IPTU because they have access to other sources of funds. The Brazilian intergovernmental transfer system gives no incentives to local governments to increase their own revenues. Intergovernmental transfers benefit smaller municipalities and in those municipalities voters are usually much closer to local authorities than in large cities. To the extent that local governments count on relatively high federal transfers per capita to finance their activities, there is little incentive on their part to incur the political costs associated with fully exercising their own taxing authority. This is particularly true in the case of the IPTU, a direct tax that affects specifically the segment of the population that owns property.

In certain circumstances, municipalities may want to make better use of their taxation potential, but face legal and/or administrative obstacles to do so. The ability to change and to enforce the legal provisions for imposing the property tax depend; to a large extent, on how developed local institutions are.

Our hypothesis in this study is that, in a country marked by great disparities such as Brazil, there is no single explanation for the differences observed across municipalities as to the use of their own-tax revenue potential. Thus, there is no single model that local authorities can use to boost local tax revenues.

Although the IPTU is one of the more traditional taxes in the Brazilian tax system, this study will attempt to show that there are several legal ambiguities that add to the difficulties in imposing

the tax. Certainly, reducing these ambiguities is a condition for increasing the use of the tax and its revenues.

To find ways to improve the performance of the property tax in Brazil is a great challenge that calls for answers to many specific questions. Some of these key questions are: How do factors such as the local economy, intergovernmental fiscal relations, difficulty in collecting and administering the tax, the legal framework, the resources available, and the level of development of the tax collections mechanism affect the performance of the IPTU as a source of local financing. The aim of this paper is to help clarify these questions.

The paper is organized in two parts. Part 1 presents an overview of IPTU revenues based on a sample of 5,295 municipalities for which data were available for 2007.[1] This chapter starts by summarizing the literature on the IPTU. It then describes the taxing power of local governments; the importance of IPTU compared to other local taxes and its share of municipal own-revenue; IPTU revenues per capita; resources available to administer the tax; and the potential for improving the performance of the tax. To facilitate presentation, the information is shown in summary form, using a classification of municipalities into analytical groups. The pertinent tables are shown in Appendix A.

Part 2 describes the legal and administrative features that affect IPTU collections in Brazil covering: the tax base and taxpayer, tax rates including progressive tax rates, tax exemptions and other benefits, and difficulties related to collection enforcement. The last chapter summarizes the findings and draws implications for municipal tax policy and local finances. Appendix B presents a case study of the performance of the IPTU in the municipality of Recife to illustrate the analysis. Appendix C describes the methodology and the sources of data. Appendix D presents the database used in the analysis.

1. An Overview of Property Tax in Brazil

Literature Review

The property tax is not an important source of revenue for the great majority of Brazilian municipalities. Prior studies show that this situation is not new, nor are the reasons for it.

The structure of the Brazilian tax system in effect today was defined by reforms introduced by the federal constitution of 1988.[2] At that time, Giffoni and Villela (1987) conducted a study of property taxes in the Brazil, showing how little these taxes affect overall revenues. The authors attribute the limited importance of the tax to a lack of technical and human resources at municipal level to assemble a fairly complex administrative structure required to maximize the potential of the property tax as a revenue source. Furthermore, municipal authorities face great political vulnerability as taxpayers pressure against updating property valuations.

[1] This 95 percent sample is fairly representative of the 5,564 municipalities in the country.
[2] For more details about the structure of the national tax system, see Afonso et al. (1998).

A more recent study by Villela (2001) arrives at similar conclusions. The author notes that despite a fixed tax base which provides a stable flow of revenues not dependent upon economic cycles, the property tax takes second place in the composition of municipal own-tax revenues. Generally, the main source of local revenue is a tax on services (ISS). Villela (2001) uses 1996 data to show that property tax revenues accounted for around 10 percent of total municipal revenues in state capitals and only 6 percent in the other municipalities. For the same year; he estimates the national average at 7 percent.[3] Classifying municipalities by geographic region, the same study shows that property tax revenues are lower in municipalities located in the north and northeast regions, and more important in those located at the central south region.

Among other reasons, Villela (2001) explains the lackluster performance of the property tax as reflecting the political pressures on taxing authorities that levy a direct tax, as compared to an indirect tax embedded in the price of goods or services. Indirect taxes account for the bulk of tax revenues in Brazil, and taxpayers are less aware of tax burden when paying indirect taxes. In contrast, any increase in the highly visible direct property tax provokes resistance from taxpayers.

Another important reason why property tax collections are low is the high incidence of illegal/informal properties that are not in the tax rolls. Similarly, building expansions, improvements and reforms frequently are also not reported or registered in the property cadastre. Villela (2001) calls attention to the difficulties faced by local authorities in assessing property values. The stock of real estate in Brazilian cities is highly heterogeneous both in terms of land tenure and property characteristics, leading to assessment errors such as very different values for similar properties or similar values for clearly different properties.

There are also systemic incentives for noncompliance with the property tax. Brazil has no tradition of executing tax delinquent properties through the juridical system and public auctions. And when tax delinquents are taken to court the legal process is time consuming and expensive. Thus, even though the property tax has the advantage of a relatively stable tax base compared with taxes levied on financial flows, real estate properties are rarely used as guarantee of tax payment because execution in court rarely occurs.

Notwithstanding these difficulties, Villela (2001) suggests that there is a significant potential for raising property tax revenues even in the poorest regions of Brazil by modernizing tax administration and by introducing some legal changes. Efforts are also needed to make the property appraisal process nonpolitical in all jurisdictions, ensuring that the fair property market value is determined by technical criteria.

Afonso and Araujo (2000) use a sample of 5,046 municipalities to estimate municipal own-revenues as percentage of GDP at 1.6 percent in 1998. Of this total, the ISS and IPTU accounted for 46 and 28 percent, respectively, and 26 percent from other sources. Although the property tax has a long tradition at the municipal level, the authors report that more cities (4,807) collected ISS than IPTU (4,527).

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[3] This estimate considered all municipal revenues, current and capital, generated by local taxes and fees, transfers from other levels of government and revenues from private sector contracts.

De Cesare (2005) confirms the prevalence of the ISS tax over the property tax as a source of municipal own-revenues, accounting for 37 and 30 percent, respectively, of total municipal own-revenues in 2001. The author considers the performance of the property tax in Brazil to be below its effective potential as source of local revenue. Compared to countries such the United States, United Kingdom, New Zealand and Australia for example, where the property tax represents 2 to 3 percent of GDP, in Brazil it is less than 0.5 percent of GDP.

In practice, the annual property tax bill is lower than the monthly condominium fee paid by the majority of apartment dwellers in urban areas. De Cesare (2001) reports average property tax revenue of R$36 per capita (US$14.90) in 2001. Ranking cities by population size, the averages vary from R$ 43.80 per capita (US$18.10) in large cities to R$ 4.90 per capita (US$2) in smaller cities. The author attributes the poor performance of the tax to dysfunctional property cadastre records that lack maintenance and updating, plus the difficulties local authorities have in assessing property at fair market values. Even in jurisdictions that are technically capable of managing the property tax well, there are legal barriers that limit the collection potential. One such hurdle is the requirement to obtain the approval of the local legislative council for general assessments and assessment adjustments whenever the adjustment exceeds the inflation rate. De Cesare (2001) finds a culture of low property tax collection in Brazil to be associated with the high visibility of the tax. Changing this situation leads to conflicts with taxpayers and generates political pressures.

Carvalho Jr. (2006) reports that property tax collections stayed at about 0.5 percent of the GDP since 2000, or the equivalent of 6.4 percent of current municipal revenues. The author corroborates De Cesare's (2001) findings regarding the low importance of the tax by international standards, and reports that property tax revenues increase with city size. For cities with a population over 200,000 inhabitants, average property tax revenues represented 9.4 percent of current municipal revenues from 2000 to 2004. In small towns with up to 5,000 inhabitants, that share was only 0.5 percent.

The better performance of the property tax in larger cities is attributed by Carvalho Jr. (2006) to two factors. First, there are large economies of scale in tax administration: large cities have lower unit costs for property assessments, cadastre updates, computerized and cross-referenced cadastre records, and legal and auditing services associated with the tax. Second, the distribution of intergovernmental transfers favors smaller municipalities, which in turn increases the importance of own-revenues in the municipal budgets of larger cities.

Macdowell (2007) confirms the greater importance of the property tax as a share of municipal own-revenues in large cities and in cities located in the central south region of Brazil. In 2006 the author estimates average property tax revenues at 0.5 percent of current municipal revenues for municipalities of less than 5000 inhabitants, and 11.7 percent for cities of one million inhabitants or more. Regionally these indicators were 0.1 and 0.6 percent respectively in the northeast region, compared to 0.6 and 13.9 percent respectively in the southeast region.

Clearly the studies summarized in this section concur in assigning relatively low importance to the property tax as a source of municipal revenue in Brazil.

Municipal Taxation Authority

Municipal own-revenues are those generated by local taxes, fees, and betterment contributions that fall within the sphere of responsibility of local governments, as established by the 1988 federal constitution. Proceeds from these taxes are entirely owned by the municipality. The federal constitution and the National Tax Code (CTN) entitle a municipality to organize the collection of its own-revenues according to its own tax code.

Municipalities have the power to impose four taxes: tax on services of any nature (ISS); urban property tax (IPTU); real estate transfer tax among living parties (ITBI); and the power to withhold at the source tax on income paid directly by the municipal administration (IRRF). What follows is a brief description of these taxes and of the fees under the direct responsibility of municipal governments.

Tax on Sales of Services (ISS)

The ISS, as its name suggests, is a tax levied on businesses or self-employed individuals providing services to third parties. The service providers may or may not have a permanent establishment. The ISS applies to a large number of services defined by federal law (LC 116/03). The major exceptions are transportation (interstate and inter-municipal) and communication services, which fall within the responsibility of second-tier governments, i.e. the states. The ISS tax base is the price of services rendered to third parties. The tax rate for the ISS is defined by municipal law within the limits set by federal law of a minimum of 2 percent to a maximum of 5 percent.

The Urban Property Tax (IPTU)

Typically, the IPTU is a local tax levied on the owners of real estate property located within the urban area of the municipality, even though federal legislation recognizes the occupant/possessor of a property as taxpayer for purposes of the property tax. The tax base for the IPTU is the fair market value of the property, calculated by adding the value of the land and the value of improvements or buildings. To determine this value, the tax authority estimates the probable value of the land according to market conditions and considers the attributes of the property recorded in the territorial cadastre. The tax bill is calculated by applying the appropriate tax rate to the assessed value of the property.

In contrast with the ISS, for which the maximum and minimum tax rates are established by federal law, tax rates for the IPTU are defined by municipal law without limitations. Some municipalities adopt differential tax rates according to land use, whether residential, commercial, industrial or undeveloped land. There is no single standard for IPTU tax rates, but Khair and Vignoli (2001) report that most municipalities use 1 percent of assessed value for developed land and 2 or 3 percent for undeveloped land. Carvalho Jr. (2006) found similar parameters

The Brazilian constitution provides for the application of the principle of fiscal progressivity in the case of IPTU tax rates. For example, properties located at high-end neighborhoods, enjoying well-developed infrastructure and public services, may be taxed at a higher rate than properties

located in less well-served areas. Jurisdictions that apply this type of progressive tax rate justify their choice with the goal to promote equity, assuming that the added revenues are used to improve conditions in less well-served areas. However, if property assessments fairly reflect market values, the value of such amenities would have been capitalized in the assessed value of the property making rate differentiation unnecessary. Some municipalities apply progressively higher IPTU tax rates to undeveloped properties in an effort to curtail land speculation. But in most cases, the principle of progressivity is ignored in the tax rate structure set by municipal law.

While the ISS tax base is the price of services rendered to third parties, the IPTU tax base is determined by the local government. Unfortunately, tax authorities often do not use technical criteria to make property assessment, creating distortions and inequities. Moreover, any modification to the property value map depends on the approval of the local legislative council and that makes the decision a political one.

It is also important to stress the differential costs involved: ISS tax collection is less expensive than IPTU collections, both financially and politically. As a direct tax, the property tax conveys the expectation of direct benefits. Property owners living in high-end urban areas may resist paying higher property taxes if they think the tax revenues will be used for investments in other parts of the city.

Real Estate Transfer Tax Among the Living (ITBI)

The ITBI is imposed on transactions involving the transfer of land ownership. Its base is the market value of the transaction as reported by the taxpayer or as assessed by the tax authority. Municipal law defines the tax rate applicable ITBI. De Cesare (2005) reports rates varying between 2 and 3 percent of reported or assessed value. The ITBI tax applies to real estate transactions throughout the municipality, i.e. both in urban and rural areas, whereas the IPTU is exclusively an urban tax.

Because the property transaction is what causes the levy of the ITBI tax, it is not a very predictable source of revenue for the municipality. However, since the transfer of the property deed cannot be recorded without the payment of the tax, chances of evasion are not high. Further, because this tax is associated with a flow of funds, its payment is relatively less burdensome than in the case of the IPTU which is levied whether or not there is a flow of funds.

Difficulties arise when taxpayers under-declare the value of the transaction to save registration costs and/or taxes. To avoid this, the tax authority must be capable of correctly assessing the fair market value of property and apply the assessed value to correct the reported value. Compared to the IPTU, property valuation for purposes of the ITBI is more likely to follow technical criteria since it is not subject to the approval of the local legislative council.

Income Tax Withheld at the Source (IRRF)

Municipalities may impose IRRF tax exclusively on income paid directly by the municipal administration**.** Although the income tax is a federally administered tax, in the case of the IRRF, by constitutional resolution, municipal administration can withhold the tax when imposed on the

recipients of direct municipal payments. Local governments do not have the power to determine any aspect of the IRRF and it is collected essentially on the salaries of municipal public servants.

Municipal Fees and Charges

Municipal tax authorities may impose fees on any public service that is specific and divisible, as long as such service is provided to the taxpayer or made available to him. Brazilian municipalities collect a good number of fees for the most diverse types of services, such as for copying documents, issuing licenses, work permits, public cleaning, street lighting, and environmental conservation, among others. These fees are established by municipal law, and their specific amounts are generally defined in city tax code or by specific legislation, thus can only be modified with the approval of the local legislative council.

While local jurisdictions are prone to rely on their freedom to introduce fees, many fees are disputed legally. Disputes often arise because it is not clear which service a given fee covers. As Khair and Vignoli (2001) argue, a good part of local services is incorrectly compensated by fees as many of them are public goods. As noted by De Cesare (2005), if the IPTU were administered adequately, local tax authorities would not need to introduce so many fees. Public cleaning, for example, could be financed with property tax revenues if considered a public good, i.e., indivisible, with no exclusive use.

Betterment Contribution

Local tax authorities may levy betterment contributions wherever there is an increase in the value of a real estate property that can be attributed to the execution of public works. This contribution is collected based on the principle of recovering public expenses paid on behalf of one or more private property owners. That is, the contribution is due from owners of property that benefic directly from the public works. The total amount that may be collected in any given instance of application of betterment contribution is limited to the cost of the investment made by the city.

