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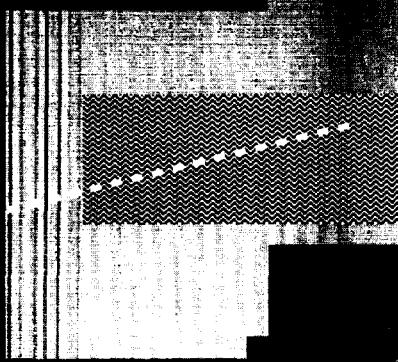
# Urban Property Tax Reform

Guidelines  
and  
Recommendations

*William Dillinger*

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## **URBAN MANAGEMENT AND MUNICIPAL FINANCE**

# **URBAN PROPERTY TAX REFORM GUIDELINES AND RECOMMENDATIONS**

**Tool**

**April 1991**

**William Dillinger**



## **FOREWORD**

This paper has been prepared for the Municipal Finance component of the joint UNDP/World Bank/UNCHS Urban Management Program (UMP). The UMP represents a major approach by the UN family of organizations, together with external support agencies (ESAs), to strengthen the contribution that cities and towns in developing countries make towards economic growth, social development, and the alleviation of poverty. The program seeks to develop and promote appropriate policies and tools for municipal finance and administration, land management, infrastructure management, and environmental management. Through a capacity building component, the UMP plans to establish an effective partnership with national, regional, and global networks and ESAs in applied research, dissemination of information, and experiences of best practices and promising options.

This report is the first of a series of management tools to be produced by the UMP municipal finance component. As a whole the municipal finance component is intended to address three questions: (1) how to mobilize resources to finance the delivery of urban services; (2) how to improve the financial management of those resources; and (3) how to organize municipal institutions to promote greater efficiency and responsiveness in urban service delivery. Work during the initial phase of the Urban Management Program has focused on the first of these questions--focusing specifically on local tax reform, intergovernmental transfers, and local access to long-term credit. Case studies and background papers on the latter questions--documenting issues in local financial management and the organization of municipal government--have also been prepared, and will provide the basis for publications to be issued under this series in the future.

## **ACKNOWLEDGMENTS**

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## **EXECUTIVE SUMMARY**

1. The property tax is a potentially attractive means of financing municipal government in developing countries. As a revenue source, it can provide local government with access to a broad and expanding tax base. In contrast to the mix of intergovernmental grants and indirect taxes that now dominate municipal revenues, it can also promote broader efficiency objectives, linking the provision of municipal services more closely to their financing and rationing the consumption of municipal services by price.
2. At present, however, yields of urban property taxes in developing countries are extremely low. Although the tax is ubiquitous--virtually all market economy developing countries assign a property tax to their municipal governments--its contribution to total public sector tax revenues is negligible, and its share of municipal revenues is typically less than 20%.

### **Procedural Reforms**

3. In part, these low yields reflect failures in the administration of the tax. A large proportion of properties are missing from the tax rolls, properties on the tax rolls are inaccurately valued, and collection efficiency is extremely poor.
4. To an extent, these administrative failures can be addressed through procedural reforms:

Coverage can be improved by changing the system used to discover and identify property, from one relying on owner-declarations to one based on rudimentary tax maps;

Valuation accuracy can be improved through the use of "mass appraisal"--a simple, formula-driven valuation method that minimizes reliance on the judgment of valuers and the honesty of taxpayers;

Collection efficiency can be increased by establishing a system of collection monitoring that more readily identifies major delinquents, and by using tax clearances to enforce payment.

### **Policy and Institutional Reforms**

5. Procedural improvements alone, however, are unlikely to have a significant, sustained impact on property tax yields. Unless tax rates are also increased, the absolute level of property tax liabilities will remain low. Unless a system for annually adjusting valuations (or tax rates) is introduced, inflation will rapidly erode the real value of tax liabilities. And unless the disincentives confronting the agencies responsible for administering the tax are addressed, procedural improvements in coverage, valuation, and collection will not be sustained.

6. This suggests that the scope of reform must be expanded to address the systems for rate setting and revaluation, and the incentives confronting administrators of the tax.

7. Given the diversity of institutional arrangements used in property taxation, the definition of relevant targets will vary. Recent experience, nevertheless, provides general rules:

- a. Rate setting. In principle, there is no "right" rate of property tax. If the property tax is functioning as a price for municipal services, the "right" rate is the rate that reflects local preferences. But the multiplicity of agencies with veto power over property tax policy introduces a downward bias in rate setting. Central government's veto power over property tax policy is particularly suspect, as it derives no revenue from the tax. Control over tax policy should, in general, be exclusively assigned to the entity most directly affected by it--municipal government.
- b. Indexation. Indexing valuations can help maintain the real level of property tax revenues during periods of inflation. Because the property tax is imposed on a presumptive basis, tax valuations do not increase automatically with rising prices. To maintain the real level of tax liabilities, taxing authorities must either revalue annually or increase nominal tax rates. Annual field revaluations, however, are too expensive, and annual tax increases are too politically controversial. Countries accustomed to inflation address this problem by adjusting valuations "from the office," on the basis of a common inflation indicator. This solution should be more widely adopted.
- c. Administrative incentives. If central government is responsible for administration of the tax, its characteristic indifference to performance of the tax can be addressed by changing the terms on which it provides this service. Placing the tax administration agency on a paid, contractual basis provides it with a direct financial interest in performance of the tax.

