Strengthening democratic governance through more equitable taxes: enhancing the property assessment system in the City of Buenos Aires, Argentina

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1. Introduction

According to the World Bank, Democratic Governance can be defined as the traditions and institutions by which authority in a country is exercised for the common good. Democratic Governance includes, as two of its key aspects, (i) the capacity of the government to effectively manage its resources and implement sound policies; and (ii) the respect of citizens and the state for the institutions that govern social and economic interactions among them.

While the capacity of the government to effectively manage its resources is often analyzed from the expenditure side, there is also an important revenue side to this key aspect. A tax system, how a government collects resources from its citizens, should be perceived as fair by the citizens if the government is exercising the authority for the common good. A tax system perceived as unfair, the opposite case, clearly limits democratic governance, as it reduces the citizen’s trust in institutions and can negatively affect the capacity of the government to manage its resources by reducing tax compliance.

In addition, when taxation systems are highly regressive they impose a hard burden on the poor and limit the capacity of the state to count with the necessary tax-base to provide the necessary services needed for reducing poverty and inequality and promoting economic growth. This also helps create the perception that some groups in society have unequal access to power and excessive influence over the decision making process, which in turn, undermines democratic governance.

This paper analyzes the current methodology used to calculate the property tax in the City of Buenos Aires, and more specifically its property assessment process or the process of assigning fiscal value to real properties which, combined with the tax rate decided by the Legislature, will define the property tax paid by the citizens.

The paper recommends policy options based on international experience for enhancing the transparency of the process and making property taxes more equitable, with the final objective of increasing citizens’ trust in the government and strengthening democratic governance.

The report is structured as follows: Chapter 2 provides background information and evaluates the property tax system in the City of Buenos Aires, focusing on its property assessment method, the reforms introduced in 2008 and its main issues. Chapter 3 briefly describes property tax systems in general in some of the most advanced economies – the United States and Europe – and in developing countries, presenting an initial international comparison of Buenos Aires to other cities in the world. Chapter 4 explains the property assessment processes in the United States, Europe and selected cities in Latin America. Finally, chapter 5 includes some recommendations to enhance the property assessment process in Buenos Aires.

These recommendations will improve the perception of fairness of the tax and will help to increase the citizen’s trust in the government, strengthening democratic governance in the capital district of Argentina.
2. Property Taxes and the Property Assessment System in Buenos Aires

2.1 Background

The City of Buenos Aires is the capital and largest city of Argentina, and one of the most important cities in Latin America. Buenos Aires counted with close to 3 million inhabitants and a GDP per capita of USD 12,000 in 2004, making it one of the richest in the region and one of the largest as well including its urban area of 13 million people. Similar to other capital cities, Buenos Aires has a special autonomous regime since 1994, a hybrid between a municipality and a province/state. The City counts with a Chief of Government, elected by the citizens every 4 years, and a Legislature of 60 members. A new Chief of Government, Mauricio Macri, took office in December 2007, after winning the elections with 60 percent of the votes. The City’s budget for 2008 is 13 billion Argentine Pesos, or about 4.2 billion U.S. Dollars.

As happens in the majority of the cities, property taxes are one of the most important sources of revenue for Buenos Aires. However, the weight of property taxes in the City’s resources has been decreasing steadily over the last six years. Property tax revenues as a share of total locally generated revenues decreased from close to 20 percent in 2002 to only 9 percent in 2007 according to local authorities, almost as high as the revenues from vehicle registration fees. After a temporary property tax reform recently approved, property tax revenues are expected to represent around 12 percent of locally generated revenues in 2008 (see Graph 1). Apart from reducing potential government expenditures, the significant reduction in property tax revenues adds to the regressivity of the overall tax structure: as property ownership tends to be heavily concentrated among the wealthy in developing countries and landlords are often not reached by the income tax system, property taxes are often seen as a vehicle that contributes to vertical equity.

In addition to the relative reduction in property tax revenues, the distortions generated by the current system have created serious inequities and represent a very important concern for the citizens of Buenos Aires. Luxury properties paying as vacant land and units built in 1988 paying the same rate than units built in 2007 because depreciation only triggers after 20 years are some examples of these inequities and distortions which make the tax to be perceived as unfair by the voters.

The economic crisis that affected Argentina in 2002 and the subsequent economic rebound that led to a real estate boom since 2004 have been important factors that property prices. Market prices for real estate changed quite dramatically in the last seven years. The devaluation of the Argentine Peso and the common practice of appraising real estate properties in U.S. dollars increased market values around three-fold in Pesos, while not necessarily reflecting this change in the fiscal value of properties. While annual inflation averaged around 10 percent between 2002 and 2007, replacement values were only partially indexed. Furthermore, the real estate boom, to some extent fueled by the sharp increase in foreign investment, has led to the creation of new neighborhoods with luxury condos and has also had a great impact in property prices in previously stagnant neighborhoods that now constitute some of the most dynamic areas in the city.

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1 Based on an average exchange rate of ARS 3.15 per U.S. Dollar
2 Wealthiest citizens should carry a relatively heavier tax burden compared to lower-income citizens
3 The government increased the replacement value for all “Category A” properties regardless of their usage category and for all non-residential category “B” properties by 30 percent per square meter. See laws 746 (2002) and 1011 (2003) for reference.
A significant reason for the decrease in property tax revenues and for these distortions has been the property assessment system established for many years, which presents serious weaknesses such as: (i) a complete disconnection from market prices and perception by the citizens that the system is arbitrary and not clear; and (ii) a regressive assessment system, with few and ad hoc reassessments.

In order to increase property tax revenues and make the tax more equitable by mitigating some of the distortions identified in the paragraphs above, the new city government passed a one-year decree for 2008’s budget that divides the City of Buenos Aires in 82 zones and that applies different property tax rate increases according to these zones. This temporary measure represented an average increase of 60 percent[^4] in the individual property tax bill. Obviously, this massive increase in property taxes has generated resistance by a significant percentage of the population who were accustomed to paying much lower amounts and who do not necessarily see a clear linkage between tax collecting and benefits received. The current administration has made it clear that this is only a temporary measure supposed to last until a new system is approved by the Legislature.

2.2 Property Taxes in the City of Buenos Aires

Property taxes (Gravámenes inmobiliarios) in Buenos Aires are composed by a series of different “contributions”. These contributions are: (i) Road and Street Lights, Trash Collection and Cleaning (ABL is its acronym in Spanish); (ii) territorial contribution; (iii) streets and sidewalks contribution; (iv) sewerage services; and (v) special fund for expansion of the subway system. These taxes are calculated using the same tax base, the real property fiscal values (also called assessed value). The City’s Legislature determines the tax rates for each of these contributions annually in the Tax Law (Table 1 shows tax rates for 2008).