Collection of betterment contributions is a revenue source very rarely used by Brazilian local governments because of its complexity. To apply this instrument without provoking numerous legal disputes, municipal authorities must clearly define the area of influence where benefits from given public works accrue, prove that property values within that area have increased, and measure the extent to which the increased value can be attributed to the public intervention. These are relatively complex tasks that require the application of sophisticated and very objective appraisal criteria.

Composition of Municipal Tax Revenues

Municipal own tax revenues in Brazil were approximately USD 28.9 billion or 2.0 percent of the GDP in 2007. This figure corresponds to about USD164.50 per capita. But, as already mentioned, countrywide averages are misleading.

Table 1 shows local municipal tax revenues distributed by components—ISS, IPTU, ITBI and fees. The category "others" comprises betterment contributions and income tax withheld at the source on salaries paid to municipal employees.

For the country as a whole, the ISS is the main source of municipal tax revenue, the IPTU is the second, and the other sources of revenue account for smaller shares of the total. But the relative contribution of each revenue source changes significantly depending on city size and geographical region.[4]

To understand the differences shown in table 1, we have to consider certain features of the Brazilian intergovernmental fiscal transfer system. In most municipalities, the main source of funds is their share of taxes collected by the federal and state governments that is transferred to them. In smaller municipalities, the Municipal Participation Fund (FPM) is the most important source of funding transferred. The FPM is a federal redistribution fund that is allocated irrespectively of the municipal ability to generate its own-revenues; the funds are distributed according to the size of the municipal population. Smaller municipalities are expected to have less capacity to collect taxes and thus receive higher transfers from the FPM. The FPM allocation takes into account municipal revenues per capita only in the case of state capitals.

The rules for distributing the FPM tend to discourage the full exercise of municipal taxation authority, especially in smaller municipalities. It is not that small towns do not collect taxes, but they end up favoring the taxes that are easier to collect and administer. In these small towns, voters are closer to the local government authorities, funds to manage taxes are relatively scarce, and FPM transfers per capita are high. These circumstances act as deterring factors for the optimal use of direct taxes as revenue source, such as the IPTU.

To illustrate this point, we analyze data for 2007 showing that in micro and small municipalities, ISS revenues clearly exceed that from all other local taxes. In second place, "other" sources prevail, particularly the IRPF on municipal salaries, which does not require especial municipal effort to collect.

It is interesting to note that the share of the IPTU in the smaller municipalities is similar or in some cases even lower than those of the ITBI and fees. This can be explained by the fact that, both from an administrative and political point of view, it is easier for smaller cities to collect the ITBI and fees than the IPTU.

The administration of the ITBI in small towns is relatively simple because local authorities know the properties that are being sold in their jurisdiction and there is usually only one property registry in the municipality. Thus, local authorities can effectively monitor the number and amount of real estate transactions by tracking property registration (Khair and Vignoli, 2001).

But collecting ITBI in smaller municipalities face pressures from taxpayers against raising tax rates, and the tax is not an important revenue source in all small towns. As a direct tax, the ITBI

[4] City population was used to sort cities that are not state capitals into size categories. Capitals, regardless of population size, were treated separately because their main indicators (demographic, socioeconomic and fiscal) do not follow regional distribution trends.

is as vulnerable to political pressures as is the IPTU. The main difference is that the ITBI is imposed at the same time the property is transferred, that is, the tax bill coincides with the flow of funds from the real estate transaction and property owners pay the tax only when the transaction is completed.

Fees are less noticeable to taxpayers than the property tax. Fees prompt legal debates when they are first introduced, but that subsides over time. Taxpayers are usually not aware of the variety of fees collected by the local authorities, especially when the fees are small.

In larger cities, countrywide, the share of the ISS of local revenues is 40 percent, compared to 30 percent for the IPTU (table 1). However, the IPTU share of local revenues is larger than in cities of smaller size. It is not difficult to understand why. Local authorities in larger cities need to rely on substantial and predictable sources of revenue to meet their public expenditures commitments. Fees are important, but they are ear-marked to finance specific services. The ITBI is generally subject to strong fluctuations according to the dynamics of the real estate market. These factors plus voter pressure make the ISS and the IPTU the favored sources of own-revenue in large municipalities.

The composition of local tax revenues relative to city size show differences by geographic regions (table 1). For example, the share of the ISS in the north (63 percent) and in the northeast (544 percent) is much higher than in other regions and well above the country average (46 percent).

IPTU as a Share of Municipal Own-Revenue

IPTU revenues were around US$ 8.2 billion or 0.44 percent of GDP in 2007. Considering the results for our sample of 5,248 municipalities, this figure represents approximately 28 percent of municipal own-revenues and about US$ 46.50 per capita.

As noted above, the share of the IPTU of total local revenues varies depending on city size and geographical region. In addition to that, this section tries to show that the relative proximity to main economic centers also affects the relative importance of the IPTU in municipal own-revenues. This analysis is based on the distribution of municipalities by level of income, city size and geographic region (tables 2 and 3).

The income categories are defined by the National Integration Ministry by combining two variables: the average household income and rate of growth of GDP per capita of each municipality. Using these criteria, micro-regions were classified into four groups: high income, low income, dynamic, and stagnant.[5] Micro-regions, according to IBGE criteria, are a cluster of municipalities within the area of influence of one municipality considered center of economic activity. The IBGE defines 558 micro-regions countrywide.

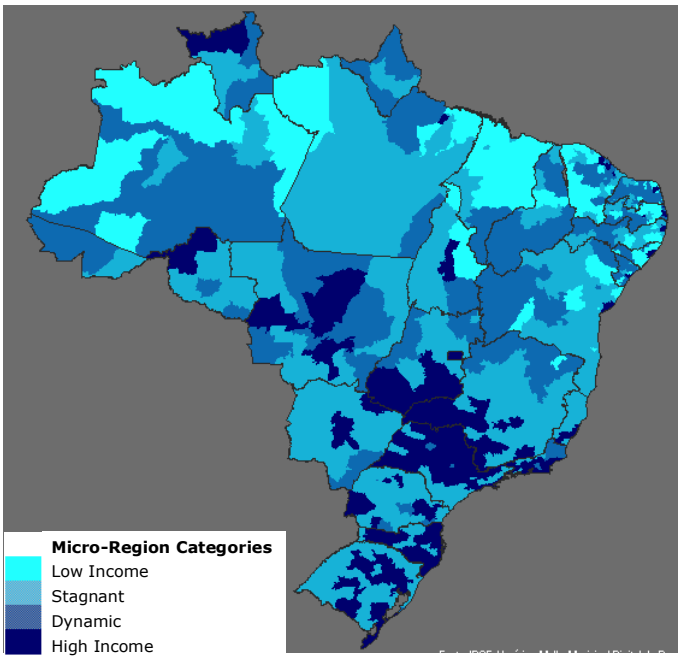
[5] The definition of income categories was published by the Ministry for National Regional Development Policy (document without a date).

In high income micro-regions municipalities have high household income per capita, regardless of the rate of economic growth. In dynamic micro-regions municipalities have relatively high rate of economic growth but low to medium household income per capita. Municipalities in stagnant micro-regions have little or no GDP growth and medium household income per capita. And low income micro-regions cluster municipalities where per capita household income and economic growth rates are low.

The majority of Brazilian municipalities are located in stagnant micro-regions, which account for about one-fifth of the national population and are less urbanized (73 percent) than the national average. High income micro-regions comprise more than half of the Brazilian population and have the highest urbanization rate. In 2007 the number of municipalities in dynamic and in low-income micro-regions was approximately the same. Compared to all others, these micro-regions are less populated and less urbanized (table 2).

Map 1 shows the spatial distribution of municipalities by micro-region and income category.[6] It shows the central south states as having the highest incidence of high income micro-regions. Among these, low income micro-regions can be found only in the state of Minas Gerais.

Map 1.
Municipalities by Micro-Region and Income Category



Source: Prepared by the authors. Primary Sources: IBGE and National Integration Ministry.

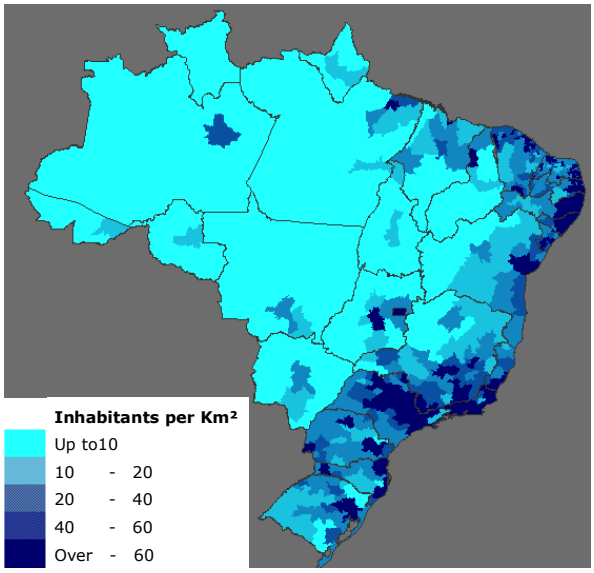
In the north and especially in the northeast region, there is greater concentration of municipalities in low-income micro-regions. Generally, in these regions, only large cities and state capitals are classified as high income municipalities.

[6] See the Statistical Appendix for more details.

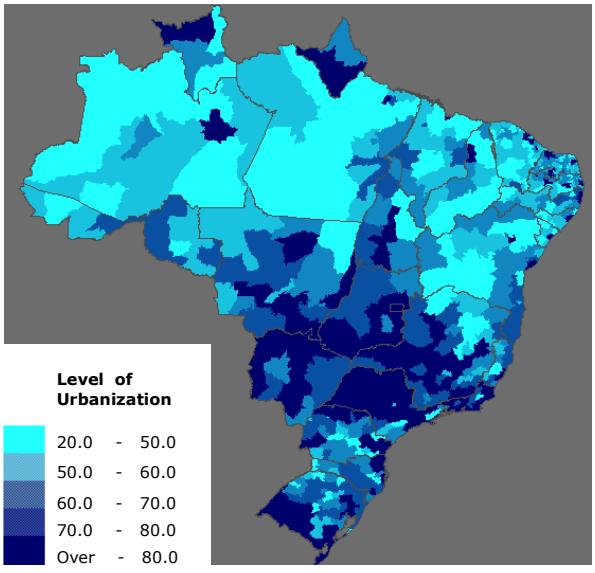
Dynamic municipalities cluster in the north, northeast and central west regions. This reflects the fact that the economy in these regions is still in process of development compared to the more consolidated economies of the southeast and south regions.

The spatial distribution of cities by income category closely follows that of demographic density and rate of urbanization, as shown in maps 2 and 3.

Map 2.
Demographic Density
by Micro-Region: 2007 a/



Map 3.
Level of Urbanization
by Micro-Region: 2007 a/



Prepared by the authors. Primary Sources: IBGE and National Integration Ministry

a/ Estimated numbers based on 2000 Census.

Table 3 highlights the importance of the income level of the micro-region in the relative importance of the IPTU as a source of municipal own-revenue. Notwithstanding regional variations, the difference in IPTU revenues between high-income and in low-income municipalities is significant, and so is city size. But regardless of city size, the share of the IPTU in own-revenues is consistently smaller in low-income micro-regions.

Not surprising, the level of household income per capita is directly related to IPTU collections, since family income impacts demographic density, level of urbanization and real estate property values. These factors are essential to understand the contrast among regions as to the relative importance of the IPTU in local revenues,

IPTU Revenues

IPTU revenues averaged US$ 46.50 per capita for our sample of 5248 municipalities in 2007. However, the national average is not a good indicator of the behavior of this tax in all jurisdictions. Graphs 1 to 6 show the municipal distribution of IPTU revenues per capita in Brazil and in each geographical region.

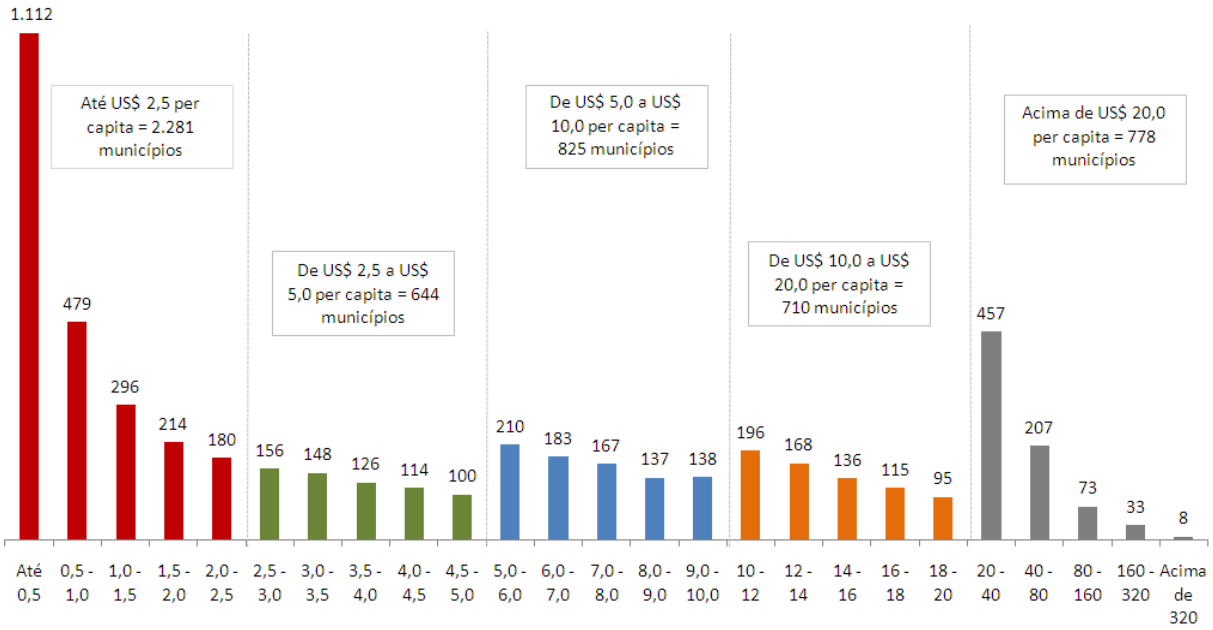
Collections in 43 percent of the municipalities were less than US$ 2.50 per capita (graph 1) confirming the findings of prior studies that the IPTU is not an important source of own-revenues for the great majority of Brazilian municipalities. Furthermore, there are enormous differences across municipalities. In 1,112 municipalities (21 percent) IPTU revenues collections were less than US$ 0.50 per capita. In contrast, in 15 percent of municipalities (778) collections exceeded US$ 20 per capita and, among those, 41 municipalities collected more than US$ 160 per capita in 2007.

The regional distribution shows the north and northeast as regions where IPTU collections were lowest (graphs 2 and 3).

When we group collection figures into five large groups (up to $2.50; $2.50 to $5; $5 to $10 $10 to $20; and more than $20 per capita) we find a relatively balanced distribution in the southeast region but not elsewhere (graph 4). This result is a bit surprising because the southeast has the highest socioeconomic level in the country and therefore, one would expect to find more municipalities with high per capita collection rates. However, in spite of being the richest region at the national level, states such as Minas Gerais and Espírito Santo have municipalities with income levels akin to those in the north and northeast regions. In fact, for these two states, especially Minas Gerais, we find a relatively large number of municipalities with low IPTU per capita and these jurisdictions impact on the average regional results (graphs 7 to 10).