### Changing the Structure of Local Revenues

8. The scope of reform may have to include the entire structure of local finance. Judging from recent experience, even providing local government with complete autonomy over tax policy and administration does not guarantee that the tax will be exploited effectively. For all its economic virtues, the property tax carries a high political price. Its effectiveness in confronting taxpayers with the cost of municipal services gives it an unusually high political profile, within the tax structure characteristic of developing countries. As a result, where local authorities have access to less efficient but more politically acceptable revenue sources, these tend to be exploited first.

9. Under these conditions, property tax reform can only be achieved in the context of wider restructuring in the sources of municipal revenue. Clearly, the objective of such reform is not to increase property tax revenues, *per se*: high property tax revenues are not an end in themselves. But in reducing the extent of arbitrary subsidies between jurisdictions and confronting local taxpayers with the cost of the services they consume, these changes are consistent with, and necessary to, the pursuit of the efficiency objective that is the principal justification for property tax reform.

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## I. INTRODUCTION

1.1 An increasingly large share of the population and economic activity of developing countries now occurs in cities. Nearly 40% of the population of the developing world live in urban areas. Urban economies now account for the majority of GDP in most developing countries.

1.2 The continued productivity of urban economies depends upon the adequate provision of urban infrastructure and social services. While there are many constraints on the delivery of these services, one of the most universal is finance. Despite the buoyancy of urban economies, the municipal governments responsible for urban service delivery have difficulty mobilizing resources. The revenue sources available to local government, moreover, often embody arbitrary subsidies and undermine local accountability.

1.3 Financial reform of municipal government is therefore high on the agenda--not merely as a means of increasing local revenues, but also as a means of linking the delivery of municipal services more closely to its financing and increasing local control over the level and mix of municipal services.

### The Economic Case for Property Taxation

1.4 In principle, there are many alternative means of increasing the revenues of municipal government. But the broader economic and institutional objectives of reform narrow the options and provide more precise guidelines for the assignment of revenue sources to municipal government. These reflect certain assumptions concerning the role of municipal government in the public sector as a whole.

1.5 Three roles are conventionally assigned to the public sector: economic stabilization, income redistribution, and allocation/public service provision. The first two roles are generally assigned to central government. Central government has a comparative advantage in executing the stabilization function, as local economies are too open to permit countercyclical measures to be implemented effectively. The income redistribution role, similarly, is best performed by central government: local attempts to address income disparities are likely to induce inefficient migration. But a large share of the service-provision role is conventionally assigned to local government. Tastes and preferences vary among individuals and communities, and welfare gains can be realized if consumers are in a position to choose the level and mix of services that best suit them.<sup>1/</sup>

1.6 If consumers' choices are to be efficient, they must reflect economic costs of alternative levels of consumption. This requirement constrains the choice of revenue sources assigned to municipal government. Municipal revenue should function not only as a means of raising funds, but also as a price for municipal services.

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1/ In making this prescription, theory distinguishes between responsibility for provision--determining the level of service provision--and performing--actually carrying out the service, a function that can be performed by local government, private contractors, or central agencies.

1.7 For some services, this requirement can be met through user charges. In the case of piped water supply, for example, an individual can control the quantity of his consumption through a tap, and the economic cost of alternative levels of consumption can be imposed through metering.

1.8 But there are cases where rationing municipal services through user charges is not feasible. Charging for the use of congested roads is a case in point. In most circumstances, the administrative costs of imposing site-and-time specific road charges are disproportionate to the economic benefits they would yield.

1.9 Relying on user charges can also lead to inefficient levels of service provision, because of the "public goods" nature of some municipal services. Solid waste management is an example. While some of the benefits of refuse removal accrue directly to individual customers, the safe disposal of refuse has wider public health benefits. If the level of service were confined to what individuals were willing to pay in the form of user fees, the service would be underprovided: while no individual consumer has an incentive to reveal his willingness to pay for wider public health benefits, all would be better off if they were provided.

1.10 These services must be financed through taxes. But taxes can also function as prices, relying on the local political system to reach efficient consumption decisions where the nature of the service does not permit these decisions to be made efficiently by individual consumers. In principle, if local voters are confronted with a choice among alternative service levels, each carrying a price tag in terms of a tax contribution, then their decisions at the polls will induce local politicians to adopt a level of service provision that corresponds to their constituents' preferences.<sup>2</sup>

1.11 This outcome, clearly, depends upon the responsiveness of local government. It also depends upon the nature of the municipal tax. If a tax is to function as a price, it must have particular characteristics. It must be a benefit tax; a tax whose incidence corresponds to the distribution of the benefits of the service it finances. This is the primary argument for the property tax. While no tax performs perfectly in this role, the property tax is more effective than the alternatives.<sup>3</sup>

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2/ In theory, consumers in metropolitan areas also have the option of voting with their feet. If local government is fragmented into many jurisdictions, each offering a fixed level of service at a given tax price, consumers would be able to move among jurisdictions, finding a combination of service and tax levels that matches their preferences.