The Tax Law caps contributions for property taxes below 1 percent of the property’s market value, and allows taxpayers to appeal their property tax amount by presenting two property appraisals from private real estate agents that certify a lower property value. Some estimates indicate that citizens pay after the 2008 reform, on average, close to 0.5 percent of the property’s market value, an amount roughly in line with international standards.

With the exception of the subway fund – which is clearly earmarked for the expansion of this transportation system – all other property taxes go to the City’s general fund. This fact does not help towards establishing a clear linkage between the collection of property taxes and the services that are financed with those funds. Most of the services related to the contributions are not listed as separate programs in the budget and are executed by different agencies of the City’s government.

2.2 Property Assessment in the City of Buenos Aires

The property assessment process, by which properties are assigned a fiscal value, is regulated by the Tax Law, approved by the Legislature on an annual basis. Article 7 of the 2008’s Tax Law establishes that properties are assessed based on their replacement value[^5] that corresponds to a property’s usage category. Examples of the eighteen usage categories included in the law are: residential-single family; offices; hotels and nursing homes, etc[^6].


[^5]: VUR or Valor Único de Reposición

[^6]: The Tax Law includes 18 usage categories. The usage categories are quite specific and include: Residential – Single-family; Residential – Multi-family; Residential – Low quality housing; Hotels, nursing homes; Clubs, Stadiums, Schools; Cinemas, Theatres; Unusual Buildings; Garages; Supermarkets; Offices; Temples; Stores; Banks; Industries; Storages; Hospitals; Laboratories; Gas Stations
Properties are later assigned a *qualitative* category, going from A (highest quality) to F (lowest). These categories are based on a set of possible characteristics or features. For example, in the case of single-family residences it includes elevators, air conditioning systems, heating, number of restrooms, etc. Each of these characteristics is assigned a specific number of points. After adding the points for the characteristics present in a specific property, the property is classified with one of the six qualitative categories.

The law sets the replacement value per square meter of a property annually. These values vary according to the usage and qualitative categories assigned to each property, and are disconnected from market prices. Despite its annual approval by the Legislature, replacement values per square meter seldom change and are not adjusted by inflation on a regular basis. The law determines, for example, a specific amount of pesos as the replacement value per square meter for residential-single family properties category A. The property assessment is calculated by multiplying the specific replacement value per square meter times the area of the property. In the case of properties older than 20 years, a depreciation coefficient is also included. Depreciation coefficients are also established in the same law.

The final component of the assessment process is a coefficient based on the zone where the property is located. The 2008 reform created zone coefficients that are applied to the properties’ assessed value (land plus building) before applying the tax rates described in Table 1. The government created 82 zones, targeting much higher increases for those areas of the city with perceived higher market values, and no increase or a low increase to the lower-income areas, in an effort to make the tax more equitable.

Finally, in terms of institutional arrangements and staffing, the Dirección General de Rentas (DGR) is the unit in charge of regulating property taxes, including the property assessment process. The DGR had created a team of close to forty assessors at the beginning of 2008 to conduct physical checks of existing properties and review both the usage and quality categories.

*2.3 Main Issues*

The current property assessment system presents many problems. The ones that most severely undermine democratic governance are the following: (i) The assessment exercise is completely disconnected from market prices and there is a perception that the methodology to calculate the property’s value is arbitrary and not clear; (ii) The assessment system is regressive; and (iii) 2008’s reform partially mitigated the regressiveness but created other inequities, reducing the citizens’ trust in government.

(i) An assessment system completely disconnected from market prices and perceived as arbitrary and not clear. As the assessment of individual properties is based on replacement value (cost approach), the characteristics of each property define the usage and quality categories and therefore determine the assessment. However, the replacement cost approach is not linked to property prices and it is not even linked to the real replacement cost of properties. In addition, the accuracy of the property assessment process varies substantially between new and existing properties. For new buildings, the process of issuing building permits – performed at another agency of the City’s government – allows the DGR to be aware of the property’s characteristics and the classification is expected to be accurate. However, for improvements made to existing property the law relies on citizens’ self-assessments, which are seldom submitted.
While other governments tend to rely on sales comparison data to conduct property assessments reflecting market prices, this would be difficult to implement in the City of Buenos Aires partially due to the current institutional arrangements. First, properties tend to be registered for a much lower value than the market value due to the lack of incentives for notaries and other actors involved in the process such as commercial banks providing mortgages. Second, the interaction between the institution in charge of registering properties – the Real Property Registry of the Capital District, which is a Federal level agency within the Ministry of Justice – and the one managing the property tax (DGR, from the local government) is limited.

(ii) The assessment system is regressive. Since the characteristics that define the qualitative categories have not been updated since the early 1980’s, more and more properties have been classified as “A” and “B” each year. Given that all properties with the same usage category and quality category pay the same amount per square meter, the current system does not differentiate between luxury residences with several new features or materials and other residences with more regular standards. A second issue related to regressiveness or vertical inequity is related to the depreciation schedule included in the Tax Law. By including depreciation rates only for properties older than 20 years, the 2008’s Tax Law treats the same way properties built in 1988 and 2007. Thus, there is a complete disconnect between the year the property was built and the replacement value for all properties built in the last 20 years. This is especially regressive considering that the real estate and construction boom that has taken place since 2004 has mostly been concentrated on luxury units in the most dynamic areas of the City, that have increased their market value per square meter significantly since 2002. Therefore, by not deprecating properties built between 1988 and 2003 (before the real estate boom) the government is taxing the same way properties of very different characteristics, probably owned by individuals of very different income levels, going against vertical equity. As a way of partially mitigating the regressiveness mentioned in the paragraph above, the previous City government updated the property assessment process in 2002 by increasing the reposition value for all properties under the quality “Category A” regardless of their usage, and all non-residential “Category B” by 30 percent per square meter. Although this measure supposedly made the system more progressive, it only applied a one-time across the board adjustment to the highest quality categories but did not modify the valuation method. Finally, another tool used to mitigate regressiveness – similar to the circuit breakers used in the United States – has been the exemption to retirees earning below two minimum salaries, people with disabilities and those unemployed heads of household. Citizens earning below two minimum salaries have been granted with a discount of 50 percent. Although these efforts were in the right direction, the overall regressiveness of the property assessment system was not affected.

(iii) Reforms introduced in 2008 partially mitigated the regressiveness but created other inequities, reducing the citizens’ trust in government. An initial evaluation of the latest reform seems to indicate that even if at a macro level the government achieved its objectives of increasing revenues and making property taxes more progressive than the previous year, the new system created horizontal inequities. By trying to increase property taxes across the board targeting properties in the richest zones and other properties with market values not updated for a long period of time (the great majority of the properties), the new law hit the owners of properties recently revalued. Those honest citizens that informed the government about improvements made to their parcels in the last few years were negatively affected by the across-the-board increase in property values. Even though the government tried to address these cases by including the appeals mechanism described previously, this did not help to build a sense of fairness and worsened the government’s credibility.