Considering all regions, the south has fewer municipalities with IPTU revenues under the US$ 2.50 (graph 5), while the central west stands at mid-point point between the southeast and the south regions.

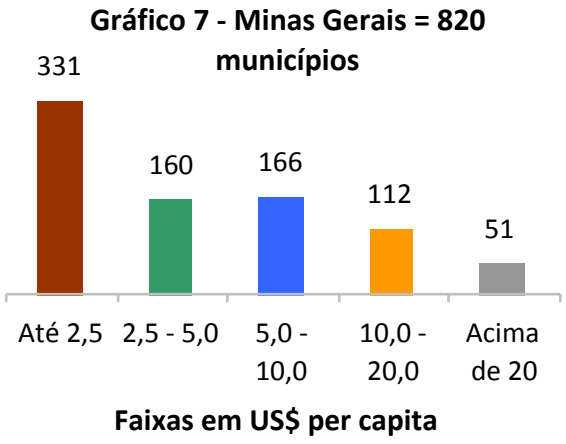
Graph 1. IPTU Collections per Capita by Region, 2007—Brazil (US$)



IPTU Collection Categories—In US$ per capita

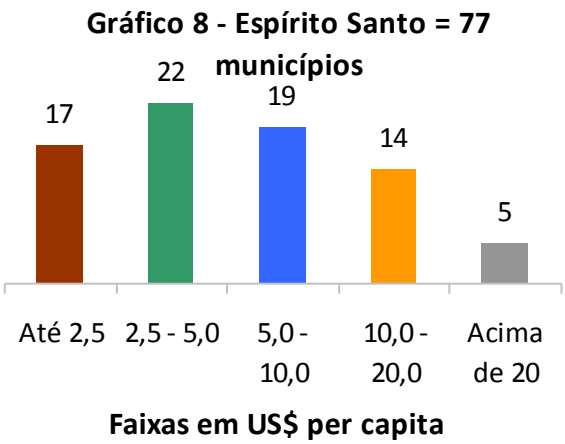
Southeast Region Municipalities
IPTU Revenues per Capita by State, 2007 (US$)

Graph 7. Minas Gerais, 820 Cities



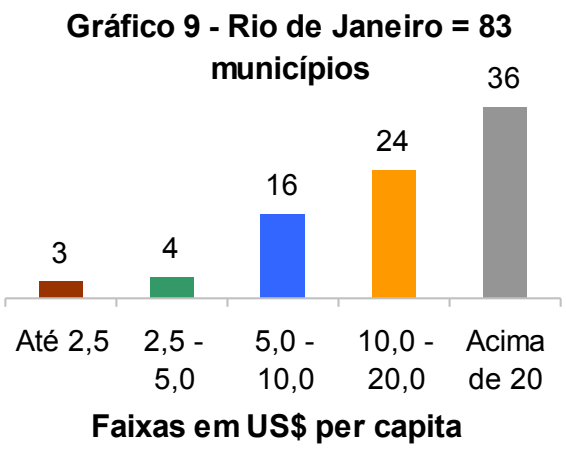
Revenue in US$ per Capita

Graph 8. Espírito Santo, 77 Cities

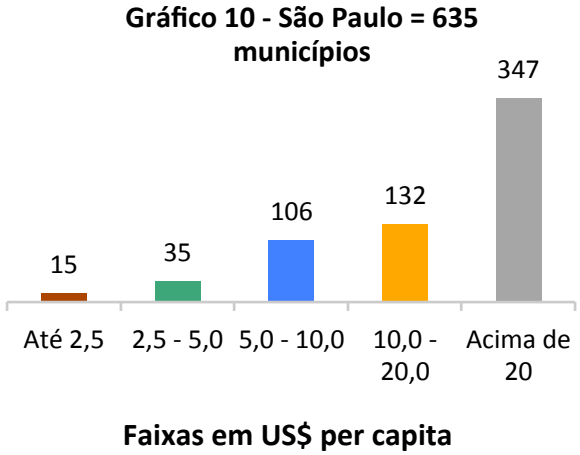


Revenue in US$ per Capita

Graph 9. Rio de Janeiro, 83 Cities

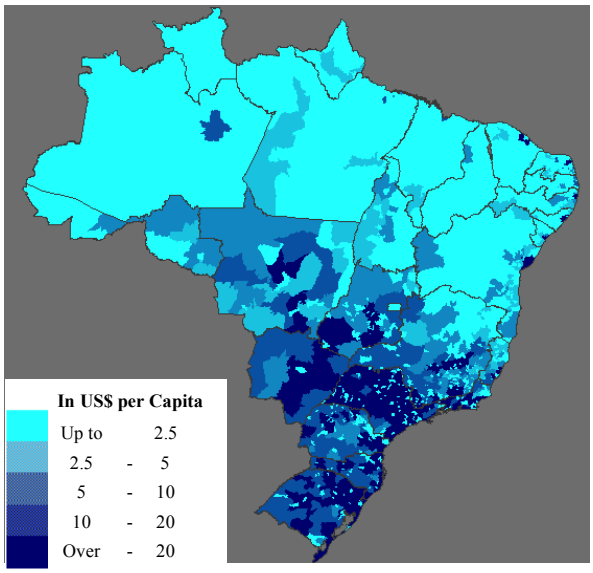


Graph 10. São Paulo, 635 Cities



Source: Prepared by the authors based on FINBRA 2007 – STN.

Map 4.
IPTU Collection in US$ per Capita: 2007



Source: Prepared by the authors. Primary Source: Finbra 2007 – STN, IBGE and National Integration Ministry.

The relative importance of the IPTU as a source of local revenue, as discussed above, depends primarily on city size and on the characteristics of the micro-region (tables 4 and 5). Even though these two variables explain a great deal of the variance, regional differences persist (map 4).

Among small municipalities with less than 5,000 inhabitants in the southeast region, for example, 34 percent collected less than $ 2.50 IPTU per capita. At the other extreme, all state capitals in the southeast collected more than US$ 20 per capita. In the north region, population

size is also positively correlated with IPTU collections. Most micro-regions have low collection and only one of the seven capitals in that region collected more than US$ 20 per capita (table 4).

Other examples illustrate the importance of economic factors to account for the differences in the level of IPTU collections. In high-income micro-regions, only 6 percent of the municipalities collected less than US$ 2.50 per capita, compared to 94 percent of the municipalities in low-income micro-regions (table 5).

To conclude, we can say that the wide variation in the level of IPTU collections represents an unexplored potential of this tax. But it is also true that one cannot expect very different municipalities to achieve similar performance in IPTU collections. Disparities in levels of collections coincide with population size differences, but it is not uncommon that IPTU revenues in municipalities of the same population are different depending on income and geographic regional location.

The analysis of IPTU revenues grouping municipalities by common characteristics reduces, but does not eliminate differences across municipalities. There are city-specific features that can only be captured through detailed case studies. Nevertheless, the the cluster approach improves our understanding of the national averages. As we argue later in this chapter, any study of the tax revenue potential of the IPTU must start with a comparison between similar jurisdictions.

Property Tax Administration—Cadastre and Property Assessment

The cadastre and the property assessment systems are among the most important administrative tools affecting IPTU collections.

Article 33 of the National Tax Code states that the IPTU should be calculated based on the fair market value of real estate property. This value is determined by the municipality estimating the price the property would sell for under normal market conditions and combining the value of land and of buildings in each parcel.

The cadastre is used to register the physical attributes and the location of the property and to identify the respective owner(s) or occupant(s).[7] Collecting extensive data and constantly updating the cadastre are basic requirements to achieve reliable assessments of the fair market value of real estate properties. For De Cesare (2005), the cadastre is the basic pillar of real estate taxation since any estimate of fair market value relies heavily on cadastral data.

To build an efficient cadastre system does not require, necessarily, the use of sophisticated tools.[8] However, in large cities the availability of specialized technical equipment and modern technology contributes significantly to improve the ability of local government to track the constant changes in real estate properties. An example of such improved technology is the use of satellite images to geo-reference cadastre information.

[7] The term "occupant" refers to the useful domain or possession of real estate property without registered land title.
[8] A detailed account of cadastre technology is available in Erba et al. (2005)

The high incidence of informal land use adds to the challenge of building an efficient cadastre system. In Brazilian cities, illegal buildings can be found among low-income as well as middle-high class properties. Evidence provided by Carvalho Jr. (2006) shows that in most municipalities land registration fees are collected from only 50 to 60 percent of the total number of real estate properties. De Cesare (2005) notes that usually the cadastre only includes formal properties, i.e. properties that have registered titles, received construction permits and are developed according to legal norms. But even the record of formal real estate properties in the cadastre is often incorrect, since the cadastre rarely registers building expansion or reform.

Only by continuous updating of the cadastre can cities identify illegal expansion, new urban properties and significant changes in properties already recorded. This process involves costs that many local governments either cannot afford or have no incentive to incur. Periodic updating of cadastral records requires substantial investments both in human resources and technology; and local governments cite the cost of aerial and field surveys as a serious obstacle.

Several municipalities that are not capable of meet these challenges end up with property assessments based on outdated or arbitrary parameters that compromise the potential of the IPTU as a revenue source. The errors are transmitted to property valuations.

The most common property assessment method in Brazilian municipalities is to add the value-base per square meter of land to the replacement cost of the buildings, in different areas of the city. Land is appraised considering its physical and location attributes. The base-value of buildings is often calculated using generic unit cost for predefined building typologies, discounting depreciation. These average values are recorded in a generic land value map. In other words, although there are other more efficient assessment methods, in most municipalities the property tax base is calculated using information from the cadastre combined with data from the generic land value map.

Property assessments are also strongly influenced by political pressures. The IPTU is a highly visible direct tax that incites pressures from organized groups of taxpayers interested in its reduction. High-income property owners often say that they already pay high taxes compared to lower-income residents in informal settlements who don't pay IPTU. According to De Cesare (2005:51), some people who live in areas provided with public services claim that it is not fair for them to pay more IPTU than other taxpayers since the money collected will most likely be used to invest in peripheral areas or in services aimed at improving conditions for the poorest population.

By law, the assessment criteria and significant adjustments to assessed values must be approved by the local legislative council. This legal requirement introduces political interests to the detriment of technical valuation standards. In big cities, influence groups resist tax reform, whereas in small cities, local government authorities are themselves owners of high-value property interested in keeping property taxes low. In both cases, local tax authorities do not have many incentives to revise assessed property values. As a result, we find a serious disconnect between the value maps and the market value of properties in the most municipalities.

Moreover, a regressive trend interferes with property assessments, as the highest value properties show greater discrepancies compared to market values, than do lower value properties. According to Carvalho Jr. (2006:23), many cities use the same land value for several areas of the city, or even for the whole city, causing significant distortions in appraisal values.

A further important disincentive for municipalities to improve the administration of the IPTU is the fact that local governments have the power to levy sales tax on services (the ISS) and these are seen as easier to manage and collect than the property tax.

These difficulties compromise the fiscal productivity of the IPTU as a revenue source and also create inequitable distortions among taxpayers.

Administrative Tools

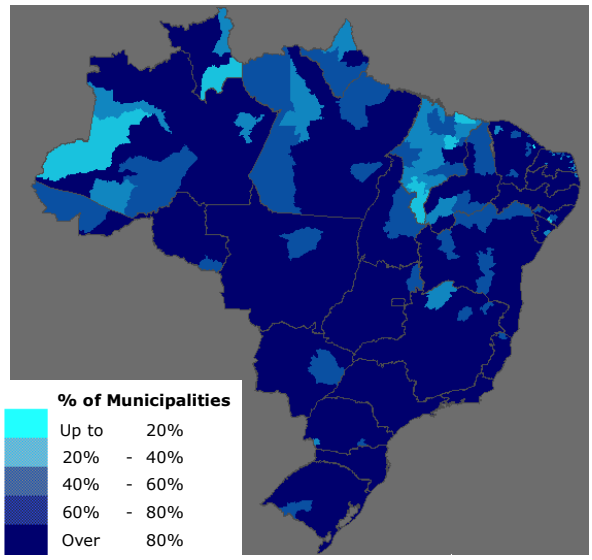
The property cadastre is a basic component in the administration of the property tax and almost all (94 percent) municipalities in our 5,248 sample had one in 2006. Actually, 84 percent of the municipalities reported having a computerized cadastre.

Computerized cadastres are more often used in jurisdictions where property tax revenues represent a large share of municipal own-tax revenues. That occurs primarily in the large cities and in municipalities located in high-income micro-regions (tables 6 and 7) but regional differences also have a strong influence in whether or not a municipality uses a computerized cadastre or not (maps 5 and 6).

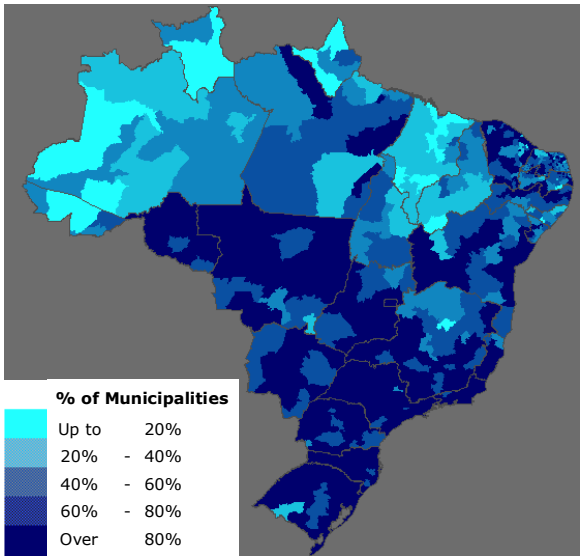
The use of land values maps is slightly less widespread: 73 percent of the municipalities in our sample report having one in 2006 and more than half (57 percent) use a computerized map. The income level of the micro-regions appears as the most important factor to explain the incidence of computerized property value maps (tables 8 and 9), a trend similar to the use of computerized cadastre.

We believe that perfecting management tools is one way to develop the tax potential of the IPTU. But the relative effectiveness of these tools depends primarily on the level of income of the jurisdiction. In fact, in cities located in low-income micro-regions, the cadastre and land value map have practically no impact on collections, whether they are computerized or not. In sum, adopting modern management tools to administer the IPTU is an important step towards better performance of the tax, but these tools alone do not raise the collection potential.