3/ A second economic case is made for the property tax, based on its relatively benign impact on the efficiency of resource allocation in the private economy. The argument reflects the efficiency criteria used to evaluate national tax instruments. At the national level, any correspondence between the incidence and benefits of a particular tax is considered irrelevant. Efficiency is therefore defined as noninterference with what is assumed to be a perfectly efficient allocation of resources in the private economy. This is achieved by imposing burden on a base that is inelastic in supply. The property tax

1.12 The match between incidence of the property tax and the benefits of the service it finances is clearly far from perfect: the statutory burden of the property tax is distributed according to value of property; the benefits of the services it finances are not. The benefits of refuse collection, for example, are more proportional to household size than property value. Nevertheless, the property tax is more effective at confronting taxpayers with the cost of local services than are the other revenue sources that might be assigned to local government.

1.13 The principal alternatives (as illustrated in Annex Figure 2) consist of intergovernmental transfers--chiefly revenue sharing--and local indirect taxes. While transfers can play a role in implementing central government stabilization or distributional policies, they cannot function as prices: by definition, the level of transfers is determined exogenously.<sup>4/</sup> Local indirect taxes also make bad prices. The direct burden of these taxes--the patent, the octroi, the business and professions tax--falls on business, rather than on residents as a whole. In the short term, residents have an incentive to vote themselves a subsidy. In the long term, the companies paying the subsidy have an incentive to cut back production--shifting the burden onto taxpayers in other jurisdictions--or to leave the jurisdiction for more attractive, but economically less efficient, locations.

1.14 The economic case for the urban property tax is therefore persuasive. The experience of developing countries, however, is that it is extremely difficult to exploit. Although the property tax is ubiquitous--virtually all market economy developing countries assign a property tax to municipal government--it generates little revenue. Property taxes account for an average of only 1.3% of total public sector tax revenues in developing countries, according to the IMF's most recent survey. As shown in Annex Figure 2, it typically accounts for less than 20% of municipal recurrent revenues in developing countries.

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performs well on these grounds, relative to the alternatives. Land is considered perfectly inelastic in supply. In the short run, buildings are also supply-inelastic. In the long run, owners of buildings can respond to a tax increase by curtailing investment in new structure, shifting resources from real property to other forms of investment. But the extent of such supply responses is arguably less than results from equivalent levels of taxation on central taxes on income, or manufacturing, or from implicit taxes on the financial sector. Inefficient supply responses are also reduced to the extent the property tax functions as a benefit tax: if individual tax liabilities match the distribution of tax-financed benefits, there is no incidence to avoid.

4/ In principle, local surcharges on central government taxes would be an attractive means of financing municipal government, as they would combine the benefits of local control over local revenue levels with the benefits of central government tax administration. Such surcharges are common in the industrial countries. Because of the narrow coverage of central direct taxes (chiefly income and payroll) and the consequent heavy reliance of developing countries' governments on indirect taxes, it would be difficult to devise a surcharge that effectively confronted local taxpayers with local service costs.

1.15 The ostensible reason for this poor performance would appear to be at least partly technical. The quality of property tax administration in developing countries is so poor that dramatic increases in revenue would result simply from achieving comprehensive coverage and reasonable levels of collection efficiency. Misguided policy would also appear to be at fault: nominal tax rates are low and the buoyancy of the tax is held hostage to the timing of general revaluations.

1.16 Underlying poor administration and low rates, however, are political liabilities inherent in the property tax. From a political standpoint, the effectiveness of the property tax in confronting taxpayers with the costs of municipal services is no virtue. Central governments--which exercise veto power over property tax policy and frequently are responsible for its administration--are reluctant to allow the tax to be exploited effectively. Local governments prefer to rely on less politically vulnerable revenue sources, where they are available. Sustainable property tax reform therefore often requires that these underlying constraints be addressed--by reducing central controls and altering the structure of local finance.

1.17 The remainder of this report consists of four parts. Chapter 2 and Chapter 3 address the policy and administrative constraints on the property tax. Chapter 4 discusses institutional issues. The final chapter discusses strategies for reform and the steps required to address these underlying constraints on performance of the tax.

## II. POLICY TARGETS

2.1 The low yield of the property tax is, in an immediate sense, the combined result of inappropriate policy and poor tax administration. To achieve a sustained increase in yields, both targets generally have to be addressed. While rate increases offer the prospect of quick revenue increases, taken alone they exaggerate the inequities in the incidence of the tax: an increase in the effective tax rate places the burden of the increase on those few individuals whose properties are on the tax rolls, accurately valued, and from whom taxes are actually collected.

2.2 Improvements in administration, on the other hand, offer the prospect of improving fairness, but they do not necessarily result in significant yields. Improvements in the comprehensiveness of tax rolls, the accuracy of property information, and the efficiency of collection do raise revenue by increasing the burden on those who currently underpay. If nominal tax rates remain low, however, yields will remain trivial. Under these conditions, the property tax--although equitably administered--may not produce enough revenue to be worth collecting.

### Raising the Effective Rate

2.3 Effective tax rates, as measured by the absolute level of individual tax liabilities, tend to be extremely low in developing country cities. This is the combined effect of two distinct policy decisions: the level of nominal rates and the timing of general revaluations.