7 No data on the evolution of the number of properties per qualitative category per year was found (the exact magnitude of the increase in the number of properties in categories A and B is unknown)
3. How do Property Taxes Work in Other Countries?

An international comparison of how property taxes work in different countries requires a basic distinction of the different services provided by the governments through this tax. Local governments use revenues from property taxes for different purposes. While some cities or counties largely depend on property tax revenues to subsist and use it to finance public health, education and other services, others incorporate this revenue to the general fund or only use it to finance specific services such as solid waste management, water, etc. Regardless of these very important differences, an initial analysis on the degree to which cities around the world rely on this source of revenue to finance their services and the challenges they face will help to set up the context and conduct and check how Buenos Aires compares to other cities.

The importance of property taxes in terms of revenue varies among cities. While in some cities it represents an important source of revenue, transfers from higher levels of government or business taxes are more important in others. Cities like Sao Paulo, Bogota and Belo Horizonte showed higher property tax revenues as a percentage of GDP than Buenos Aires in 2002 according to the Lincoln Institute of Land Policy (see Table 2), even during a year when the GDP for the City of Buenos Aires was much lower and property tax collection higher as a percentage of total revenues.

Another indicator that clearly shows the relatively lower significance of property tax revenues in Buenos Aires is the ratio between fees collected for vehicle registration and property tax revenues. While the ratio cities such as Chicago, Los Angeles or Mexico does not exceed 0.06 – and many cities such as New York or Madrid do not even single out vehicle registration fees in their budgets because of its low significance in the overall revenue structure – Buenos Aires has an extremely high ratio of 0.75 (see Graph 2). This is not a result of an unreasonably high vehicle registration fee in Buenos Aires or a much higher number of cars per capita, but rather a very low collection of property taxes.

Apart from revenue collection, property tax systems tend to face very similar issues around the world and many jurisdictions find the implementation of a property tax problematic. Property tax administration involves six key steps: discovery of the tax base; preparation of a property list; equitable valuation of the property or property assessment; recognition of exemptions; application of tax rate to valuation; and collection. Although each of these steps has their own challenges, property assessment tends to be the most contentious phase of property tax administration because of its relatively higher degree of subjectivity. The next sections will analyze how property tax works and the typical challenges faced by most advanced and developing countries.

3.1 Property Tax in Most Advanced Economies

(i) United States

As a local tax used to support local services, the property tax in the United States is a highly visible levy whose costs can be related directly to the benefits of local government programs. This important fact contributes to the perception of property taxes as an acceptable tax and thus will tend to increase compliance by the citizens.

Local governments in the United States raise a relatively higher portion of their income from property taxes compared to other cities around the world. This has to do with the fact that local governments are responsible for financing health and education services locally, while in other countries these services tend to be funded by transfers from the federal or state level government.

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8 A fee typically collected by the local government in most cities
Property taxes show a great variation in the local governments of the United States. Some local governments may depend on property taxes for nearly all of their revenues while others have a much more diversified revenue base. In the largest cities the proportion also varies although, as shown in Graph 3, it tends to represent over 30 percent of total revenues. Typically, property tax revenues vary according to the financial needs of the local government: the tax rate is readopted by the local government once a year at a level sufficient to yield enough revenue to balance the operating budget.\(^9\)

However, despite its fiscal importance to local governments and the fact that the concept of taxing property to finance local services is considered acceptable, property taxes are often criticized for three main reasons that negatively affect many property tax systems in the world: (i) although property taxes can be related to ability to pay this has not always been the case – unlike sales or income taxes; (ii) it sometimes taxes unrealized capital gains; and (iii) the methodology used to assess properties and update property values can be problematic and regressive.

To overcome the first issue some local governments in the United States have implemented property tax circuit breakers, intended to link the property tax bill to the owner’s income – the tax is capped when it reaches a specific percentage of the owner’s income. Regarding the second issue, higher taxes due to an increase in market prices regardless of the owner’s income, it also tends to be mitigated by introducing thresholds on the increase in taxes per year.

Finally, property valuation and assessment is also one of the main problems of the property tax system in the United States, for three main reasons. (i) Property valuation is a more difficult and subjective process than analogous exercises for any other tax; (ii) The shock of applying a new assessment to the tax if reassessments are not frequent enough does not tend to occur with other taxes; and (iii) it tends to be regressive: “properties with higher values are normally assessed at lower rates than properties with lower values, which means that the property tax is more regressive than it should be.” (ICMA 2004).

Technologically, most big cities in the United States tend to count with the latest information systems needed to consolidate a solid property list and replicate valuation models based on market prices to a high number of similar properties.

(ii) Europe (OECD countries)

Unlike the United States, central governments tend to have the power to tax property in Europe (OECD countries). However, property tax rates tend to be set partially by the central administration – through a basic rate – and partially by local governments, which have limited power to change rates and usually do it through a locally determined municipal coefficients or rates. Regardless of which level of government has the power to set the tax rates, most of the revenues do go to municipalities. Property taxes in Western Europe have increased their weight in the revenue structure of many local governments, but most of them are still below 10 percent of local revenues (Almy, 2001).

Property assessment and the reassessment periods are also the main issues related to property taxes in Europe. Countries differ substantially in their approach towards these two exercises. The responsibility for developing valuation models and the application of those models to the individual properties may be done at the central level or locally. While some countries develop models centrally and apply them locally (Denmark and Spain), others leave it up to the decision of local governments. Although some of the most advanced European economies rely on self-assessments by taxpayers, the use of this assessment method is very limited.

\(^9\) This practice is also followed in Canada and Australia. See Almy (2001) p. 18
Finally, in some countries such as the Netherlands and the United Kingdom municipalities increasingly contract with private sector companies for valuation services.

Reassessment periods also vary. While some countries have not revalued their tax bases for decades, others undertake revaluations regularly (annually or every less than four years). Many countries have either no provision for regular reassessments or have postponed revaluations so often that their tax base is completely disconnected from current market values. Despite these countries try to mitigate the problems associated with infrequent revaluations by some form of indexation, the use of this mechanism is not effective when values has not been updated for 20 years.

Western Europe also differs in terms of technology, ranging from countries with low levels of automation such as Portugal to others with advanced computer-assisted mass appraisal systems (CAMA) used for market research, application of the three approaches to property value, identification of comparable sales and quality assurance, geographic information systems (GIS) and tax administration systems. Countries leading in the development of computerized cadastral systems are Denmark, Netherlands and Sweden.