Map 5.
Percentage of Municipalities with Cadastres: 2006 a/



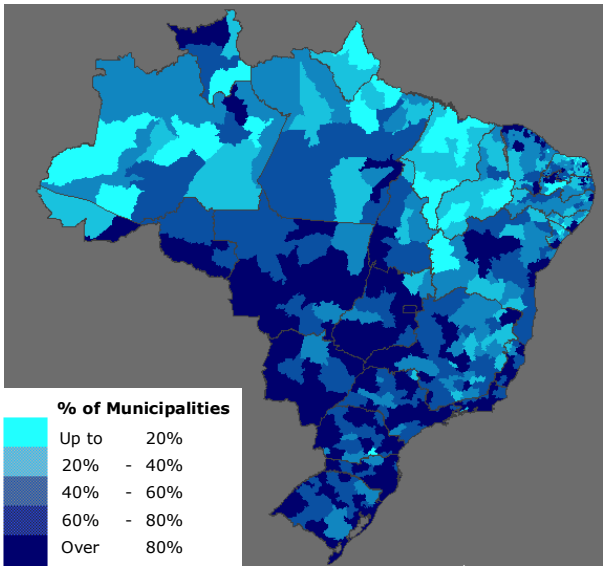
Map 6.
Percentage of Municipalities with Computerized Cadastres: 2006 a/



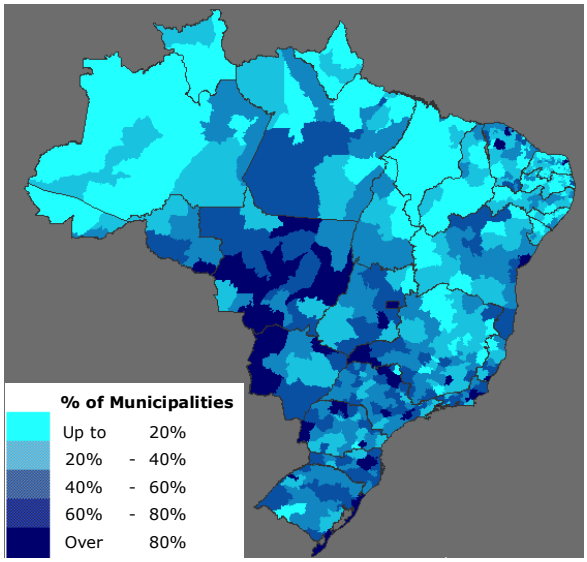
Source: Prepared by the authors. Primary Source: IBGE.

a/ Calculated for micro-regions.

Map 7.
Percentage of Cities with Generic Land Value Maps: 2006 a/



Map 8.
Percentage of Cities with Computerized Land Value Maps: 2006 a/



Source: Prepared by the authors. Primary Source: IBGE.

a/ Calculated for micro-regions.

The Potential of the IPTU as a Revenue Source

Throughout this paper we repeatedly demonstrate the relatively low importance of the IPTU as a source of own-revenue for the majority of Brazilian cities. Even though the average IPTU collections was US$ 46.50 per capita countrywide, more than half of the cities in the country collected less than US$ 5 per capita and a large number of them not even US$ 0.50 per capita. The observed high variance in the performance of the tax, in itself, indicates that there is enormous unexplored potential for improvement, but determining the size of this potential is not a trivial task.

In the following analysis we compare IPTU revenues per capita across municipalities, even though that does not tell us the magnitude of tax potential, it helps formulate useful hypotheses. We know that the wide differences in performance makes it difficult to select indicators for comparison across municipalities. To minimize this problem, we start by comparing the performance of cities with similar characteristics, using a few case studies. The data used in these comparisons combine 2007 information on collections, use of modern administrative tools, regional and micro-regional characteristics, plus demographic and urban density information from the national 2000 Demographic Census and 2000 the Human Development Index (HDI) for the municipality.[9] We also consider municipal GDP per capita for the year 2006.

As already noted, city size, geographic location and level of household income of the micro-region have a positive effect on IPTU revenues. Economic factors impact collection potential and availability modern tools to administer the tax. Thus, it is not surprising that the richer central south region has the highest number of cities with IPTU revenues above US$ 10 per capita. These cities are located in high-income micro-regions and have high levels urbanization and population density.

The impact of income on IPTU revenues is paramount and is clearly evident in the performance of non-capital large cities. In the northern region, among 11 cities above 100,000 inhabitants, more than half had IPTU revenues below $2.50 per capita in 2007, while in the richer, southeast region, only 1 of 121 large cities had low IPTU collections per capita. We surmise from these data that cities of similar size but located in regions with different levels of economic development are not comparable. But there are intra-class differences for cities of the same size and region that can indicate untapped tax potential. For example, São João de Meriti is the only city in the southeast region with IPTU revenues below US$ 2.50 per capita. São João has 464,282 inhabitants and is located in the metropolitan region of Rio de Janeiro, part of a high-income micro-region. The municipality is fully urbanized at a density of more than 13,000 inhabitants per km². All of these features make it hard to explain why the municipality collected only US$1.60 IPTU per capita IPTU in 2007.

[9] Census data and the HDI are reported for 5,504 municipalities that existed in Brazil in the year 2000. For this reason, these data are not available for all municipalities included in our 5,248 sample for which we have IPTU collections data for 2007. In other words, it was not possible to know the level of urbanization, population density, and the IDH for approximately 5 percent of the jurisdictions in our sample. Table A3 in the Statistical Annex presents these indicators for the municipalities where these data were available.

But to compare the performance of São João de Meriti with that of Guarujá, another large city in the southeast region which has high per capita IPTU revenues (US$ 359) would not prove that São João is not using the full potential of the IPTU. The high performance of Guarujá is probably due to the fact that it is a coastal city, with a large tourist trade, many high-value real estate properties, close to the capital of the state of São Paulo. In contrast, São João de Meriti is a bedroom community where workers who commute to Rio live in less valuable properties, many of them in informal settlements. In short, São João de Meriti is not comparable to Guarujá because the latter has specific conditions favoring higher IPTU revenues.

On the other side, if we compare São João de Meriti with another bedroom-community in the metropolitan region of Rio de Janeiro, we can infer that São João could indeed improve its IPTU performance. Belford Roxo is a good comparator. This is a city also located in the metropolitan region of Rio de Janeiro, fully urbanized with a total population of 480,555 inhabitants, high population density (6,112 inhabitants per km²), GDP per capita around US$ 4.378 and IDH rating of 0.742. The level of service tax revenues (US$15.90 v US$ 12.30 per capita) is similar in São João de Meriti and Belford Roxo. But these similarities are not reflected in the level of IPTU collections, as Belford Roxo collects almost five times the amount collected by São João de Meriti (US$ 8.10 v. $1.60 per capita).

The main difference between these two municipalities is that Belford Roxo has computerized cadastre and land value map whereas São João de Meriti has a computerized cadastre but does not even have a land value map. This shows that investment in modernizing the administration of the tax in São João de Meriti could improve the performance of the tax. As pointed out earlier, these investments, per se, do not generate tax potential and therefore, we would not expect that São João could be able to reach the same level of IPTU revenues per capita as Guarujá. However, we can expect that introducing modern tax administration tools would narrow the IPTU revenue gap between municipalities with similar characteristics.

2. Legal Aspects of the IPTU in Brazil

The Tax Base

Knowledge about the legislation affecting the property tax in Brazil is required to property understand the challenges facing municipalities with respect to the IPTU.

Brazil is a federation where three levels of government comprise: the Union, 27 states and the Federal District and 5,567 municipalities. One of the most important features of this type of sovereign organization is how taxing powers are allocated. The 1988 Federal Constitution gives municipalities the power to impose property tax.[10] In making this decision, the legislator took

[10] Article 156. Authorization for Cities to introduce taxes on:
I – urban buildings and land;
§ 1. Regardless of the progressive taxation mentioned in Article 182, § 4, paragraph II, the tax described in paragraph I may: (Wording from Constitutional Amendment No. 29 of 2000)
I – be progressive based on land value; and (Included per Constitutional Amendment No. 29 of 2000)

into account the stability of the tax base, as real estate property cannot migrate from one municipality to another (immovability of tax base), which is not the case for other taxes. Also, the intrinsic relationship between the taxpayer and the public authority providing services reinforces the argument that this tax should be under local authority.

The Brazilian law that defines general norms to calculate the tax base and to levy the IPTU is the National Tax Code—CTN (Law 5,172/66). In Article 32, the CTN establishes that this tax will be imposed on urban buildings and land. And its to be levied on ownership, useful domain or possession of real estate property, without regard to the taxpayer's personal status, especially his economic capability. The IPTU is attached to the land parcel when it is transferred or transformed (Article 130, CTN). This is true if a certain property is for sale and has some IPTU tax due—the tax debt is transferred to the buyer along with the land ownership.

The basis for assessing the tax is the fair market value of the property (CTN, Article 33) and that should be the value at the time of the sale. The assessment applies to the total value of land plus improvements, using the land values map as reference. This process can only be altered by law approved by the municipal legislative council.

Tax Rates and Progressive Taxation

A frequent legal debate around the IPTU is how tax rates are determined. In particular, the debate is about the limits and possibility of gradually increasing the tax rate, i.e. progressive taxation. The controversy arises because of the tools to assess the tax and record property characteristics in the cadastre are deficient. Certainly, these tools do not help gauge the taxpayer capacity to pay the tax (FERREIRA, 2009).

Under the Federal Constitution (after Constitutional Amendment No. 29/00) progressive IPTU taxation takes two forms:

1. Progressivity based on land value (fair market value), considering the capacity to pay of the landowner (Article 156, §1, I, CF). In this case, the tax rate can be modified depending on the location and the use of the property; and
2. Progressivity over time. In this case, progressive taxation can be imposed as a punitive sanction to ensure compliance with the social function of the property. This provision has no fiscal purpose. Rather, the tax rate is increased yearly as a way of forcing the landowner to develop a vacant parcel or to occupy vacant buildings.

Progressive tax rates over time can potentially make the IPTU more equitable in the long term, but its use is still incipient in Brazilian municipalities. For this reason, we will concentrate the analysis on the more commonly used form of progressive taxation based on the fair market value of the property.

II – have different aliquots based on location and use of the property. (Included per Constitutional Amendment No. 29 of 2000)

Progressive Taxation Based on Fair Market Value

Progressive taxation based on the fair market value of the property was sanctioned by the Federal Supreme Court (STF) through Constitutional Amendment No. 29/2000. The STF resolution recorded in Summary No. 668 states: "A municipal law establishing progressive tax rates for the IPTU before Constitutional Amendment No. 29 is unconstitutional, unless it was imposed to ensure compliance with the social function of the property." It is important to note that this amendment does not authorize progressive tax rates for all property taxes, but only grants a specific exception in the case of the IPTU.

The STF resolution specifies that it is unlawful to impose progressive tax rates based on the number of properties owned by the same taxpayer since doing so would jeopardize the application of the criterion regarding the capacity to pay of the taxpayer. [11]

Some scholars oppose Constitutional Amendment No. 29 arguing that it is unconstitutional to impose progressive IPTU tax rates based on fair market value arguing that it contradicts the individual rights and guarantees of the taxpayer (Barreto, 2007). The argument is that these are rights may not be suppressed by any legislation because they are fundamental rights guaranteed by the Federal Constitution (CF, Article 60, IV). But the argument is faulty in that it confuses progressivity with selectivity, which is indeed unlawful. A selective tax rate would be one levied on properties based on their use, location or other characteristic that discriminates one property from another. But progressive taxation is an increase in tax due to an increase in the fair market value of the land, and, therefore, it is based on the taxpayer ability to pay.

Immunities and Exemptions

Brazilian laws on tax immunities and exemptions differentiate one from the other. The constitution defines exemptions as occurring at the time of the real estate property transaction, whereas immunities occur immediately. Article 150, VI of the Federal Constitution defines the so called "reciprocal immunity" whereby the Union, States and Municipalities may not impose taxes on each other's wealth, income and services. This legal provision means that a municipality cannot levy IPTU on property owned by a Federal or a State entity. The constitution goes further. In §2 of the same Article 150 it extends immunity to wealth, income and services of government controlled by autonomous entities and foundations when their essential activities overlap. Although the text of the law is clear, there are still doubts about whether the IPTU can be imposed on government property rented to third parties. This doubt was dispelled by the publication of Summary No. 724 of the STF which states that: "Although rented to a third party, property belonging to any of the entities mentioned in Article 150, VI, c, of the Constitution continues immune to the IPTU as long as the rent is used to fund essential activities of said entities."

[11] The STF resolution states: "It is unconstitutional to set progressive tax rates for the urban building and land based on the number of properties owned by the taxpayer" (Summary No 589).

Even thought not contemplated in the constitution or in STF decisions, the trend in legal doctrine is to apply reciprocal IPTU immunity to public firms and mixed-economy firms as long as they are rendering public service (Article 175, CF).

In contrast to immunities, which must be mandated by federal law, tax exemptions and amnesties can be granted by municipalities and it not uncommon for them to do so quite liberally. However, the Fiscal Responsibility Law (Complementary Law No. 101/2000) in Article 14 establishes some rules to reduce the excessive use of amnesties and exemptions by local governments. The law mandates that proposals for IPTU exemptions be submitted for approval by the municipal legislative council, along with an impact analysis of its effects on the budget for the fiscal year in which they are to be enforced. Furthermore, exemptions must meet the parameters established in the Budget Directives Law (LDO) and must fulfill at least one of the following conditions: (a) show that the tax waiver is considered in the Annual Budget Law and does not affect the fiscal revenue goals stated in the LDO, and (b) be accompanied by compensating measures that result in permanent revenue increases.

Collection of Outstanding Tax Debts

When the taxpayer fails to pay the tax within the stimulated time period, the municipality must take action through the office of its attorney general to register the name of the debtor on the list of outstanding debts for tax collection purposes. These are debts for legal tax obligations which include additional fees and fines (Article 39 of Law No. 4,320/64).[12] For the IPTU, as well as for other taxes, after the payment period lapses and once the exact amount due is determined, by law the municipality must record the debt on the appropriate book at the office managing outstanding debts (Balleiro, 1999). Once recorded, a document called "Tax Debt Certificate" must be issued, giving the municipal treasury the mandate to go to initiate judicial action to compel the delinquent taxpayer to pay the amount due. That taxpayer will then have five days to pay or to assign assets to guarantee payment. If payment is not made within the grace period or there is not sufficient guarantee, any of the assets of taxpayer that can be pledged will be seized.

The remaining question is whether residential property can be given in guarantee to satisfy an IPTU debt. This leads us to the principle of homestead exemption under the provisions of Article 1 of Law 8009/90, which states "Residential property belonging to a married couple themselves or the family unit, cannot be pledged or answer for any type of debt - civil, commercial, fiscal, security, or other—contracted by [said] married couples or by parents or children who may be the owners and reside therein, except in cases stipulated in this law." The law goes on to state (Article 3) that this bar on pledging the family home applies in any procedure - civil, fiscal, security, labor or of any other type. However, the legislator took care to remove this restriction for the collection of real estate property taxes on buildings or land due on family property, including duties and fees. Therefore, it is possible to impose restrictions on the family home in cases of failure to pay the IPTU.

[12] The National Tax Code (Article 203) defines tax receivables: "Tax Receivables are a tax credit regularly recorded in the appropriate tax department, after the time limit for payment lapses, by law or by final decision decreed under normal procedures".

In other words, there are legal instruments to compel a taxpayer to pay the IPTU when the tax is not paid voluntarily. But several problems arise, making it difficult to enforce and collect outstanding IPTU debts. Among those, it stands out the lack of enforcement capacity of the municipal attorney generals who, due to negligence or technical inability lets the statutory time limits for collection expire. Moreover one has to consider that court cases take a long time to be decided. Although several municipalities have specialized courts to process tax actions, these courts have thousands of cases (many for small amounts), so it takes a long time to resolve conflicts. These systemic obstacles end up causing high transaction costs that hamper the legal enforcement capacity of the municipality to collect tax debt.