2.4 Reduce Central Controls over Rates. In principle, there is no "right" level of property taxation. If the property tax is functioning as a price for municipal services, the "right" level is the level that reflects local preferences. But central government restrictions on tax rates can introduce a bias against higher rates. As central government derives no revenue from the tax, it has no direct financial interest in higher yields.<sup>5/</sup> This calculation is reflected in the extremely low effective rates mandated by central governments in, for example, Indonesia (where the combination of a tax rate at 0.5% of capital value and an assessment ratio of 20% yields an effective tax rate of 0.1%) and the Philippines (where central government legislation fixes a maximum tax rate of 1% to 1.5% of capital value but mandates assessment ratios that can reduce the net tax rate to as low as 0.1%).

2.5 Index Valuations. Excessive standards can introduce a bias against timely revaluations. Although property prices are often extremely buoyant in developing countries, revaluations are required if these are to be reflected in tax assessments. The traditional approach to revaluation is to rely on periodic field surveys, on a schedule determined by central government. This practice is the relic of a preinflationary age, when property prices were relatively stable, and field inspections served as a means of updating information on

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5/ The counterargument--that central government must control all taxation to execute national fiscal policy--is spurious. The level of property taxation in developing countries is too small to be a significant element in fiscal policy.

new construction, as well as adjusting prices. Under inflationary conditions, it results in a rapid real decline in assessed values: a 15% annual inflation rate reduces the real value of an assessment by half in five years. Failure to revalue during periods of inflation is often self-perpetuating: as valuations fall in real terms, taxpayers become accustomed to low effective levels of taxation; as the gap between tax valuations and market values widens, the political costs of abruptly revaluing to market levels increases, prompting further delays. (In principle, declining real valuations can be offset by annual increases in nominal tax rates, the political courage to do so is rarely observed.)

2.6 Countries familiar with inflation have addressed this problem through indexation. While indexing, over time, tends to yield less accurate valuations than field inspection, the amounts involved are small enough that the loss in fairness is well justified by the gain in buoyancy. The degree of sophistication used in indexing valuations varies. In U.S. jurisdictions, for example, an attempt is made to base the indices on the rate of increase in land and construction costs within the taxing jurisdiction. In Colombia, similarly, the index is (in principle) to be based on the results of an annual property survey. Other jurisdictions are less meticulous. In Tabasco, Mexico, the index is derived from a national consumer price index. In Brazil, no attempt is made to link the rate of indexation to property prices, or even to general increases in the cost of living. In effect, the adjustment factor functions as both an inflation index and a nominal tax rate.<sup>6</sup>

#### Broadening the Base

2.7 Broadening the definition of what is taxable can also increase the yield of the tax. Exemptions and favorable treatment for particular types of property can remove significant contributors from the property tax base. The ostensible objective of these policies is to promote a variety of apparently distributional or allocative objectives--to shift the tax burden onto higher income groups, or to influence investment decisions. The validity of these objectives is often questionable--particularly when local government is pursuing them--and their effectiveness is limited.

#### Reduce Tax Rate Progressivity

2.8 Progressive tax rates--that is, rates that are higher for higher-valued property--are common in developing countries. The tax rate on residential property in Calcutta ranges from 11% of annual rental value (ARV) for properties valued at less than Rs. 600 to 40% of ARV on properties with values exceeding Rs. 18,000. In the Philippines, similarly, centrally mandated assessment ratios introduce a strong element of progressivity into the property tax structure: residential properties with a market value of less than 30,000 pesos are to be taxed at 15% of their value; properties worth over 500,000 pesos are to be taxed at 80% of value.

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6/ Mayors may make these adjustments unilaterally, provided the percentage increase does not exceed the official inflation index for treasury bonds. Higher adjustments merely require the approval of the municipal council.

2.9 Progressivity in the form of exemptions for low value property is also common. In Karachi, properties with a rental value of less than Rs. 600 (\$28) are exempt; in Rio, properties with a tax liability of less than \$3.90 are exempt. Both Rio and Karachi have a de facto policy of exempting squatter settlements.

2.10 The intent of these policies is apparently to shift a greater share of the cost of municipal services onto those with greater capacity to pay. Whether the property tax is effective in this respect is debatable. Property value is an imperfect indicator of a taxpayer's net wealth or income, particularly if part of the incidence of the tax is passed from the owner onto his tenants.<sup>7/</sup> It is also not clear that--effective or not--local government should be concerned with what are fundamentally distributional issues.

2.11 While modest degrees of progressivity are probably harmless, high degrees of progressivity can have adverse effects on yields: they induce evasion at the upper end of the value scale, while reducing the tax yield from low income properties to a level that is not worth collecting. Calcutta's tax structure, for example, implies a tax rate on high value commercial property equal to 60% of annual rental value--a rate high enough to prompt the bribery attempts and spurious legal challenges that plague Calcutta's tax system. At the opposite extreme, the Philippines' 15% assessment ratio on low value property, combined with the 1.5% ceiling on the nominal tax rate, yields an effective tax rate of less than one-tenth of one percent--and a tax bill that is not worth the costs of collection.<sup>8/</sup>

2.12 Reduce Sectoral Differentiation. Tax rate structures in developing countries frequently differentiate among different land uses. Residential property is taxed at a lower rate than industrial and commercial property, and owner-occupied residential property is taxed at a lower rate than renter-occupied. Vacant land is either exempted or surcharged.