3.3 Property Taxes in Developing Countries

Property taxes are – together with transfers from higher levels of government – one of the most common revenue sources for local governments in developing countries (World Bank, 2007). However, these countries have historically faced challenges managing this tax which have kept property tax revenues below the average of cities in the United States (see Graph 4). Although some of these issues are inherent in the specific characteristics of the property tax worldwide, and do not necessarily have to do with developing countries, others are related to a perceived lack of capacity at the local level. The most serious problems in property tax administration tend to be related to the property assessment process, which will be studied in further detail in the next chapter.

According to Balh (2007), the low dependence on this tax in developing countries is explained by four main disadvantages of property taxes, two of them directly related to the property assessment system:

(i) Administrative constraints and how the tax is actually perceived by taxpayers. In most developing countries property taxes are badly administered. Starting with the difficulty in defining the inventory and following with the other steps of the process such as assessment and collection, the property tax is generally difficult and costly to administer. These problems, in combination with low revenue yields and a capacity issue – shortage of property assessors in virtually all developing countries – represent significant obstacles to the implementation of the tax. In terms of perception by the taxpayers, both assessment ratios and collection rates are often very low. This leads to unfairness in terms of how various categories of taxpayers are treated, and to significant revenue leakage.

(ii) Enforcement of property taxes is difficult in developing countries. Elected officials often do not count with reasonable legal means to penalize those who do not comply.

(iii) Property taxes are not income-elastic. Reassessments only occur on a periodic basis. When revaluation is too infrequent – as it tends to be in developing countries – the exercise leads to large-one time increases in tax liability and to citizens’ discontent due to the shock. The current situation in Buenos Aires clearly exemplifies this disadvantage.

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10 Sales comparison, replacement cost and income approach – explained in further detail in the next chapter
(iv) Relatively higher unpopularity of property taxes compared to indirect taxes such as value added tax. This higher unpopularity is based on three main factors: (a) as happens in any country in the world, the levied tax does not necessarily correspond to income perceived; (b) also common for all countries, the visibility of the property tax is higher compared to consumption taxes, that are often obscured in the final price of the merchandise; and (c) the judgmental approach to assessment that is taken almost everywhere, and more typically in developing countries. “A proposed increase in the tax rate on a tax base that is determined in uncertain or even mysterious ways is bound to provoke negative reactions” (Bahl 2007).

Finally, a fifth factor that could be added to the list developed by Bahl is corruption, which also has a negative impact on the efficiency of the property tax. A World Bank report (2007) cites a study by Nickson (1995) according to which corruption is believed to be one of the main factors responsible for the property tax’s poor revenue efficiency11 in Latin America. In addition, the study also stresses failures in the property assessment system as key factor in the success or failure of the tax: “collusion between taxpayers and tax officials in assessment of property values and outright fraud by tax officials are largely responsible for the low effectiveness of the property tax.” (World Bank, 2007)

4. International Experiences on Property Assessment

A property assessment system that is perceived as fair by the citizens will be crucial towards the objective of strengthening democratic governance at the local level. As the previous overview on property tax systems suggests, most property assessment systems face similar issues. However, according to the scholars some jurisdictions in the United States and Europe have developed better systems, both technically and institutionally, that could be replicated in developing countries. This section will start by briefly describing the existing options for conducting a property assessment exercise and will later analyze the challenges and how property assessment works in the United States, Europe and selected cities in Latin America.

The property assessment process typically consists of two basic steps. First, properties are appraised or valued at their market value, in a technical exercise led by property assessors. Secondly, properties are assessed for tax purposes at a percentage of their market value, which should ideally be very close to the market value. This is usually done by the elected officials. The assessor’s goal is to value the building, land and improvements of each parcel at the market price.

There are three general approaches to the process of property valuation: (i) Market Data; (ii) Income Approach; and (iii) Cost approach. Each of these approaches is described below.12

(i) Sales or Market data, or comparable sales approach, estimates the value of a parcel by comparing similar properties that have recently been sold with this parcel. The approach uses information directly produced by the market about how property owners and prospective owners value properties. It is the most direct evidence of property values and should be relatively accurate, even for properties that have not recently changed hands. The approach requires a number of actual transactions in order for meaningful comparisons to be made, which is difficult given that during any fiscal period only a very small percentage of the property on a tax list is subject to a market transaction.13

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11 The ratio of revenue collected to the cost of raising the revenue tends to be lower than in developed countries
12 Table 3 summarizes advantages and disadvantages of each assessment method.
13 For example, about 6 percent of Mexico City’s properties are sold each year. In the State of Maryland, where this method is used, transactions tend to range between 5 to 10 percent of the existing properties (Source: government officials and former government officials from Mexico City and the State of Maryland)
(ii) The income approach or capitalized value converts the future returns from ownership of a parcel into the present value equivalent to estimate the amount a willing and knowledgeable investor would pay for the future income flow. The approach is most attractive for estimating the value of income-producing properties (businesses, including rental housing).

(iii) The replacement cost or summation approach estimates value based on three important components: building cost, land value and depreciation. Building cost is based on current construction costs and specifically takes into account size, number of rooms, etc. following a costing manual developed locally. It then deducts a depreciation allowance for the age and condition of the building. The value of the land is normally estimated separately. Land value is typically calculated using a price per square foot. The final valuation will include a total land value plus the depreciated replacement cost of structure. This approach – similar to the one used in Buenos Aires for all properties – is especially suitable for special or unique properties that are seldom exchanged on the market and generate no income, but is sometimes used to confirm the accuracy of market data.

In addition to these methodologies, countries also use different assessment cycles. These assessment cycles define how and when properties are reassessed in order to keep the accuracy of property values. The frequency of revaluations is a key aspect of any property assessment system. Revaluations should be frequent enough to maintain an acceptable degree of uniformity in assessment rates. Ideally, valuations should be updated annually (if needed) although this is not common even for developed countries. On the other extreme, long intervals between revaluations bring political problems and damage democratic governance. They reduce the credibility of the tax and create constituencies who benefit from outdated values that will strongly oppose revaluations. In contrast, frequent revaluations make property tax burdens more equitable. Furthermore, according to some scholars the annual costs of an ongoing revaluation program often compare favorably with the annualized costs of periodic revaluations (ICMA 2004, Mikesell 2003).

The assessment cycles used by governments tend to fall into three general categories: (i) Mass cyclical assessments; (ii) Segmental reassessments and (iii) Annual reassessments.\(^\text{14}\)

(i) Mass cyclical assessments: all properties in a taxing jurisdiction are valued for tax purposes in a particular year. That value will not change until the next scheduled mass assessment, except for new construction, demolition, or a change in the use of property. They repeat the assessment every 2 to 10 years. Its main advantages are fairness (all properties get reassessed at the same time) and efficiency (all efforts are concentrated in one year). However, it requires the right software (cadastral maps) for detailed inventory and assessment functions and a sufficient number of staff to carry out the exercise. It may also require audits of the assessment process. Some of these services are usually contracted out.