A recent innovation in this area (that has been provoking debate) was introduced by Resolution No. 33.06 of the Federal Senate. This resolution authorizes sub-national governments to hand their consolidated debt to financial institutions for collection up to their face value. This provision is called endorsement or mandate to third parties. When a fiscal institution collects tax debts it must respect the limits and conditions set by the Fiscal Responsibility Law and Resolutions No. 40 and 43 of 2001 of the Federal Senate. In sum, the resolution allows third party collection of tax debt and municipalities do use that faculty endorsing third parties to carryout the judicial collection of IPTU debts.

Tax debt collection by third parties reflects an attempt by the local government to improve the judicial collection system. It also demonstrates the lack of efficiency and efficacy when collection of fiscal debts is carried out directly by sub-national governments. Unfortunately, tax debt collection by third parties is very difficult to implement under the Brazilian federal constitution.

3. Concluding Remarks

Unlike several other countries, in Brazil the municipalities are not “creatures of the states.” The constitution defines the national political-economic structure and delegates powers to local municipalities. However, there is no constitutional mandate concerning the number of municipalities per state or about the size of municipalities. Municipal population vary from around 1,000 inhabitants to more than 10 million and, even though the country has great socioeconomic disparity, the geographic division of the territory in municipalities ignores technical requirements such as the need to ensure enabling conditions for local governments to be able to finance local expenses with own-tax revenues.

Other difficulties arise in relation to the system of intergovernmental transfers which is not governed by one sole principle. A major part of the transfer resources earmarked for municipalities originate from tax sharing agreements (FPM) and those are ruled by clear criteria and municipalities can use these funds as they see fit. But other kinds of federal and state transfers to municipalities overlap and do not follow well defined criteria. As a general rule, transfers are not distributed based on the need for resources, and they tend to discourage municipal efforts to collect own-revenues. This is particularly true in the case of FPM.

In 2007, IPTU collections averaged US$ 46.50 per capita. But the national average does not apply to majority of municipalities in the country.

In this paper we attempted to identify the opportunities and obstacles to the improvement of the IPTU as a source of local revenue. Our analysis is based on the premise that the different characteristics of the municipalities are associated with different capacity of local governments to generate own-revenue through their tax collection effort.

This being the case, any estimate of how large is the revenue potential of the IPTU should start with a comparison between equals. Clearly, smaller cities tend to have less capacity to mobilize own-revenue than state capitals. But even cities of similar size can have different resource-mobilization capacity depending on the level of income of the micro-region and level of development of the country region where they are located These factors also contribute to explain intra-regional differences in IPTU collections.

The impact of intergovernmental transfers on own-revenue generation varies according to the characteristics of the municipality but also depending on how local administrations exercise their taxation power. In other words, the hypothesis advanced in this paper is that the intensity of the effect intergovernmental transfers on own-revenues varies depending on local taxation practices.

The distribution of municipal own-tax revenues among main sources (ISS, IPTU, ITBI and fees) shows that the ISS and IPTU are the most important sources in all Brazilian municipalities, accounting on average for 46 and 28 percent, respectively. However, the national average is significantly affected by the performance of the larger cities. In smaller municipalities, although the ISS is still the main source of own-revenue, the relative importance of the IPTU drops to 12 percent, reflecting difficulties local authorities face to collect the tax.

To understand the widespread (and growing) importance of the ISS, we need to remember that it is an indirect tax on consumption of services. It is a tax that is not imposed upon a specific segment of society, but is levied on the consumers of services, and the corresponding tax burden (transferred to the price of services) is parceled out in small amounts thus almost invisible. On the other side, as a direct tax on owners (and occupants) of urban real estate property, the IPTU is a highly visible tax. Taxpayers are used to pressuring the local authorities to minimize their tax burden. The tax base for the IPTU is the fair market value of property as defined by municipal assessments and periodic updates of land value maps are fundamental to maintain the collection potential of this tax. But frequent updates are not common. Property assessments demand a great deal of administrative, human and financial resources. Furthermore, significant assessment changes depend on the approval of the municipal legislative council, which makes such changes a political decision.

The evidence presented in this paper confirms that in micro- and small-municipalities the ISS is clearly the most important municipal tax. The IPTU comes next. But in very small municipalities in all but the northeast region, the share of the ITBI on own-revenues comes second after the ISS. This is so because it is easier for smaller municipalities to collect ITBI than to collect the IPTU for both administrative and political reasons.

In large cities the ISS continues to be the most important tax; the IPTU is second but, in contrast with cities of less than 100,000 inhabitants, the role of the IPTU is more prominent in generating own-tax revenues, accounting for 30 percent on average nationwide. Local governments in large cities need to rely on broad-based and predictable sources of revenue to meet expenses. Fees are important, but they are ear-marked to fund specific services. Revenues from real estate transfers (ITBI) are not earmarked but collections can be very unpredictable due to fluctuations in the real estate market. Thus, as voters continuously pressure for services and infrastructure, local governments in large cities and state capitals, in all regions, find the ISS and the IPTU the preferred sources of own-revenues.

The availability of computerized cadastre and land value maps has a positive impact on IPTU collections. This finding is somewhat surprising since there are strong indications that these instruments are deficient, even though data on their coverage and quality are not available. However, the evidence does suggest that improving cadastres and land value maps contributes to higher IPTU collections, in many but not all jurisdictions. Municipalities in low-income micro regions have low IPTU collections whether they have modern cadastres and land value maps or not. It may also happen in high-income municipalities that other factors besides administrative capacity influence the revenue potential of the IPTU.

As mentioned earlier, changes in land value maps are influenced by political conditions. For example, small municipalities that rely on large transfers (FPM) per capita do not have the motivation to make efforts to update property assessments. Public officials in these municipalities are often those who own the highest-valued property.

In large cities there is now a movement toward using the IPTU as an instrument to boost the collection of the ISS. The city of São Paulo is good example. In order to stem ISS evasion, this city adopted obligatory electronic receipts for some services provided. But the effectiveness of this measure depends on consumer collaboration. Thus, since 2005 tax authorities encourage consumers to ask for electronic receipts by allowing them to deduct part of amount paid for the ISS from their IPTU tax bill. Similar measures were adopted by the city of Belo Horizonte, Recife, Rio de Janeiro and other large cities.

There are also legal constraints on expanding IPTU collections. Especially, there are legal questions about progressive IPTU tax rates, either when imposed over time or on the basis of the fair market value of the property. There are no constitutional restrictions on the application of progressive IPTU tax rates. However, because their use is still relatively recent in Brazil, jurisprudence and legal doctrine are still insufficient to guide the implementation of such rates. Legal uncertainties in this case, negatively affect the tax revenue potential of the IPTU as well as the relative equity of the local tax system. Concerning collection (or lack thereof) of outstanding tax debt, finding out which are procedures that impede compliance is the best strategy to understand the problem. But it is also important to examine—in light of the constitution—the viability or not of transferring tax debt collection to the private sector. Still another area that needs attention is the criteria that local governments use to grant tax exemptions and amnesties and to whether these criteria meet the dictates of the Fiscal Responsibility Law.

In conclusion, it is important to stress that the scope of this paper is not mean to exhaust the study of the determinants of the revenue potential of the IPTU. We started by classifying municipalities into analytical groups accounting for their common features and used this method to show that, in a context of great socioeconomic disparities, aggregate figures for more than 5,000 municipalities do not give a true picture of own municipal revenues. We recognize that this method does not capture in detail the distinct realities of the municipalities but it serves as a starting point.

We recognize that the study of specific municipalities is crucial to arrive at a better understanding of the importance of the IPTU in municipal financing. On the other side it to obtain information about each one of them is not a trivial task. As an alternative, one can do case studies of the tax performance for a sample of municipalities considered representative. The success of this approach will depends upon correct sample selection, among other things.

Therefore, within certain limits, the analysis of IPTU collections in Brazil with the methods used in this study yields hypotheses that can be tested through case studies. Based on these, tax authorities can formulate programs to improve IPTU collections up to its best potential in a given jurisdiction. We illustrate these conclusions by applying the theoretical assumptions and empirical findings of this study to a case study of the performance of the IPTU in the city of Recife and present the results in Appendix A.

Tables and Graphs

Table 1: Distribution of Municipal Own-Tax Revenue by Population Class and Region, 2007 a/, b/

(Percentages)

Brazil						Southeast					
Average Brazil	ISS	IPTU	ITBI	Fees	Others	**Region Average**	ISS	IPTU	ITBI	Fees	Others
	46	28	7	8	10		46	31	7	7	9
Micro	38	12	16	8	26	Micro	40	15	16	9	20
Small	40	19	11	11	19	Small	42	23	10	11	14
Medium	40	27	8	12	13	Medium	37	34	8	11	10
Large	41	30	7	10	13	Large	41	33	6	9	11
Capitals	52	29	7	5	6	Capitals	52	31	7	4	7
North						**South**					
Region Average	ISS	IPTU	ITBI	Fees	Others	**Region Average**	ISS	IPTU	ITBI	Fees	Others
	63	11	4	9	13		39	27	10	12	11
Micro	55	2	10	3	31	Micro	31	17	17	11	24
Small	61	4	5	6	25	Small	31	28	13	15	13
Medium	65	7	3	8	18	Medium	33	31	10	16	10
Large	54	4	2	4	36	Large	42	26	8	14	10
Capitals	67	16	4	11	2	Capitals	43	27	11	8	11
Northeast						**Central West**					
Region Average	ISS	IPTU	ITBI	Fees	Others	**Region Average**	ISS	IPTU	ITBI	Fees	Others
	54	17	7	9	14		41	26	12	8	12
Micro	41	3	2	2	52	Micro	38	7	26	6	23
Small	48	4	5	5	38	Small	35	12	24	9	21
Medium	53	9	6	7	24	Medium	39	19	14	11	17
Large	46	15	6	8	25	Large	34	27	8	9	22
Capitals	57	22	8	10	3	Capitals	47	34	9	6	3

Prepared by the authors. Primary Source: FINBRA 2007 – STN

a/ Population Class Sizes: Micro = up to 5,000 inhabitants; Small = 5,001 to 20,000; Medium = 20,001–100,000; Large = Over 100,001; and Capitals = state capitals.

b/ Others = IRRF + Betterment Levy.

Table 2: Distribution of Municipalities and Population by Income Category, 2007

Income Category	Number of Municipalities		Population		
	Total	Distribution %	Total in thousand inhabitants	Distribution %	Level of Urbanization a/
Brazil	5,248	100.0	175,630	100.0	81.8
High Income	1,544	29.4	102,590	58.4	93.6
Stagnant	2,180	41.5	46,722	26.6	72.9
Dynamic	883	16.8	12,939	7.4	55.3
Low Income	641	12.2	13,379	7.6	51.6

Source: Prepared by the authors. Primary sources: FINBRA 2007 – STN, IBGE and National Integration Ministry.

a/ Numbers estimated based on 2000 Census.

Table 3. Share of the IPTU in Municipal Own-Revenues by Income and Population Categories, 2007 a/

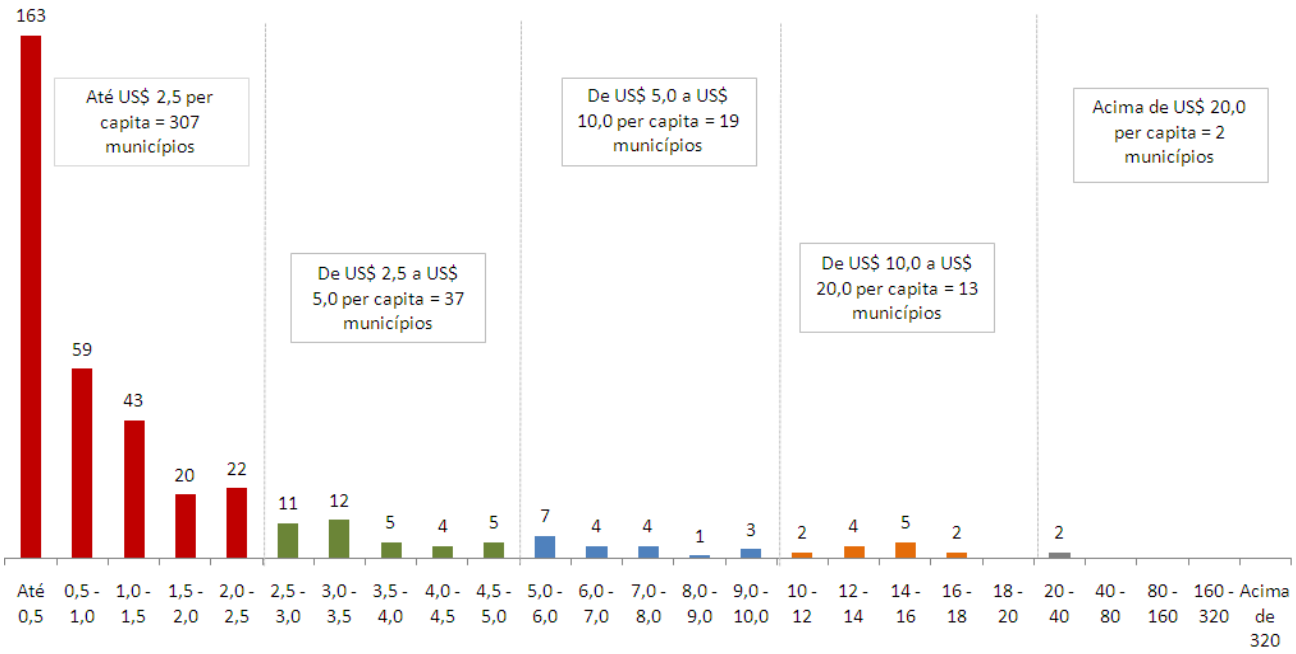
(Percentages)

Brazil						Southeast					
		Income						Income			
Brazil Average	Total	High	Low	Stagnant	Dynamic	Region Average	Total	High	Low	Stagnant	Dynamic
	28	30	4	21	11		31	32	9	28	18
Micro	12	15	2	12	3	Micro	15	16		13	5
Small	19	25	3	19	7	Small	23	25	2	22	14
Medium	27	33	4	23	15	Medium	34	37	22	28	20
Large	31	32	7	23	11	Large	33	33		32	
Capitals	28	29		14		Capitals	30	30			
North						**South**					
		Income						Income			
Region Average	Total	High	Low	Stagnant	Dynamic	Region Average	Total	High	Low	Stagnant	Dynamic
	11	13	4	11	3		27	27		27	18
Micro	2	1	2	2	2	Micro	17	17		17	
Small	4	4	3	4	4	Small	28	29		27	12
Medium	7	10	5	7		Medium	31	31		31	23
Large	6	15	6	5		Large	25	26		17	
Capitals	14	13		15		Capitals	28	28			
Northeast						Central West					
		Income						Income			
Region Average	Total	High	Low	Stagnant	Dynamic	Region Average	Total	High	Low	Stagnant	Dynamic
	17	21	4	12	8		26	29		19	17
Micro	3		3	2	3	Micro	7	8		6	4
Small	4	15	4	4	4	Small	12	15		9	12
Medium	9	13	4	9	12	Medium	19	17		18	28
Large	18	21	8	16	11	Large	32	33		30	
Capitals	21	22		12		Capitals	32	32			

Source: Prepared by the authors. Primary Sources: FINBRA 2007 – STN, IBGE and National Integration Ministry.

a/ Population size classes: micro = up to 5000 inhabitants; small = 5001 to 20000 inhabitants; medium = 20001 to 100000 inhabitants; large = 100001 or more; capitals = state capitals.