2.13 The ostensible purpose of such differentiation is, again, to shift the burden of the tax onto those better able to pay, or to influence investment or land use decisions. Like progressive tax structures, these sectoral distinctions are not effective in achieving their ostensible objectives, but they can have adverse financial or efficiency costs.

2.14 Virtually all developing countries impose a higher rate on industrial and commercial property than on residential property: in Calcutta, the rate on industrial and commercial property is 50% higher than the residential rate. In Indonesia (before the recent reforms) the ratio was 2.5:1.

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7/ For example, a large apartment building housing low income households would be taxed at a higher rate than single family home housing a taxpayer of moderate means.

8/ Outright exemption for low value property may be, on the other hand, justifiable--but on administrative rather than distributional grounds. The costs of discovering, valuing, billing, and collecting from low value properties may not be worth the administrative cost, even at uniform tax rates. Where small, low value properties constitute a large proportion of the tax base, however, tax authorities would be better advised to adopt extremely simple valuation methods, thus bringing them into the tax system at the lowest possible cost.

2.15 The ubiquity of these surcharges suggests that politicians have an intuitive appreciation for the principle of shifting: the ability of some taxes to be shifted from the point of collection onto other factors of production, disguised in the form of higher prices or lower factor returns. Property taxes on industrial and commercial tax bases are clearly susceptible to this phenomenon.<sup>2/</sup> While this makes this part of the property tax base attractive from a political standpoint, it undermines the rationale for the tax. Because it permits the taxpayers in one jurisdiction to export the costs of local government to neighboring areas, it undercuts the effectiveness of the property tax in serving as a price for municipal services.

2.16 Increase Rate on Owner-occupied Residential Property. Owner-occupied residential property, in contrast, is a component of the base that is typically undertaxed. While rarely exempted outright, owner-occupied property is widely given favorable tax treatment. Sometimes this is explicit. In Karachi, the tax rate on owner-occupied residential property is 25% lower than the rate on equivalent renter-occupied property. More often, the favorable treatment is implicit in the valuation methodology used for owner-occupied properties. In Amman, rented property is valued on the basis of actual rents, but owner-occupied property is valued on the basis of a formula, which is generally conceded to yield underestimates of value.

2.17 The policy rationale for such treatment is weak. It is debatable whether owner occupancy is so inherently desirable as to merit favorable tax treatment. And its equity implications are probably adverse. Owner occupants tend to have higher incomes than the tenants who ultimately bear the burden of taxes on rented residential property. Like the treatment of industrial and commercial property, this loophole is more likely a response to a political calculation--a tax imposed on a visible flow of rents is more politically acceptable than one imposed on the intangible flow of housing benefits that owner occupants enjoy--but it has no economic or distributional justification.

2.18 Increase Rate on Vacant Land. Vacant land is also a frequently undertaxed component of the tax base--particularly in Anglophone Africa and some Islamic countries. Vacant land is completely exempt from the property tax in Onitsha, Nigeria, for example. In Jordan, vacant land is taxed at 0.04% of the price declared when it was last sold--a de facto exemption for all but the most recently sold properties.

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9/ The extent to which the incidence of a property tax on industrial and commercial property can be shifted will vary according to the characteristics of the business. Where the tax is imposed on producers of tradable goods that dominate the national market, much of the incidence will be shifted forward onto consumers in other jurisdictions. If the business produces tradables that do not dominate the national market, the incidence will be borne in the short term by the owner but may have a wider incidence in the long run. If the business produces nontradables, the incidence will be shared between owners and local consumers.

2.19 The favorable treatment of vacant land has several rationales. Precolonial Islamic countries traditionally exempted land that was not yielding income from property taxation, a factor that may still be significant in Africa and South Asia, as well as the Middle East. The view of the property tax as a municipal service charge is also used to justify this policy. By this line of reasoning, since vacant land receives no services, it should have no liability.

2.20 Neither of these arguments stands up to scrutiny. Patches of vacant land increase the costs in infrastructure that must bypass them. The value of vacant land represents capitalized income. The balance of arguments therefore favors the inclusion of vacant land in the property tax base.<sup>10</sup>

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10/ The opposite treatment of vacant land is found in Latin America, where land is taxed more heavily if it is vacant than if it is built upon. In the state of Yucatan, Mexico, for example, the rate on vacant land is 2.5 times the rate on built property. In Rio, the rate on vacant land in the wealthier southern zone of the city is 7% of market value, 26 times the rate on built property. Such surcharges on vacant land appear to be designed to discourage so-called speculation: to induce landowners to develop property they would otherwise hold vacant. The logic of this objective is itself suspect: it is not clear that there is a public interest in forcing landowners to advance the time at which they commit land for urban use. But the argument is moot: there is no evidence that surcharges on vacant land have any impact on development timing. Imposing a vacant land tax does not change the relative rate of return on alternative uses of a given land parcel--it merely reduces the return to development, whenever it occurs.