(ii) Segmental reassessment is a procedure by which a specified fraction of real property parcels in a jurisdiction is reassessed each year, moving through the assessing unit in sequence. Thus, if a three-year cycle is used, one-third of the properties in the area would be reassessed each year, with all properties reassessed every three years. This system, used for example in the State of Maryland (U.S.) is a more balanced approach and may be the most realistic cycle for a big jurisdiction in a developing country. Despite this advantage, it can produce temporary inequities at a time of significant changes in market values.

\(^\text{14}\) Table 3 summarizes advantages and disadvantages of each assessment cycle.
(iii) **Annual assessment** is a process that presumes updated values for all real property parcels each year. This option is only possible through the use of advanced information-management systems. Annual reassessment can be irrelevant if last year's forms are simply recopied or if all parcels have values increased by a flat factor of \(x\) percent (e.g. based on inflation). That process destroys the equity of property tax because no adjustments are made for properties whose value has either fallen or increased.

A fourth option on assessment cycles – though less common than the previous three – is called **spot reassessment**. This unusual method updates the value of an individual property when it is sold. Although it is politically attractive given that the value of only a few properties gets updated per year and it is relatively easy to assign a market value to a property right after a transaction took place, the likely considerable lag in the reassessment of the rest of the properties redistributes the property tax burden to new buyers.

The main advantages and disadvantages of the three approaches to property valuation and the different options on assessment cycles, summarized in Table 3, provide an interesting starting point to analyze how property assessment works in practice in most advanced economies and in some Latin American cities. This analysis will also incorporate other factors such as the staff’s qualifications and institutional arrangements related to property assessment.

### 4.1 Property Assessment in Most Advanced Economies

(i) **United States**

The property assessment or value-estimation procedure varies across the fifty states. The legal system in the U.S. allows each state to determine its own property assessment method. Many times the states delegate this power to the local governments. Therefore, there is a great variety of systems being used, both in terms of the property valuation method used and the cycle followed. However, the most commonly used standard – regardless of the valuation method or assessment cycle used – is market value or “the cash price a property would bring in a competitive and open market”. Most states require the assessment to be within 10 percent of the market value. Only in California the properties are revalued for tax purposes only when they are sold and then set at the new transaction price.

Apart from the methodology and frequency for the valuation of properties, there is no widespread agreement on the institutional arrangements for property assessment or the staff’s qualifications. Some jurisdictions prefer to use an independent valuation agency or contractor; others prefer to use the institution responsible for property tax administration. The argument for independence is that it reduces the effect of political pressures to adapt valuation to property tax policy objectives. Its main disadvantage is that because of the lack of political strength, these agencies sometimes do not count with the resources needed to execute reassessments. In terms of the qualifications, big cities tend to count with multi-disciplinary teams that adjust to the jurisdiction’s needs.

Just to cite an example, New York City, the most populous city in the United States, uses the three approaches to property valuation: sales comparison, income approach and cost approach. These methods are selectively used for the different property categories. Small residential properties and vacant land are valued using the sales comparison approach, taking sales of similar properties for the previous three years. The value of offices and businesses (including income-producing properties such as apartment buildings) is estimated using the income approach, taking an estimated income and dividing the net income by a capitalization rate. Finally, the cost approach is mainly used for new constructions and renovations, but also for special properties such as stadiums, museums, churches, etc. Properties are reassessed on an annual basis.
The Department of Finance, through its Property Division, is the agency in charge of valuing New York City’s one million residential and commercial properties.

(ii) Europe
Property appraisal and assessment models are not homogenous in Europe. Countries vary in terms of their appraisal methods, assessment cycles and institutional arrangements among other characteristics. While assessment levels or the ratio between assessed levels and market values tend to high and thus be very close to market values in some countries, they are totally disconnected from market prices in others.

Denmark and Sweden, for example, rely heavily on mass appraisal using the sales or market data, but also combine it with the other two classic methods – the income approach is used for properties being rented with infrequent sales and the cost approach for the remaining types of properties. On the other extreme, France’s and Germany’s property assessment systems are totally disconnected from market prices. While France uses highly generalized per-unit models which update property values using coefficients, Germany tends to rely on the cost approach, using costing manuals that include use and construction quality. These systems are considered to be inequitable (Almy, 2001). In the Netherlands, the appraisers are free to choose the method among a list of methods included in the legislation. Finally, Spain makes market surveys at the national level that are later developed regionally.

In terms of reassessments, the law usually specifies a date of assessment and property is supposed to be assessed on the basis of its status on that date. Except for a few countries, reassessment is not frequent in Europe. Germany and France only index values to inflation every 6 years. They avoid reassessment shocks but as stated several times in this paper unusual reassessment cycles also go against equity. Only Denmark and Sweden have followed frequent reassessment cycles (annually or every two years) thanks to continuous market monitoring, studies of valuation accuracy and price trends and continuous maintenance of the properties attributes database. The Netherlands and the United Kingdom reassess every 5 years or less.

Institutionally, the responsibility for developing valuation models and the application of those models to the individual properties may be centralized or decentralized. In addition, some countries delegate this responsibility on the Ministry of Finance (Spain, France, Italy) while others count with an independent agency that manages all matters related to cadastre management and property valuation (Sweden, Czech Republic).

The assessors’ qualifications are a very important issue in Europe. International experience varies with respect to the importance of academic preparation, in-service training and professional credentials. Also, the profession of the assessors also varies: although valuation essentially is a form of economic analysis, in some countries assessors are architects (e.g. in Spain), civil engineers and surveyors (e.g. in the United Kingdom). Denmark’s assessors are usually economists. Within the field of valuation there is a growing recognition that the qualifications needed for mass appraisal are different from traditional forms of single property appraisal, needing more skills in statistical analysis. Finally, some countries such as the Netherlands and the United Kingdom municipalities increasingly contract with private sector companies for valuation services.

4.3 Property Assessment in Latin America
Similar to Europe and the United States, there is a great variety of approaches to property appraisal and assessment in developing countries, particularly in Latin America.
While almost all countries in Latin America rely on local governments to conduct property valuation, the methodology used and the qualifications of the assessors differ.

First, there are significant differences regarding the average assessment levels. According to the Lincoln Institute of Land Policy, the average assessment level for the cities with available information ranges from 15 percent in Curitiba (Brazil) and 30 percent in Buenos Aires to 80 percent in Bogotá (Colombia) and Belo Horizonte (Brazil), as reflected in Graph 5.