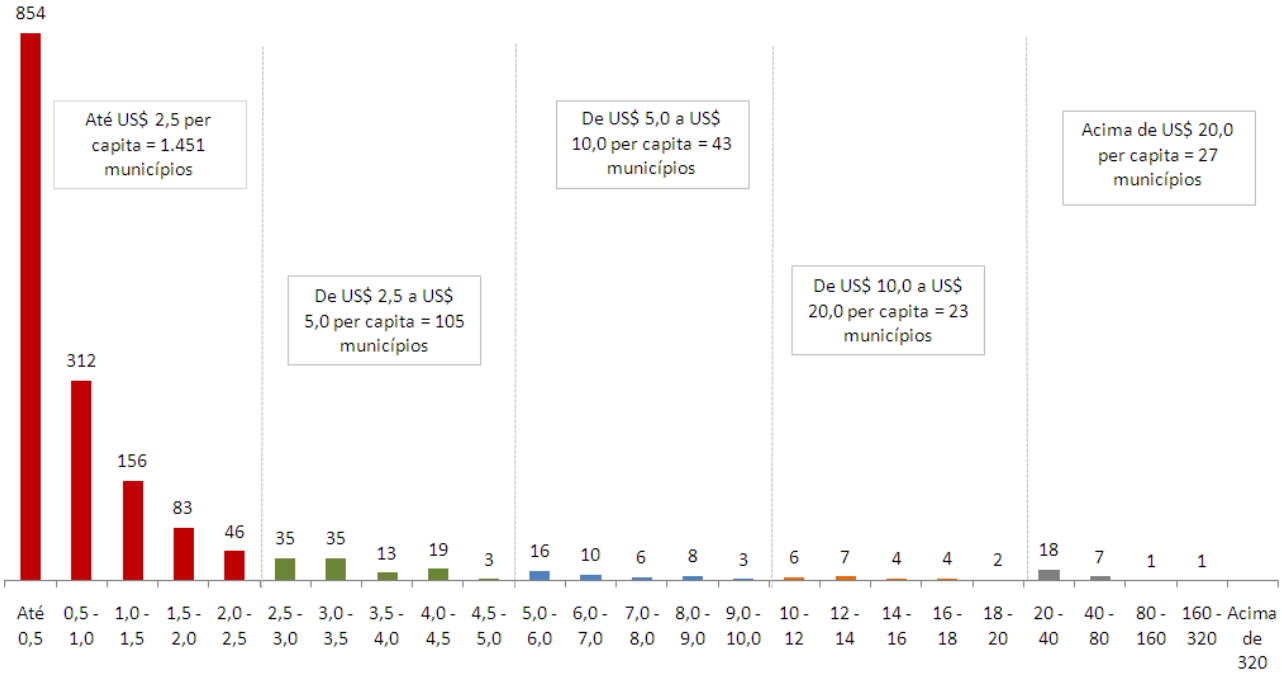
Graph 2. IPTU Collections per Capita by Region, 2007—North Region (US$)
378 Municipalities



IPTU Collection Categories—In US$ per Capita

Up to US$ 2.50 per Capita = 307 cities	From US$ 2.50 to US$ 5.00 per capita = 37 cities	From US$ 5.00 to US$ 10.0 per capita = 19 cities	From US$ 10.00 to US$ 20.00 per capita = 13 cities	Over US$ 20.00 per capita = 2 municipalities

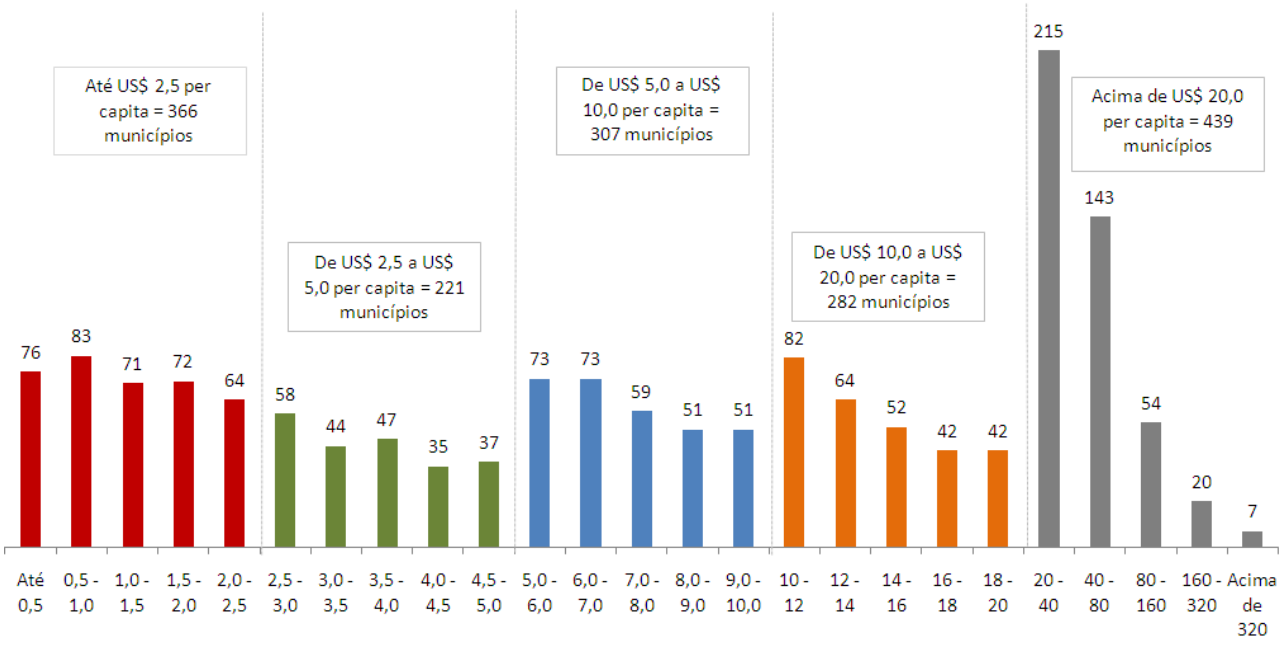
Graph 3. IPTU Collections per Capita by Region, 2007—Northeast Region (US$)
1,649 Municipalities



IPTU Collection Categories—In US$ per Capita

Up to US$ 2.50 per capita = 1,451 cities	From US$ 2.50 to US$ 5.00 per capita = 105 cities	From US$ 5.00 to US$ 10.00 per capita = 43 cities	From US$ 10.00 to US$ 20.00 per capita = 23 cities	Over US$ 20.00 per capita = 27 municipalities

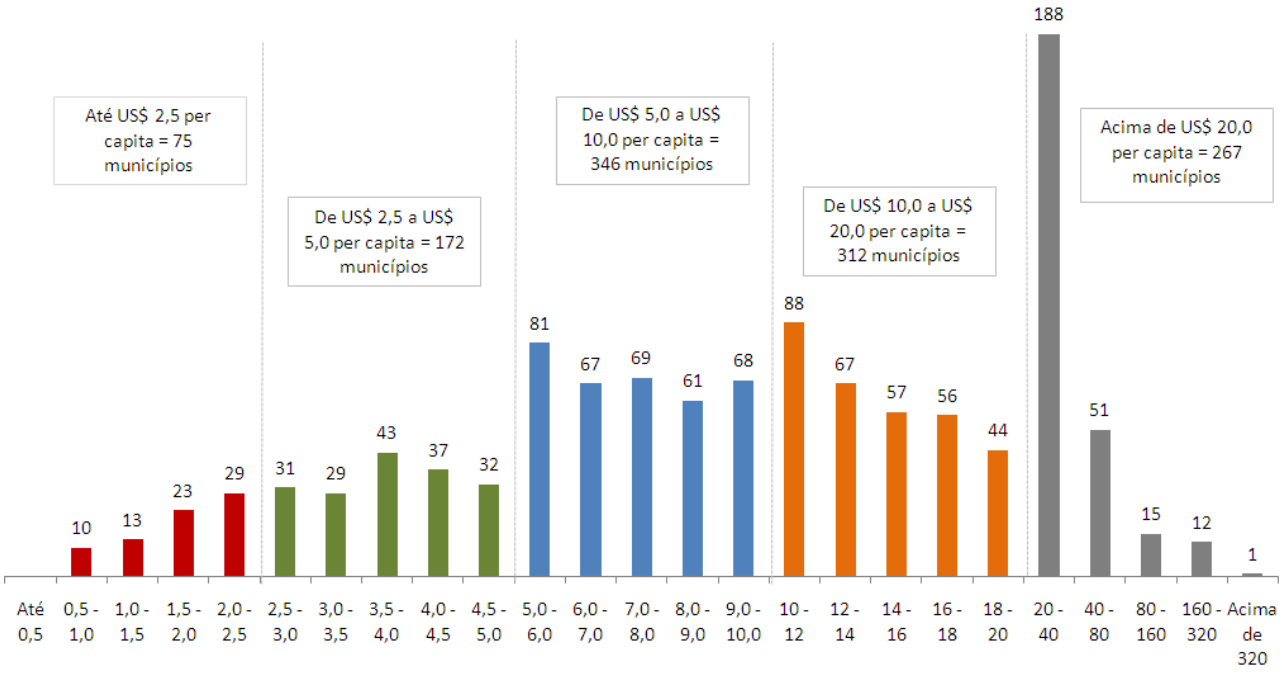
Graph 4. IPTU Collections per Capita by Region, 2007—Southeast Region (US$)
1,615 Municipalities



IPTU Collection Categories—In US$ per Capita

Up to US$ 2.50 per capita = 366 cities	From US$ 2.50 to US$ 5.00 per capita = 221 cities	From US$ 5.00 to US$ 10.00 per capita = 307 cities	From US$ 10.00 to US$ 20.00 per capita = 282 cities	Over US$ 20.00 per capita = 439 Cmunicipalities

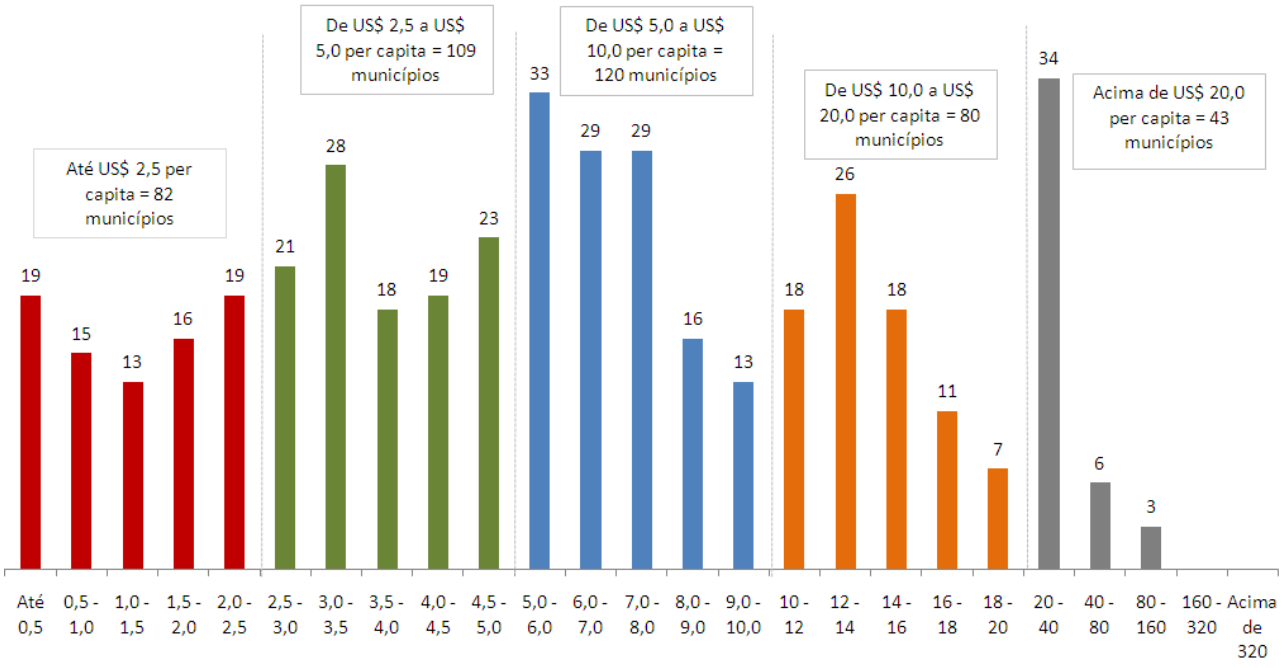
Graph 5. IPTU Collections per Capita by Region, 2007—South Region (US$)
1,172 Municipalities



IPTU Collection Categories—In US$ per Capita

Up to US$ 2.50 per capita = 75 cities	From US$ 2.50 to US$ 5.00 per capita = 172	From US$ 5.00 to US$ 10.0 per capita = 346 cities	From US$ 10.00 to US$ 20.0 per capita = 312 cities	Over US$ 20.00 per capita = 267

Graph 6. IPTU Collections per Capita by Region, 2007—Central West Region (US$)
434 Municipalities



IPTU Collection Categories—In US$ per Capita

Up to US$ 2.50 per capita = 75 cities	From US$ 2.50 to US$ 5.00 per capita = 172	From US$ 5.00 to US$ 10.0 per capita = 346 cities	From US$ 10.00 to US$ 20.0 per capita = 312 cities	Over US$ 20.00 per capita = 267

Source: Prepared by the authors based on FINBRA 2007 – STN.

Table 4: IPTU Revenues per Capita by Municipal Population Size, 2007 a/ b/

(Percentages)

Brazil						Southeast					
	Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00		Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00
Brazil Average	43	12	16	14	15	**Region Average**	23	14	19	17	27
Micro	41	19	23	13	4	Micro	34	21	25	15	5
Small	50	12	16	13	10	Small	27	16	20	18	18
Medium	41	8	10	15	25	Medium	9	6	15	20	50
Large	8	5	9	14	64	Large	1		4	14	81
Capitals			8	23	69	Capitals					100
North						**South**					
	Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00		Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00
Region Average	81	10	5	3	1	**Region Average**	6	15	30	27	23
Micro	88	12				Micro	11	22	36	23	7
Small	87	8	4	1		Small	5	14	33	29	19
Medium	75	11	7	6	1	Medium		2	12	32	54
Large	55	18	18	9		Large			5	8	87
Capitals			29	57	14	Capitals					100
Northeast						**Central West**					
	Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00		Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00
Region Average	88	6	3	1	2	**Region Average**	19	25	28	18	10
Micro	95	4				Micro	36	32	26	5	2
Small	94	4	1	1	1	Small	15	28	33	16	7
Medium	81	10	6	1	2	Medium	3	10	19	49	20
Large	24	22	22	22	10	Large			20	10	70
Capitals				22	78	Capitals					100

Source: Prepared by the Authors. Primary Source: FINBRA 2007 – STN

a/ Population class sizes: Micro = up to 5,000 inhabitants; Small = 5,001 to 20,000; Medium = 20,001–100,000; Large = Over 100,001; and Capitals = state capitals.

b/ IPTU collection areas defined in US$ per capita. Purchasing power was converted for similarity.