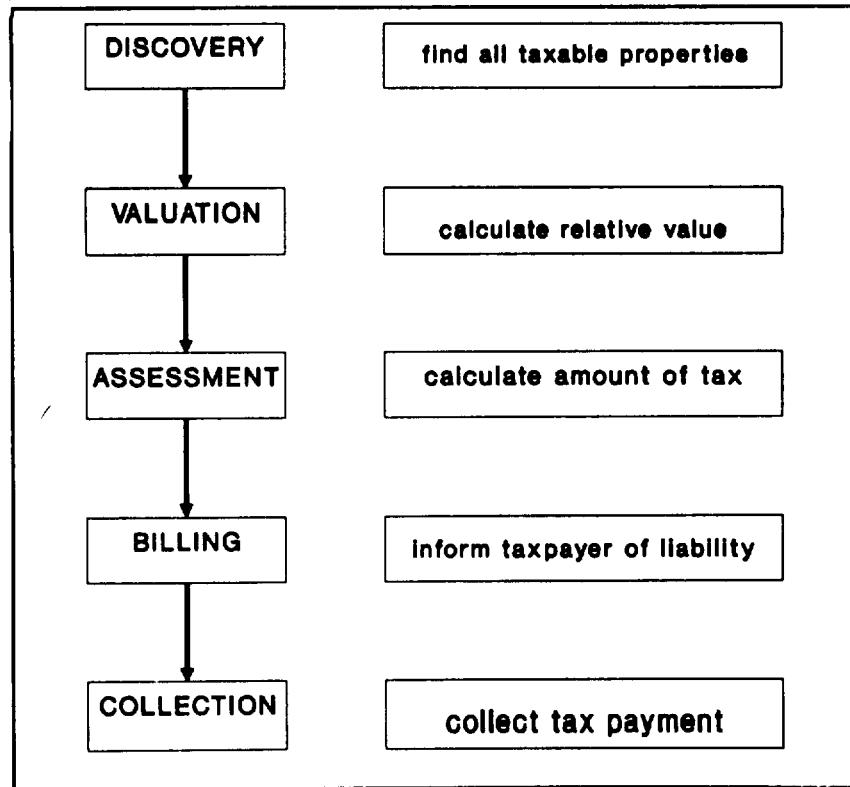
### III. PROCEDURAL TARGETS

3.1 In most developing countries, property tax reform cannot be limited to policy. Because the quality of tax administration is poor, the burden of the tax falls haphazardly on those unable to exploit its weaknesses. Raising rates alone would exaggerate these inequities. Reform efforts must therefore address problems in administration.

3.2 Figure 1 outlines the steps involved in the administration of the property tax. Two characteristics of these sequences deserve emphasis.

3.3 First, the amount of revenue raised depends upon the cumulative performance of all five steps--the proportion of properties discovered, the accuracy of valuations on those properties, the tax rate, the proportion of bills effectively delivered, and the proportion of those bills that are paid. Failure at one stage in administration of the tax can counteract successes at others. This has important implications for the design of tax reform interventions. To ensure that reform ultimately results in an increase in revenues, the scope of intervention--at least at the diagnostic stage--must be comprehensive--confronting all five steps in administration of the tax.

3.4 Second, the sequence is an ongoing, not a one-time event. Sustained increases in property tax revenues depend upon the process's being repeated annually: new properties have to be discovered and valued, tax rates have to be adjusted, and the billing and collection cycle has to be followed through. Intervention therefore has to be directed at permanent change in the way taxes are administered, if it is to have a sustained impact on revenues.



Appropriate Standards

Figure 1: Sequence of Property Tax Administration

3.5 The environment of property taxation is more difficult in developing nations than in the industrial countries. The basic data on which the property tax is based is inaccessible or unreliable. Base maps on which property discovery and identification would be based are nonexistent. The market data on which valuations are based is unreliable, as property markets are driven underground by high transaction taxes and rent controls. Data

on property ownership is inaccessible, either because ownership is disputed, or because deeds registries are unwilling or unable to cooperate with taxing authorities. The rapid growth of cities in developing countries exacerbates the difficulty of administering the property tax, as subdivisions and new construction must be constantly discovered and incorporated if the tax base is to reflect the physical growth of the city.

3.6 Efforts to improve property tax administration must be adapted to this environment. In general, this argues for sacrificing precision for ease of administration, and--while exploiting opportunities for coordination with title offices and public utilities--confining the scope and standard of information gathering to the requirements of the property tax itself.

#### Discovery and Identification

3.7 The objective of discovery is to find all the properties subject to taxation and obtain the information needed to impose the tax. Two basic approaches are used:

- (a) self-declaration--where the taxpayer is induced to provide the information to the taxing authority; and
- (b) government inventory--where the taxing authority obtains the information in the field.

3.8 Under a self-declaration system, all taxpayers are legally required to periodically declare the property they own to the taxing authority. The virtue of this approach is that it is inexpensive. The taxpayer has to do all the discovery work (and part of the valuation) himself. But it is rarely successful. Self-declaration is workable only if the taxing authority is able to induce the cooperation of taxpayers, and this has proven difficult.

3.9 Remnants of self-declaration systems still exist in Indonesia, the Philippines, and some Indian cities. (Calcutta is one.) Turkey and Peru are among the few countries that still rely entirely on it. There, property owners are required to file property declarations with the taxing authority, every three years. Declarations must also be filed when a property changes ownership, or when a building is constructed or improved.