Secondly, Buenos Aires also lags behind comparable Latin American cities in most characteristics of the property assessment system (see Table 4). First, while these comparable Latin American cities rely on more than one method and tend to include the sales comparison approach, Buenos Aires only uses a cost approach method disconnected from market prices. Secondly, most cities comply with the reassessment period established by law and index property prices to inflation within these reassessments. Third, these cities also tend to count with a quality control mechanism for their assessments. Finally, staff qualifications also differ: while Buenos Aires counts with tax inspectors to valuate properties, other cities have opted for a broader approach including engineers, architects and technicians specialized in valuation of properties.

5. Policy Recommendations: Enhancing Property Assessment in Buenos Aires

The previous sections have illustrated the main issues faced by the City of Buenos Aires in the property assessment process, showing how they negatively affect democratic governance. In addition, the paper has also provided an overview on how property taxes and property assessment in particular are carried out in the United States, Europe and developing countries (more specifically in Latin American cities).

This final section builds upon the analysis done so far and suggests policy options for reforming the property assessment process in Buenos Aires with the intermediate objective of increasing its equity and transparency levels and the final objective of increasing citizens’ trust in government and therefore improving local democratic governance.

Following Bahl (2007), property assessment systems tend to show a high level of equity when “assessment ratios are high, reassessments are frequent, assessment personnel are full time and specifically trained and assessment technology is available.” Or, in other words: fiscal values very close or the same as market values, reassessments every two to five years, assessment personnel specialized in property valuation and solid information systems. The recommendations for Buenos Aires follow these general lines and are organized into three technical pillars, each of them with necessary prerequisites for implementing these reforms. Tackling each of these challenges will require time and resources, apart from building a political consensus between the different branches of government and the different political parties.

(I) Increase assessment ratio: Buenos Aires would benefit from moving to a system where assessment values for residential properties are connected to market prices, and where ideally these two amounts match. Commercial properties should be valued using the income approach. The cost approach should be used for other properties.

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15 According to the International Association of Assessing Officers (IAAO), the international target is to assess properties at a range of 90 to 110% of their market value.
The sales comparison approach is the preferred method used to assess residential properties at market prices both in developed and developing countries. This approach increases transparency and equity and helps to restore the perception of fairness of property taxes. Citizens pay according to their market value of their property, which is known by everybody. Necessary preconditions for the application of market value assessments are (i) the existence of a functioning real estate market and a good property registry; (ii) having the right institutional arrangements in place to register sales accurately; (iii) an appropriate database with accurate information of every property (property inventory) and appropriate software that allows the agency to run mass appraisal based on sales data.

(i) A functioning real estate market and a good property registry. There should be the possibility to receive accurate information on real estate transactions and other qualities of real estate. In order to apply the sales comparison approach Buenos Aires needs to ensure that the law mandates sales disclosure for all properties and that those sales are effectively registered at their real value.

(ii) Institutional Arrangements. Information flows between the key actors involved in property sales, registration and construction need to be strengthened to ensure that property valuation information is accurate. Relevant actors include the DGR, the Property Registry, notaries who certify transactions, real estate firms, developers, commercial banks providing mortgages and the federal revenue agency, among others. Strengthening these information flows will require stronger incentives than just the good will of these actors. For example: passing laws that require the association of notaries, real estate firms and developers to maintain and share databases on the sales registered and introducing credible audits that severely penalize those notaries and firms that register properties below their real value, among other measures. The information flows from notaries and the property registry should be ideally linked to the database managed by the property tax administration agency (DGR).

(iii) An appropriate database and software: obtain the technology needed but analyzing the cost-effectiveness of such an investment. Even though having a new system in place will take time and will require both political and economic efforts, only through a solid database and a strong back office will the assessment reform be successful. Although the existing software used in Buenos Aires could not be analyzed in detail, based on anomalies detected in 2008’s billing process there seem to be serious issues with property inventory that have to be solved before moving to the next stage.

Ideally, a large assessment district such as Buenos Aires would have a modern computer-assisted mass appraisal (CAMA) system that would support the valuation of all kind of property and would support all three approaches to value. Purchasing new software up to international standards would cost the city a significant amount of resources but would represent a basic first step towards setting up a sustainable property assessment system for capital city as Buenos Aires and that could be recovered relatively easily after the reform. The City should obviously consider conducting a cost-benefit analysis of the investment needed in both cases to ensure that the new information systems needed for the implementation of the new costing methodology to be described later are economically viable. In addition, any new information system or database should be compatible with the option of making the information available online at a future stage.

16 Source: DGR officials
17 A challenge that managers of property tax systems face everywhere is achieving cost-effectiveness, that is, an acceptable high level of performance at an acceptably low level of administrative cost. One aspect of cost-effectiveness is to calculate administrative costs as a percentage of property tax revenues. As a percentage of revenues, costs should obviously be lower than 100 percent. Otherwise the tax would cost more to administer than it produced in revenue. In western countries, administrative costs in the range of 2 to 5 percent of revenues are often achieved (the average in the United States is 2 percent even though cities as Chicago and Seattle achieve a 1 percent ratio). (Almy 2006)
It is important to recognize that start-up costs usually are considerably higher than annual operating costs after a system has been working for several years. Once the system is set up, mass appraisals are relatively easy to conduct and its cost is much lower than performing single real estate appraisal. Additional ways to reduce the costs of valuation are to (1) reduce the amount of data on each property that is required; (2) reduce the amount of human effort in reaching a value conclusion; and (3) increase economies of scale through automation and through putting property data to more uses than property tax administration (Almy 2006). Additionally, the City could explore engaging in cooperation agreements with other cities that have recently updated their software to obtain technical assistance and advice at a lower cost.

Finally, following international practices, Buenos Aires would benefit from using all valuation approaches based on their comparative advantages. Residential properties should be assessed using the sales comparison approach. Commercial properties should be appraised using the income approach and the City should continue relying on the cost approach for unusual properties (as it is the case in New York City). The new system should obviously be able to run the three valuation approaches.

(II) Increasing frequency and quality of reassessments: Buenos Aires would benefit from setting a reassessment period between two to four years and establish it by law to maintain a reasonable relationship between the assessment base and market values. Introducing a quality control mechanism with regular evaluations of assessments is also crucial to gain credibility.

The assessment cycle should be often enough but not necessarily every year. Despite the ideal scenario of annual reassessments, having a reassessment every three or four years would be reasonable, leaving the door open to additional reassessments within that timeframe in case of significant market changes or in the case of high inflation.

Infrequent assessments have been blamed for inequities between older and newer homes and in general for high coefficients of dispersion\(^{18}\). As stated by ICMA (2004), the effects of a delayed reassessment include: (i) long periods during which recent buyers pay higher taxes because their property prices were updated; and (ii) major readjustments for all property owners when the new assessments are finally complete. When property owners see sharp increases in assessments or sharp drops in market prices they are likely to challenge assessments. If reassessments are very infrequent and property prices rise dramatically during a long period of inflation or due to a real estate boom the likely result will be a reassessment shock. Limiting the annual increase in property prices by a specific percentage is a measure some cities use to mitigate the risk of a reassessment shock and avoid high litigation costs.