Table 5: IPTU Revenues per Capita by Municipal by Income Level, 2007 a/

(Percentages)

Brazil						Southeast					
	Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00		Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00
Brazil Average	43	12	16	14	15	**Region Average**	23	14	19	17	27
High Income	6	10	22	24	38	High Income	5	8	19	22	47
Stagnant	41	17	19	14	8	Stagnant	31	21	22	15	11
Dynamic	77	11	7	3	2	Dynamic	74	7	6	7	5
Low Income	94	4	2			Low Income	80		20		
North						**South**					
	Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00		Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00
Region Average	81	10	5	3	1	**Region Average**	6	15	30	27	23
High Income	58	15	8	15	4	High Income	4	10	26	28	32
Stagnant	74	13	8	5	1	Stagnant	9	19	32	26	14
Dynamic	88	9	3			Dynamic	17	22	50	6	6
Low Income	97	3	1	1		Low Income					
Northeast						**Central West**					
	Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00		Up to 2.50	2.50 to 5.00	5.00 to 10.00	10.00 to 20.00	Over 20.00
Region Average	88	6	3	1	2	**Region Average**	19	25	28	18	10
High Income	24	10	6	24	35	High Income	6	19	35	21	19
Stagnant	86	8	4	2	1	Stagnant	25	27	22	20	6
Dynamic	89	7	2		1	Dynamic	26	31	26	12	5
Low Income	94	4	1			Low Income					

Source: Prepared by the Authors. Primary Source: FINBRA 2007 – STN, IBGE and National Integration Ministry.

a/ IPTU collection areas defined in US$ per capita. Purchasing power was converted for similarity.

Table 6: Distribution of Municipalities by Level of IPTU Collections per capita and Cadastre Indicators by Size of Municipality, 2006/2007 a/ b/

Cadastre Indicators		Number of Municipalities	IPTU Collection US$ per capita %		
			Up to 5	5 to 10	Over 10
Brazil Average		5,248	**56**	**16**	**28**
Micro	Total	1,264	60	23	17
	No Cadastre	74	96	1	3
	Cadastre	164	88	7	5
	Computerized Cadastre	1,026	53	27	21
Small	Total	2,508	61	16	23
	No Cadastre	189	96	1	3
	Cadastre	269	94	4	2
	Computerized Cadastre	2,050	54	19	27
Medium	Total	1,228	49	10	40
	No Cadastre	41	98		2
	Cadastre	82	87	2	11
	Computerized Cadastre	1,105	45	11	44
Large	Total	222	13	9	78
	No Cadastre	2	100		
	Cadastre	2	50		50
	Computerized Cadastre	218	11	9	79
Capitals	Total	26		8	92
	Computerized Cadastre	26		8	92

Source: Prepared by the Authors. Primary Source: FINBRA 2007 – STN and MUNIC 2006 – IBGE

a/ Population class sizes: Micro = up to 5,000 inhabitants; Small = 5,001 to 20,000; Medium = 20,001–100,000; Large = Over 100,001; and Capitals = state capitals.

Table 7: Distribution of Municipalities by Level of IPTU Collections per capita and Cadastre Indicators by Income Level of Micro-Region, 2006/2007 a/

Cadastre Indicators		Number of Municipalities	IPTU Collections US$ per capita %		
			Up to 5	5 to 10	Over 10
Brazil Average		5,248	**56**	**16**	**28**
High Income	Total	1,544	16	22	62
	No Cadastre	14	86		14
	Cadastre	30	37	20	43
	Computerized Cadastre	1,500	15	23	62
Stagnant	Total	2,180	58	19	22
	No Cadastre	79	90	4	6
	Cadastre	198	86	9	6
	Computerized Cadastre	1,903	54	21	25
Dynamic	Total	883	88	7	5
	No Cadastre	101	99		1
	Cadastre	154	99	1	
	Computerized Cadastre	628	83	10	7
Low Income	Total	641	98	2	1
	No Cadastre	112	100		
	Cadastre	135	100		
	Computerized Cadastre	394	96	3	1

Prepared by the authors. Primary Source: FINBRA 2007 – STN, MUNIC 2006 – IBGE and Ministry of National Integration.

a/ IPTU collection areas defined in US$ per capita. Purchasing power was converted for similarity.

Table 8: Distribution of Municipalities by Level of IPTU Collections per capital and Indicators of Land Values Map by Size of Municipality, 2006/2007 a/ b/

Value Map Indicators		Number of Municipalities	IPTU Collections US$ per capita %		
			Up to 5	5 to 10	Over 10
Brazil Average		5,248	**56**	**16**	**28**
Micro	Total	1,264	60	23	17
	No Map	417	75	16	10
	Map	224	64	21	16
	Computerized Map	623	48	28	23
Small	Total	2,508	61	16	23
	No Map	773	85	8	8
	Map	423	67	13	20
	Computerized Map	1,312	46	22	33
Medium	Total	1,228	49	10	40
	No Map	216	85	6	10
	Map	170	58	7	35
	Computerized Map	842	38	12	49
Large	Total	222	13	9	78
	No Map	8	50	13	38
	Map	21	14	5	81
	Computerized Map	193	11	9	80
Capitals	Total	26		8	92
	Map	2			100
	Computerized Map	24		8	92

Prepared by the authors. Primary Source: FINBRA 2007 – STN and MUNIC 2006 – IBGE

a/ Population class sizes: Micro = up to 5,000 inhabitants; Small = 5,001 to 20,000; Medium = 20,001–100,000; Large = Over 100,001; and Capitals = state capitals.

b/ IPTU collection areas defined in US$ per capita. Purchasing power was converted for similarity.

Table 9: Distribution of Municipalities by Level of IPTU Collections per capital and Generic Land Values Map Indicators by Income Level of Micro-Region, 2006/2007 a/

Value Map Indicators		Number of Municipalities	IPTU Collections US$ per capita %		
			Up to 5	5 to 10	Over 10
Brazil Average		5,248	**56**	**16**	**28**
High Income	Total	1,544	16	22	62
	No Map	193	31	31	38
	Map	204	22	22	57
	Computerized Map	1,147	13	21	66
Stagnant	Total	2,180	58	19	22
	No Map	530	79	12	9
	Map	368	62	17	21
	Computerized Map	1,282	49	23	29
Dynamic	Total	883	88	7	5
	No Map	381	96	3	1
	Map	139	91	5	4
	Computerized Map	363	78	12	9
Low Income	Total	641	98	2	1
	No Map	310	99		
	Map	129	98	1	1
	Computerized Map	202	95	4	1

Prepared by the authors. Primary Source: FINBRA 2007 – STN, MUNIC 2006 – IBGE and National Integration Ministry

a/ IPTU collection areas defined in US$ per capita. Purchasing power was converted for similarity.

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Appendix A: The IPTU in the City of Recife

This case study of the city of Recife applies the theoretical assumptions and analytical strategy used in the main paper in order to illustrate the main conclusion of the paper. Recife is the capital of the state of Pernambuco with 1,422,905 inhabitants in 2000, or 18 percent of the population of the state. Together with Salvador-BA and Fortaleza-CE, Recife is one of the three largest cities in the northeast region.

The demographic density of the city is high (6,468 inhabitants per km² in 2000), there are approximately 376,000 housing units, and the city faces many urban problems. To give an idea, although the proportion of homes served by the general water system is 88 percent, only 43 percent of the homes are connected to the sewerage system.

An estimated 44 percent of the city population earns less than half a minimum salary per month. There is a high proportion of illegal housing, and a large contingent of dwellings classified as inadequate or overcrowded. Only 13 percent of the real estate in the city is undeveloped land which, in itself, shows a small margin for expansion. To accommodate growth, the population has settled in the cities within the metropolitan region that are strongly influenced economically by Recife. The central city has a large service sector which is responsible for 57 percent of the jobs.

From 2002 until 2009, IPTU revenues maintained a relatively stable share of Recife's own-revenue at about 27 percent (table A-1) while the share of the ISS was almost twice as much, fluctuating from 46 to 50 percent in the same period. This reflects the strong service sector and also the large incidence of informal property and the city's high population density. Moreover, it is easier to administer the ISS than the IPTU.

Table A-1: Share of IPTU and ISS in Own-Revenue for the City of Recife, 2002-2009

(Percentages)

	2002	2003	2004	2005	2006	2007	2008	2009
IPTU	27.8	27.9	27.0	26.8	26.6	27.0	27.4	27.3
ISS	45.9	46.4	49.1	49.6	49.9	47.9	47.3	47.8

Prepared by the authors. Primary Source: Finance Secretary for the City of Recife.

Recife is rather unique among northeastern capitals for its prevalent importance of the ISS tax, which accounts for a far greater share of revenues than the IPTU. Factors that contribute to this outcome are the relatively limited stock of land for new buildings which in turn curtains the potential increase in the number of properties paying IPTU. Conversely, there are fewer obstacles to increasing the services sector as seen with the recent expansion of medical/hospital call centers.

IPTU collections show less than satisfactory performance. Approximately 30 percent of the tax assessed is not collected. This level of compliance has not changed much over the last few years in spite of efforts by local authorities to improve collections through measures such as mailing

letters to taxpayers 3 times a year, phone contacts to remind taxpayers when installments are due, and the hiring of a group of collection agents and auditors who handle major contributors.

But notwithstanding these difficulties and considering the large number of informal properties in Recife, IPTU collections per capita in 2008 reached R$ 102.60 (US$ 56), raking 10th among Brazilian capitals. Not only that, but Recife's performance is much better than cities of similar size in the northeast region, such as Salvador with R$ 50.40 (US$28) and Fortaleza with R$ 39.90 (US 22) (table A-2).

Table A-2: Population and IPTU in R$ per capita for Capital Cities, 2008

Capital	Population	IPTU per capita	
		R$	US$
Sao Paulo	11,037,593	265.1	146
Florianopolis	408,161	223.6	123
Rio de Janeiro	6,186,710	193.6	106
Porto Alegre	1,436,123	169.7	93
Belo Horizonte	2,452,617	164	90
Goiania	1,281,975	162.5	89
Curitiba	1,851,215	146.2	80
Campo Grande	755,107	123.3	68
Vitoria	320,156	112.5	62
Recife	**1,561,659**	**102.6**	**56**
Aracaju	544,039	70.2	39
Salvador	2,998,056	50.4	28
Maceio	936,314	43.2	24
Fortaleza	2,505,552	39.9	22
Natal	806,203	39.2	22
Joao Pessoa	702,235	35.1	19
Cuiaba	550,562	32.9	18
Manaus	1,738,641	29.3	16
Sao Luis	997,098	27.6	15
Belem	1,437,600	25.6	14
Palmas	188,645	23.9	13
Rio Branco	305,954	21.3	12
Teresina	802,537	20.8	11
Boa Vista	2,452,617	19	10
Porto Velho	382,829	14.9	8
Macapa	366,484	7.5	4

Prepared by the authors. Primary source: ABRASF. R$1 = US$0.55

Collections of Tax Debt

The participation of the judiciary in the collection of IPTU tax debt, recorded as Outstanding Tax Debt, is increasing since 2006, in spite of a small decline in 2009 due to the international economic crisis (table A-3). This trend reflects efforts by the office of the city Attorney General to legally collect the tax, especially since the hiring of more staff selected through public competition.

Table A-3: Revenues of IPTU Outstanding Tax Debt—In Current R$

Year	2006	2007	2008	2009
Revenues	8,529,316	16,226,350	21,376,145	13,876,200

Prepared by the authors. Primary Source: Finance Secretary for the City of Recife.

Notwithstanding these efforts, there is still much difficulty in collecting IPTU debt through the courts. The judiciary is bogged down by a large volume of cases and by its slow procedures. Compounding the problem there are administrative difficulties within the office of the Attorney General itself. Presently, there are about 30 thousand outstanding tax debt cases to be processed by just 20 attorneys. Certainly an investment in more staff is a priority.

Faced with such large number of cases, the City Attorney's Office is concentrating its attention on cases that are less than 5 years old—those that are within the statutory collection period. Older cases are difficult to resolve due to regulatory constrains and problems related to the identification of taxpayers or the responsible party is. The slow process at the City Attorney's Office and at the Courts gives undue advantage to delinquent taxpayers. The option of contracting out the collection of Outstanding Tax Debt has been considered. However, the problem with this alternative is that, although it probably would increase IPTU revenues, it raises serious constitutional questions because it impinges upon an exclusively state activity.

We also notice in the process of legal collection of outstanding tax debt that few properties go to legal auction because their owners failed to pay the IPTU. In most cases, when the situation reaches this critical stage, the owner chooses to negotiate the debt with the city.

Land Values Map

The key to increasing IPTU collection in Recife consists in updating the generic land values map, which has not been modified in the last 10 years. To understand this, it helps to examine legal formula for the city to assess the tax.

In conformance with the municipal tax code, the base for the IPTU tax is the fair market value of the property calculated by using the following formula:

VV = (VO x TF) + (Vu x Ac), where:

VV—is the fair market value of the property;

VO—is the unit value of a linear meter of assumed frontage for each side of a block of public area, defined by the generic land values map;

TF—is the assumed frontage of the property;

Vu—is the value of a square meter of construction on the "List of Construction Costs," and

Ac—is the developed area of the property.

According to this formula, the fair market value is the sum of the value of the land plus the value attributed to buildings. Land unit values described in the generic land value map are defined based on the following information, considered together or separately:

1. Current transaction prices and offers made on the real estate market;
2. Features of the region where the property is located;
    a. Public infrastructure services that exist in the street;
    b. Centers of tourism, economic activity, and recreation that influence the real estate market;
    c. Physical characteristics of topography, soils, and accessibility of property.
3. Land use norms, as defined in the Master Plan and in the Land Use and Occupancy Law.

In valuing land, an attempt is made to capture the impact of factors such as location, geographic features, services and other public goods available. For buildings, other factors are used to define the costs of improvements, such as the standards of construction, for example popular, luxury, medium.

In the case of Recife, it is essential to reassess the market value of land which surely has been undervalued in many cases. On average, the fair market value assessed by the city tax authorities is 60 percent of the actual fair market value of the properties. This indicates that it is possible to increase collection by improving property assessments.

The purpose of the generic land value map is to allow for the periodic revision of land values. In fact, the strategic city plan for the next two years calls for studies, and includes a proposal to revise the generic land values map. Once the revision is completed it must be negotiated politically, prior to its submission to the city legislative council, to avoid legal claims that would cause immediate damage to the city.

Territorial Cadastre

The territorial cadastre registered 374,203 properties in the city of Recife in 2010, among those approximately 21 percent are not in the tax rolls. These properties are classified as follows:

- 280,306 buildings and 13,841 land parcels;
- 63,565 tax exempt properties on account of very low levels of IPTU revenues per parcel that are not worth the cost of collection (amounts less than around US$ 60.00);
- 13,937 properties classified as posing collection difficulties. Included in this group are properties with unknown owners and those located in slum areas; and
- 2,554 properties immune or exempt of IPTU tax.