Table 1: **PROBLEMS AND OPTIONS IN DEVELOPING COUNTRIES PROPERTY TAX ADMINISTRATION**

<b><u>PROBLEMS</u></b>	<b><u>OPTIONS</u></b>
no maps	self declaration street lists, "tax mapping"
no market information	extrapolation, construction data, "valuation commissions"
no clear title	ad rem liability, broad ad personam liability
rapid urban growth	cross referencing
high inflation	indexation

3.10 On the declaration, owners must provide the information required to determine the property's value. In Turkey, owners must provide information on the location, usage, physical measurements, and characteristics of land and buildings. Based upon these characteristics, owners must then calculate the property's value, using price factors provided by the taxing authority. (In Turkey, owners have the option of making an estimate below the minimum value, but they pay a penalty if the property is subsequently sold for more than its estimated value.)

3.11 The effectiveness of the self-declaration system depends upon the cooperativeness of taxpayers--on the willingness of all property owners to file full and accurate property declarations--and in practice it's difficult to get them to do so. All the countries using the self-declaration system rely, to some degree, on penalties to induce compliance. The legal penalties for failing to declare values, or for underdeclaring them, are often severe. In Taiwan, for example, the taxing authority has the right to acquire any taxable property at its declared value. To be effective, however, these penalties must be credible. But they are not credible because the penalties are rarely imposed. As audits are infrequent, the odds of discovery are small.

3.12 Turkey--the only country reporting even modest success with owner-declaration--relies upon a combination of field audits and tax clearances to enforce compliance. The audits' coverage is reportedly broad enough to raise the odds of discovery to credible levels. They are supplemented by a tax clearance system--in which an owner wishing to sell his property must obtain a clearance from the taxing authority before submitting his application to the registrar of deeds. The clearance system, while effective in inducing compliance among owners who intend to sell their property, does not affect owners who do not anticipate selling.

3.13 Use Simple, Single Purpose Maps. The limited coverage of formal real estate transactions in many developing countries, combined with the administrative difficulties involved in implementing a tax clearance system, limit the applicability of the Turkish experience to other countries.

3.14 By far the most common approach to discovery is the inventory system, where the taxing authority staff goes into the field to obtain the data required to administer the tax. In effect, inventory systems are equivalent to 100% audit under an owner-declaration system. The virtue of this approach is that it permits a field verification. The drawback is its cost.

3.15 From the outset, an inventory system requires a geographical referencing system to ensure that all properties are found and assigned an ineradicable identification code. In industrial countries, this is not difficult. Parcel maps are normally available, either with the taxing authority or with another agency of government. Even where they are not (for example, in the United Kingdom), a fall-back option is available: street maps with a functioning street address system.

3.16 In developing countries, none of these can be relied upon. Some parcel maps may exist, but their coverage will be limited to higher income areas. Street maps may exist for lower income areas, but they do not provide a basis for discovering properties not visible from the street. And street maps fail to provide a foolproof identification system. Systematic house numbering systems cannot be relied upon in most developing country cities.

3.17 Many developing countries--particularly in former British colonies--do not use map-based geographical referencing systems. Cities as large as Calcutta, Karachi, and Ibadan simply divide their territory into zones, assign each zone to an inspector, and assign him responsibility for discovering all taxable property in his jurisdiction. To provide the unique identifier, a tax identification number is painted directly onto each building.

3.18 In Calcutta and Karachi, the taxing authorities claim that this approach works, but the claim is difficult to verify. The system places much faith in the honesty of the inspectors--and in the willingness of taxpayers not to paint over their tax identification numbers. In some cases this faith is clearly misplaced; in Ibadan, Nigeria, so many taxpayers have painted over their tax identification numbers that most tax bills are undeliverable.

3.19 Some form of map that identifies parcel boundaries therefore appears necessary to ensure complete coverage and ineradicable identification. But there are many standards of mapping--variants in both the quantity and quality of information to be mapped, and widely differing costs associated with the different options. As maps can be major expense of starting up, the costs and benefits of different options need to evaluated carefully.

3.20 The standards required of a property tax map are modest. The map must simply enable the taxing authority to account for all the properties and identify each in a way that cannot be eradicated by the taxpayer. In principle, these basic requirements can be made with a map that is neither accurate in terms of scale, nor complete in the sense of including the entire boundaries of each parcel. As long as the map demarcates the point at which each parcel's boundary intersects the street--and all parcels front on a public street--this approach meets the requirement of comprehensiveness and ineradicability.

3.21 This approach is uncommon--in part, one suspects, because decisions about mapping standards are made by surveyors who have professional standards to uphold. The case for adding one characteristic--the boundary of the entire parcel--is, however, fairly persuasive. By mapping the whole parcel, the taxing authority can ensure that all the land is accounted for and can obtain data on the land area of each parcel, for later use in determining value.

3.22 Parcel boundaries need not be mapped with precision, however. The standards of accuracy that would apply to a legal demarcation of boundaries are inappropriate to a tax map. A tax map does not constitute recognition of a legal claim to property ownership. Precise boundaries therefore do not need to be determined on the ground, nor accurately represented to scale on a map.

3.23 This imprecision can significantly reduce mapping costs. Accuracy is expensive. Where maps are based on aerial photographs, for example, the costs of obtaining the photography and supplementary field data are relatively low; the point of cost-inflection is orthogonal rectification.<sup>11</sup> While adding to costs, such refinements have few benefits from a fiscal standpoint.