The most important necessary precondition for increasing the frequency of reassessments – usually carried out through mass appraisal in the case of residential properties – is the existence of an appropriate database with accurate information of every property (property inventory) and appropriate software that allows the agency to run mass appraisal based on sales data, explained in the previous pillar. In order to carry out the appraisal of real estate regularly many countries have implemented mass appraisal systems. These systems require the utilization of advanced computer assisted mass appraisal systems – CAMA systems – integrated with tax administration and geographic information systems (GIS). Once the databases and software needed in Buenos Aires are in place, as stated in the previous pillar, reassessment of residential properties could be done through mass appraisal.

\(^{18}\) The coefficient of dispersion is a measure of unfairness, see policy recommendations on quality assurance below
Quality assurance is a key responsibility and challenge for any assessor’s office. The fairness of an assessment can be tested objectively using two main tools: (i) by calculating the average coefficient of dispersion, which provides evidence of the overall accuracy of appraisals; and (ii) performance audits, which are more useful to check the accuracy of individual appraisals. Both tools are further explained below:

(i) The average coefficient of dispersion is the deviation from the mean of assessment ratios for individual properties or classes of property. The coefficient indicates how fairly the assessor apportioned the property value: a lower coefficient indicates a more consistent assessment. The International Association of Assessing Officers (IAAO) recommends that the coefficient of dispersion be no more than 15 percent for heterogeneous or older properties and no more than 10 percent for newer more similar properties. The assessment ratio is a simple exercise that can be performed once the database with sales data and the software are working.

(ii) Performance audits target individual properties and are useful and complement ratio studies. However, there are no standards for performance audits, not even in the United States. Buenos Aires is already conducting performance audits but the samples have been too small. In 2003, for example, a sample audit only covered 96 properties out of a total number of 1.64 million.

(III) Create a property assessment unit with qualified personnel.

According to scholars (Almy 2001), to achieve political acceptance, revenue targets and other goals, property taxes must be allocated sufficient technical and human resources and be well administered. Thus, Buenos Aires would benefit from the creation of a property assessment unit within the DGR with qualified personnel on property valuation and enough staff to manage an inventory of 1.6 million properties.

In terms of qualifications, as seen even in other Latin American cities (see Table 4), property assessors tend to be engineers and architects, and not tax inspectors as it is the case in Buenos Aires. In addition, the use of software and special databases will require staff with some expertise in information systems, and increasingly with skills in statistics and economics.

The number of staff to be included in this unit is also crucial towards achieving its objectives. In the economies with the most advanced information systems the parcels per assessor range between 3,000 to 8,500 parcels (based on available data). Buenos Aires, with 319,000 parcels and close to 1.64 million properties, relatively weaker information systems, inaccurate inventory, relatively weaker institutional arrangements and a lower budget, the property assessment unit should increase its staff substantially, especially in a first phase until the CAMA system is installed, decreasing the number of staff once the system has been set up and the inventory is more solid.

19 The coefficient is calculated in four steps: (1) Determine the assessment ratio for the parcels in a sample of recently sold properties; (2) determine for the sample of transactions the mean or median of the assessment ratios; (3) compute the average deviation of the individual property assessment ratios from mean or median; (4) divide the average deviation by mean or median. The result is the coefficient of dispersion.

20 “The IAAO should consider developing standards on performance audits and recommended performance measures.” (Almy 2006)
(IV) Non-Technical Recommendations

In addition to the technical recommendations stated above, the following non-technical points are strongly suggested in order to increase the chances of success of a potential reform and strengthen local democratic governance.

(i) **Authorities need to explain the nature of the tax.** This recommendation arises from experience in other developing countries. The City of Buenos Aires should inform citizens on property taxes, the reasons for collecting them and the use of these resources. Services provided that otherwise would not be available should be stated explicitly. Linking increases in the tax to additional projects will give more visibility to the use of the resources, helping to increase public acceptance towards the tax.

(ii) **Public Acceptance: Keep methodology as simple as possible and plan a good communication strategy.** The system should be easy to explain to all citizens and widely publicized in the media. The case of Mexico City and also the experience with 2008’s reform in Buenos Aires are clear examples on how complex systems generate problems. Public acceptance of the tax will be achieved only if records are open and available for public inspection. In a future stage, the use of internet to look up individual assessment data will further enhance the new system’s transparency. An accessible, effective appeals system, as well as targeting exemptions precisely is required. Individual inquiries should be answered. Experts recommend the tax administration agency to demonstrate at every opportunity that the tax is being equitably administered (Almy 2006).

(iii) **Ensure judicial viability.** Judicial terminology should match the terminology used by the government (i.e. what market value means) to ensure that there will not be unconstitutional claims against the reform. Mexico City had to pay over US$ 20 million after the system was declared as unconstitutional by the courts.

(iv) **Stick to transparency and credibility by all government officials.** Any failure on this field could undermine all the other efforts.

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**Biography**

Mariano Lafuente is a Research Analyst at the Public Sector Management Unit for Latin America and the Caribbean Region at the World Bank. He has worked on public sector financial management, civil service reform and other public sector management projects at the national and sub-national level in Mexico, Brazil, Colombia, Peru and Paraguay among other countries. Before his current position he worked as a Budget Analyst for the Country Management Unit for Argentina, Chile, Paraguay and Uruguay also at the Latin America and the Caribbean Region at the World Bank. He holds a bachelor’s degree on Political Science from Argentina’s Catholic University and a master’s degree in Public Policy with specialization in Public Sector Financial Management from University of Maryland.