In 2002, the municipal government completed a digital map of the city and intended to update it periodically. However, updates were not done due to high costs. Since 2004, the municipality has been improving its territorial cadastre gradually. At that time the administration introduced a new computerized cadastre program seeking greater data consistency, including a protected system for properties that account for 80 percent of IPTU collection, and procedures for routine updates. The migration from the old to the new territorial cadastre unveiled many illegalities and discrepancies which have now been corrected. In addition, city auditors have been tracking new real estate developments through checking new construction permits and following real estate listings in local newspapers.

However, the most significant impact of the cadastre on collections occurred when it was used to find inconsistencies, clandestine buildings and the so called “poor debts” or “skeletons” characterizing properties that are difficult to collect IPTU debt.

An important event for improving the city cadastre was the public competition in 2007 for the job of cadastral technician which resulted in the hiring of 20 specialists. This is certainly a step forward, but still far from meeting the main problems of administering the IPTU tax in Recife.

Other Measures

It seems curious that the city is also using the IPTU as an incentive to increase ISS collection and the use of electronic receipts for services rendered (*Nota Fiscal Eletrônica de Serviços*—NFS-e).

The client (service user) who asks for the NFS-e can use part of the corresponding ISS as a credit of up to 50 percent of the IPTU due on any property in the city of Recife. The service user does not have to be the owner of the property where the credit is applied. This measure is considered ingenious to the extent that it also encourages IPTU collections, because to participate in the scheme, the taxpayer has to be up to date with IPTU payments.

The introduction of the NFS-e, despite being relevant and considering the short time it has been in place, has not shown outstanding results. Many taxpayers are accumulating credits by asking for the NFS-e, but are not designating the property where the credit would apply, making it impossible to implement the discount. The amount credited for IPTU rebates in 2009 was around R$ 3 million (US$1.3 m), but only R$ 660 thousand was used (US$280,000).

The use of the progressive IPTU in Recife is exclusively based on fair market value, using variable tax rates based on the value of the property. In other words, tax authorities do not use the progressive IPTU as a punishment for vacant or underutilized property. By focusing on fair

market value, the tax authorities hope to apply the principle of taxpayer ability to pay, while maintaining an exemption policy for low-value property. The suitability of progressive taxation over time in the city of Recife, as stated in the Urban Development Act (*Estatuto da Cidade*), has not yet been considered. The administration estimates that only a relatively small number of properties (13,000) would qualify to be taxed at progressive rates, thus the measure would have little influence on revenues, while generating needless political cost.

Other initiatives include programs aimed to modernize the municipal administration, such as the *Programa Nacional de Apoio à Gestão Administrativa e Fiscal para os Municipios Brasileiros* (PNAFM), financed by the InterAmerican Development Bank, and the Programa de Modernização da Administração Tributária (PMAT), funded by the National Bank for Economic Development (BNDES). The local government sees these programs as very important for the city, for their impact on improving own-revenues and also because these programs contribute toward improving the city infrastructure facilities.

In sum, there are several measures that can be used to raise IPTU revenues in Recife, and the most important among them is the revision of the generic land value map. However, local administrators understand that they have to avoid sudden changes that abruptly raise the IPTU tax burden. The fear is that these measures will result in enormous political stress for the municipal authorities, and will provoke strong resistance both from civil society and the city council. Gradual and constant changes will always be preferable as the best way to implement change.

Appendix B: Methodology

Presentation

This appendix is divided into two parts. The first section lists the variables, data sources, period of analysis and methodological procedures used to analyze the status of IPTU tax collection in the country. This section also describes the scope and limitations of the analysis. The second section deals with legal and administrative factors that influence how local governments utilize the potential of the IPTU as revenue source.

A Report of IPTU Collection in Brazil

Variables, Data Sources and Period of Analysis

Part of our analysis focus on the revenues collected with the IPTU by Brazilian municipalities using statistics on tax revenue and information about the administrative tools available to municipalities for tax collection.

Statistics on revenue show tax collection by municipality with special emphasis on IPTU revenues. Municipalities also use revenues transferred from other levels of government, such as IPVA (State Tax on Automotive Vehicles). This information is extracted from the STN (National Treasury Secretariat) municipal budget reports in an electronic publication called Finances of Brazil or FINBRA.

FINBRA is the main source of fiscal information for the municipal level of government. It is issued annually by the STN, approximately eight months after the close of each fiscal year. To date, the most recent data available is for 2007 covering 5,295 municipalities, or about 95 percent of the 5,564 municipalities in the country.[13]

Despite the fact that FINBRA does not show information for all Brazilian municipalities, this database was selected because no other government organization compiles as much data for an expressive number of municipalities as the STN does.

Concerning administrative resources for the collection of IPTU, research shows information on the cadastre and on generic land values map. The source of these data is the Survey on Basic Municipal Information from the IBGE (Brazilian Geographic and Statistics Institute) also known as the MUNIC.

The MUNIC, although little used by Brazilian researchers, uses a questionnaire that the IBGE applies to all municipalities to capture local government management information. This survey started in 2001 and, since it is a recent effort, every year a new questionnaire is used, so that information available in each publication does not follow exactly the same pattern.[14]

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[13] FINBRA is available on the Internet for download at the address: http://www.stn.fazenda.gov.br/estados_municipios/financas/Finbra2007v1.exe.

[14] Data on MUNIC are available at: http://www.ibge.gov.br/home/estatistica/economia/ferfilmunic/deafault.shtm.

Although the results from MUNIC for 2008 are already available, the last issue of the survey that contained information related to the IPTU is for 2006. The 2006 MUNIC asked the 5,564 municipalities whether or not they had a cadastre and generic land values map and if these tools had been computerized. However, there is no information about the quality of these tools such as on the degree of coverage of the cadastres and on the updating of land values maps.

Notwithstanding the limitations of the MUNIC survey, it is the principal source of information on local tax management covering a large number of municipalities.

As we describe below, our diagnostic of the status of IPTU collections in Brazil starts with the classification of municipalities into homogeneous groups. For this purpose we use the population size of each municipality, its geographic location and the level of household income of the micro-regions where the municipality is located. The first two pieces of information are extracted from census data published by the IBGE. The source of data for micro-regional income level is a study done by the National Integration Ministry.[15]

Classification of Municipalities Into Homogeneous Groups

The Brazilian Constitution considers the municipalities to be autonomous entities of the Federation. Even though general decisions concerning the political-administrative structure and powers delegated to municipalities are found in the text of the constitution, each municipality enjoys a reasonable level of autonomy to define its priorities and procedures.

It is important to point out that there are no legal guidelines regarding population size per municipality or the ideal number of municipalities per state. There are cases of municipalities with less than 1,000 inhabitants while in others the population is around 10 million. Furthermore, the number of municipalities in each state does not have much to do with the land area occupied by each or with its geographic position.

This picture of extreme autonomy itself is an indication that Brazilian municipalities can have unique features. When we add to this the fact that the country is marked by great socio-economic disparities, we realize that local peculiarities can be even greater.

The main challenge for any study of Brazilian municipalities is finding adequate criteria to work with the different features of the more than 5,000 municipalities in the country. Aggregated figures are interesting when we compare local governments with other spheres of government, but are less useful to depict factors that explain the behavior of certain variables in different municipalities.

To build municipal indicators of the geographic location of municipalities is surely better than relying on national averages, but this process does not consider that municipalities also do not match in terms of population size.

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[15] National Integration Ministry. National Regional Development Policy. Available at: http://www.integracao.gov.br/download/download.asp?endereco=/pdf/desenvolvimentoregional/pndr.pdf&nome_arquivo=pndr.pdf, without date

The classification of municipalities by population size within each region and/or state ends up being the method chosen by the majority of researchers who study this level of government. This method is considered particularly suitable for analyzing municipal own-revenues because it shows that own-revenues tend to be lower for municipalities with smaller size population.

But classifying municipalities by population is not enough to explain how they explore different types of taxes under their authority.

Without a doubt, it is reasonable to suppose that smaller cities and towns do not have the same opportunities to collect own-revenues that state capitals and large cities have. However, we have to consider other factors that affect local tax potential such as the household income of the micro-region and whether the area of the state where the city is located is a productive one.

In an attempt to minimize the difficulties mentioned above, this study adds to the traditional analytical tools another way of classifying municipalities. Besides regional and demographic factors, we consider how municipalities are distributed by micro-region and household income in our analysis of IPTU collections.

Classification by micro-region uses criteria established by the IBGE. Micro-regions are defined per state and encompass all municipalities that are within the area of influence of a central municipality. In all, the IBGE defines 558 micro-regions countrywide.

Household income classes were defined by the National Integration Ministry and are the result of combining two variables: the average household income and the growth of the GDP per capita. Using these criteria, micro-regions were classified into four groups: high income, dynamic, stagnant and low income.[16]

High income micro-regions include municipalities with high household income per capita regardless of the pace of growth of the local economy. The dynamic category includes micro-regions with medium and low household income, but significant GDP growth. Municipalities in the stagnant group have a medium household income and well developed socioeconomic structure, but not much economic growth. Finally, the low income class includes municipalities with a reduced level of household income as well as low GDP growth.

The following chart shows the classification of municipalities by the proposed criteria. Note that state capitals, regardless of population size, are treated separately from other municipalities since they have a prominent place in the distribution of the main demographic, socio-economic and fiscal indicators at the local government level.

[16] See the document issued by the Ministry for National Regional Development Policy (without data).

Template for the Classification of Municipalities by Income Level, Population Size and Geographic Region a/

BRAZIL						SOUTHEAST					
	Total	High In-come	Dyna-mic	Stag-nant	Low In-come		**Total**	High In-come	Dyna-mic	Stag-nant	Low In-come
Total						**Total**					
Micro						Micro					
Small						Small					
Medium						Medium					
Large						Large					
Capitals						Capitals					

NORTH						SOUTH					
	Total	High In-come	Dyna-mic	Stag-nant	Low In-come		**Total**	High In-come	Dyna-mic	Stag-nant	Low In-come
Total						**Total**					
Micro						Micro					
Small						Small					
Medium						Medium					
Large						Large					
Capitals						Capitals					

NORTHEAST						CENTRAL WEST					
	Total	High In-come	Dyna-mic	Stag-nant	Low In-come		**Total**	High In-come	Dyna-mic	Stag-Nant	Low In-come
Total						**Total**					
Micro						Micro					
Small						Small					
Medium						Medium					
Large						Large					
Capitals						Capitals					

a/ Population class sizes: Micro = up to 5,000 inhabitants; Small = 5,001 to 20,000; Medium = 20,001–100,000; Large = Over 100,001; and Capitals = state capitals.

Strategy and Analysis

Within each analytical group, we designed indicators to answer questions in the following order:

1. When is the IPTU collected?
2. How municipalities are distributed into classes of per capita IPTU revenue?
3. What is the share of IPTU revenues compared to that of other municipal own-revenues?
4. How do the use of administrative tools influence IPTU collections?

5. How do the above indicators behave depending on size, geographic location and income class of the micro-region the municipality belongs to? Which factors affect the amount of IPTU collected?

A comparative analysis of these indicators across groups of municipalities should give us information to identify the main factors affecting the extent to which the IPTU contributes to local revenues.

Data were compiled by classifying municipalities by groups based on their common characteristics. This shows that aggregated figures, such as the national average for IPTU revenues, are not useful as parameter to determine which municipalities has unexplored its IPTU tax potential, because municipalities exhibit great disparities.

However, due to this very diversity, we recognize that this method is insufficient to capture the distinct features of Brazilian municipalities in detail.
If, on one side it is crucial to understand local specificities to do a more precise analysis of local IPTU collection behavior, on the other, it is not easy to do this by seeking information in each one of the 5,564 municipalities of the country.

One way to overcome these difficulties is to do case studies; but the success of case study analysis depends on correctly selecting a sample of municipalities considered representative, among other factors.

Still, within certain limitations, the analysis of IPTU revenues using the approach proposed in this paper generates hypothesis that can be explored in more depth through case studies. It also helps in developing programs to improve the extent to which the tax potential of the IPTU is used.

Strategy for Legal and Administrative Analysis

An important factor which impacts on the IPTU performance is the legal framework for the tax; specifically, whether the laws that regulate the tax are adequate to meet the actual needs of the cities. A starting point in this analysis is to evaluate obstacles imposed by laws as distinct from those associated with administrative problems. For example, a basic point of the analysis is to ask about the reliability and updating process of the territorial cadastre. Next, one needs to investigate whether the constitutional mandates regarding the IPTU are guarantees or impediments to a smooth tax administration. Regarding extra-constitutional law, the central question is whether that legislation grants to municipality the power to alter or adjust legislation affecting the IPTU. The latter basically depends on the level of development of the local institutions.

Also from the legal standpoint it is important to note the percentage of unpaid tax recorded on the municipal outstanding tax debt rolls, and how many of these cases are legally prosecuted. From there, it is possible to determine the relationship between amounts paid/outstanding debt. And then, if necessary, propose improvements in city legal representation and verify if the amounts collected show an increasing or decreasing trend.

In addition, an analysis of constitutional and extra-constitutional law is needed to determine if there is any type of protection for IPTU delinquents, especially the law to protect family assets (homestead) and the criteria used to grant exemptions.

Finally, the impact of progressive IPTU taxation should be discussed, considering both types of progressive rates: those applied over time and those based on the fair market value of the property. The latter is used more often and follows principles of taxpayer capacity to pay; its application clusters in the urban areas that concentrate more public benefits in the form of infrastructure and services.

Progressive taxation over time is a measure corroborated by the Urban Development Act (*Estatuto da Cidade*, Law 10,257/01). This type of progressive taxation has always been a sensitive issue in our tax system, especially when related to direct taxes such as the IPTU. Progressive tax rates are justified in this case because, to the extent that there are vacant urban land and/or unutilized buildings, the urban fabric frays, and the population presses toward outlying areas of the city. When this happens, new urban facilities are needed to serve peripheral expansion areas and higher costs are incurred. Therefore, it is more reasonable (and cheaper) to try to compel landowners to build or occupy the land.

Municipal legislation regulates progressive taxation over time and is only constitutional if used after the approval of Constitutional Amendment No.29 approved in 2000, and as regulated by the *Estatuto da Cidade* approved in 2001. The aim of this tax is to avoid having an urban land parcel underdeveloped or unoccupied for an extensive period of time. For this purpose, IPTU tax rates can be increased up to twice the rate of the prior fiscal year but by not more than 15 percent. The *Estatuto da Cidade* also states that municipalities cannot give amnesties in the case of this tax—which might be open to question as eventually unconstitutional rule since municipalities have ample and autonomous power to release a taxpayer from a tax penalty through granting an amnesty.

Also concerning the application of progressive IPTU rates, it is relevant to know whether the municipality has a reliable territorial cadastre, since that is an essential condition for implementing progressive taxation in just and equitable basis.

Another aspect to be taken into account in the application of progressive taxation is whether a yearly increment of 5 percent is significant. In most municipalities the IPTU tax rates are so low that such small increase is likely to be irrelevant. In these circumstances, it might be worth to the property owner to keep his land undeveloped in the expectation that its future value will be higher even after discounting for the taxes paid, than selling or developing it.

Appendix C: Database

This appendix is available as an Excel file on the Lincoln Institute website at http://www.lincolninst.edu/pubs/download.asp?doc_id=1625&pub_id=2285.