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Tables, Charts and Graphs


<table>
<thead>
<tr>
<th>Year</th>
<th>Corporate Taxes</th>
<th>Property Taxes</th>
<th>Vehicle Reg.</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>70%</td>
<td>19%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>2001</td>
<td>70%</td>
<td>20%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>2002</td>
<td>72%</td>
<td>20%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>2003</td>
<td>71%</td>
<td>18%</td>
<td>16%</td>
<td>0%</td>
</tr>
<tr>
<td>2004</td>
<td>73%</td>
<td>16%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>2005</td>
<td>75%</td>
<td>14%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>2006</td>
<td>77%</td>
<td>11%</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>2007</td>
<td>78%</td>
<td>9%</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>2008</td>
<td>75%</td>
<td>9%</td>
<td>9%</td>
<td>0%</td>
</tr>
</tbody>
</table>

P: projected

Source: Buenos Aires City Government, Ministry of Finance

Table 1. Tax Rates For Contributions Related To Property Taxes (2008)
(in Argentine Pesos)

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Tax Rate(^{23})</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Public Lights, Trash Collection and Cleaning (ABL)</td>
<td>$ 5.50 per $ 1,000</td>
</tr>
<tr>
<td>(ii) Territorial Contribution</td>
<td>Progressive scale based on reposition value, separate scale for land</td>
</tr>
<tr>
<td>(iii) Streets and Sidewalks contribution</td>
<td>$ 0.20 per $ 1,000</td>
</tr>
<tr>
<td>(iv) Sewerage Services</td>
<td>$ 0.12 per $ 1,000</td>
</tr>
<tr>
<td>(v) Special Fund for underground’s system expansion (Law 23.514)</td>
<td>5% of amount paid under (ii) territorial contribution</td>
</tr>
</tbody>
</table>

Source: Tax Law 2008, Law Number 2.568

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\(^{23}\) Applied to property’s reposition value (cost of replacing the property). For example, a property with a reposition value of $ 100,000 would pay $ 550 for item (i) – see section 4.2 for information on process to calculate reposition value.
Table 2. Revenue Collected of Property Tax as a percentage of GDP for Selected Cities in Latin America

<table>
<thead>
<tr>
<th>Country</th>
<th>Fiscal Year</th>
<th>Jurisdiction</th>
<th>Type of Jurisdiction</th>
<th>Indicator (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>2002</td>
<td>Ciudad Autonoma de Buenos Aires (FD)</td>
<td>x</td>
<td>0.8332</td>
</tr>
<tr>
<td>Brazil</td>
<td>2002</td>
<td>Belo Horizonte</td>
<td>x</td>
<td>1.0414</td>
</tr>
<tr>
<td>Brazil</td>
<td>2004</td>
<td>São Paulo</td>
<td>x</td>
<td>1.4895</td>
</tr>
<tr>
<td>Colombia</td>
<td>2003</td>
<td>Bogota</td>
<td>x</td>
<td>0.9273</td>
</tr>
</tbody>
</table>

Source: Lincoln Institute of Land Policy

Graph 2. Revenues From Vehicle Registration Fees Over Property Tax Revenues For Selected Cities (2008)

Sources: 2008 Budgets for the City of Chicago, the City of Los Angeles, Mexico City and Buenos Aires respectively

Graph 3. Property Tax As % Of Total General Fund Revenues For Selected Cities In U.S. (2008)

Source: 2008 Budgets for the City of Chicago, New York City, Los Angeles, District of Columbia

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24 Revenue collected from property tax for the Jurisdiction where it is collected, divided by the GDP of the jurisdiction, both in national currency, expressed as a percentage (%)

25 Chicago Vehicle Tax Fund; Los Angeles State Motor Vehicle License Fees
Graph 4. Property Tax As % Of Total Revenue For Cities In Developing Countries

Source: Budgets for Mexico City, Buenos Aires and Bogota (2008) and Sao Paulo (2007)

Table 3. Advantages And Disadvantages Of Different Real-Property Appraisal Methods, Assessment Cycles And Staffing In The United States

<table>
<thead>
<tr>
<th>Process</th>
<th>Options</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Appraisal Method</td>
<td>Sales Comparison</td>
<td>Widest applicability</td>
<td>Accurate database and sufficient repeat sales needed</td>
</tr>
<tr>
<td></td>
<td>Income Approach</td>
<td>Useful for income-generating property</td>
<td>Rate used to calculate value normally subjective</td>
</tr>
<tr>
<td></td>
<td>Cost Approach</td>
<td>Useful for unusual properties and renovations</td>
<td>Data must have property attributes</td>
</tr>
<tr>
<td>Assessment Cycles</td>
<td>Mass Cyclical</td>
<td>Fairness, Efficiency</td>
<td>Requires right software and performance audits</td>
</tr>
<tr>
<td></td>
<td>Segmental</td>
<td>Gradual approach, effort distributed across years</td>
<td>Can produce temporary inequities</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>Accuracy</td>
<td>Requires advanced information systems</td>
</tr>
<tr>
<td>Staffing</td>
<td>State</td>
<td>Consistency across counties within a state</td>
<td>Perceived lack of autonomy</td>
</tr>
<tr>
<td></td>
<td>Local</td>
<td>Higher degree of autonomy at local level</td>
<td>Inconsistencies among jurisdictions</td>
</tr>
<tr>
<td></td>
<td>Outsourcing</td>
<td>Useful for technical tasks</td>
<td>Cost can be higher</td>
</tr>
</tbody>
</table>

Source: Prepared by author with information from Colwell (2007)
Graph 5. Average Property Assessment Levels in Latin America

Source: Lincoln Institute of Land Policy

Table 4. Property Assessment in Latin America

<table>
<thead>
<tr>
<th>Aspects of Property Assessment</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Chile</th>
<th>Colombia</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Assessors</td>
<td>Tax Inspectors, Architects, Engineers</td>
<td>Tax Inspectors, Engineers</td>
<td>Tax Inspectors, Engineers, Technicians</td>
<td>Architects, Engineers</td>
<td>n/a</td>
</tr>
<tr>
<td>Use of Private Services</td>
<td>n/a</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Assessment Method</td>
<td>Cost</td>
<td>Cost, Sales comparison</td>
<td>Cost, Sales comparison</td>
<td>Cost, Sales comparison, residual</td>
<td>Sales comparison, income, residual</td>
</tr>
<tr>
<td>Techniques Used</td>
<td>n/a</td>
<td>n/a</td>
<td>Descriptive Statistics</td>
<td>Descriptive Statistics</td>
<td>Descriptive Statistics</td>
</tr>
<tr>
<td>Methods to control performance</td>
<td>n/a</td>
<td>n/a</td>
<td>Mean/median</td>
<td>n/a</td>
<td>Many</td>
</tr>
<tr>
<td>Assessment Cycle</td>
<td>Avg. reassessment every 4 years, no readjustment between assessment</td>
<td>Avg. reassessment every 2 years, readjustment through inflation index</td>
<td>Avg. reassessment 4 years, readjustment through inflation index, regressions</td>
<td>Reassessment every 5 years by law, readjustment through property price index, inflation index</td>
<td>Avg. reassessment every 3 years, law requires every 5, readjustment through property price index, regressions</td>
</tr>
<tr>
<td>Use of Assmt. Values for other purposes</td>
<td>Tax on personal property</td>
<td>no</td>
<td>tax on real estate transfers</td>
<td>n/a</td>
<td>tax on real estate transfers, expropriation</td>
</tr>
</tbody>
</table>

n/a: not available  

1 Coefficient of dispersion, mean/median, histogram, price relation differential, regression models

Source: Lincoln Institute of Land Policy