3.24 Tax reform projects should also avoid attempts to link up with other geographical information gathering efforts. While a major tax mapping project would seem to be an opportunity to address disputed claims to property ownership, the benefits of linking legal and fiscal cadastre are overstated. Adding a legal component to a tax mapping exercise is expensive. Because the standards required for titling are high, the marginal cost of adding a legal component to a fiscal cadastre is significant. More importantly, the pace of tax mapping is different from that of title adjudication. To impose a property tax, comprehensive coverage is required. As no benefits can be reaped until the process is completed, speed is important. In the adjudication and demarcation of title, by contrast, each owner derives the benefit of clear title as he receives it. The process of legal titling can therefore justifiably proceed at a slow pace. Linking the fiscal and legal cadastre, however, condemns the former to the pace of the latter.

### Valuation

#### Defining Value

3.25 Use the Definition that Exploits the Best Market Data. In a completely unconstrained situation, the first valuation issue would be how to denominate value. Property value can be denominated in two ways: either on the basis of the rent a property would be expected to yield (its annual rental value or ARV) or according to its expected sales price (termed capital or market value).

3.26 Both definitions are widely used. The choice of a system is largely a reflection of historical association. The United Kingdom and France have traditionally valued property on the basis of rental value; in general, their one-time colonies in Africa and Asia do so. Countries influenced by the United States--the Philippines, Liberia, and most of Latin America--follow the U.S. practice and define value on the basis of capital value. The capital value definition is also used in most of northern Europe--Germany, the Netherlands--and in Japan, Turkey, and Indonesia. (Table 2)

3.27 In part, this is a policy issue, as it influences distribution of the burden of the tax. Although both capital value and rental value reflect the income to be derived from a property, their distributional implications differ. ARV reflects the income from a property in its current use. Capital value reflects the market's assessment of the income to be derived from a property in the future, including income generated by more intensive use of the property. As a result, the capital value definition will tend to place a higher

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11/ That is, correcting for distortions caused by the fact that all points on a photo are not at right angles to the lens of the camera.

**Table 2: DEFINITIONS OF VALUE AND LIABILITY,  
SELECTED COUNTRIES**

Annual rental value		Capital value	
owner	occupant	owner	occupant
Nigeria	United Kingdom	Brazil*	(No cases)
Jordan		Mexico	
Pakistan*		Philippines	
India		Peru	
France	France***	Japan	
Spain		Germany	
Cote d'Ivoire		United States****	
		Indonesia	
		Liberia****	

\* Primary liability rests with owner; secondary liability with occupants.

\*\* Calcutta. Under new law, tenant is liable for the difference between tax owed on rent-controlled base and tax owed on market base.

\*\*\* French "land and building tax" (taxe fonciere sur les proprietes baties) is imposed on owner; "property tax" (taxe d'habitation) is imposed on occupant. Both taxes are imposed on the basis of estimated annual rental value (ARV).

\*\*\*\* Legal liability rests with the property itself (ad rem); enforcement directed at owner.

proportion of the property tax burden on "underused property"--vacant land or built-upon properties that the market perceives as ripe for conversion to more intensive use.

3.28 In practice, the economic consequences of the two definitions are not so different as theory would suggest. In adapting to the limitations on market data for various classes of property, valuers from one system borrow liberally from the techniques of the opposite camp. In ARV systems, classes of property for which no rental market exists are valued on a capital basis and then converted to rental value using a capitalization factor. In capital value systems, similarly, rental income is capitalized to yield a capital value for classes of property for which other methods of determining capital value cannot be used.

3.29 This suggests that political credibility and administrative feasibility--rather than the more abstract economic arguments--should be the overriding consideration in choosing a definition of value. Where renting is the most common form of tenure, and rental values are well known and easily accessible to the taxing authority, ARV may be the most appropriate way to define value. Where owner occupancy is the more common tenure form--and particularly where an active real estate market exists--capital value may be more appropriate.

### Calculating Value

3.30 In reforming property taxation, the main issue to be addressed in valuation is not how value should be denominated but how it should actually be derived. Here again, procedural choices can make the difference between a system that delivers fair, defensible valuations at reasonable cost, and one that does not.

3.31 The purpose of tax valuation is to provide a basis for distributing the burden of the property tax. In considering standards and options for valuation, it is important to distinguish tax valuation from the valuation governments undertake when they intend to purchase a property outright. In the latter case, a high standard of accuracy is required: the valuation must produce an absolute value in current market terms, as the amount changing hands will equal the entire value of the asset. Valuation for tax purposes, in contrast, requires only a determination of the relative value of properties at a common point in time. As it involves an exchange equal only to a small percentage of the property's value, accuracy can be justifiably traded off in the interest of cost and administrative simplicity.

3.32 What is essential in a tax valuation system is objectivity--so as to reduce opportunities for dispute or collusion---and a methodology appropriate to local skills and the market information available in the local jurisdiction.

3.33 **For Common Types of Property, Use Mass Appraisal.** There are fundamentally two approaches to valuation. The first relies on direct market information about the property being valued. The second depends on extrapolation, by formula, from a sample of properties; a practice termed mass appraisal.

3.34 The direct market information approach is chiefly used in ARV countries in Africa and South Asia--the one-time colonies of France and Britain. Mass appraisal is used in both capital value countries---Brazil, Mexico, and the Philippines, among others--and to value owner-occupied properties in ARV countries. Some ARV jurisdictions--Anambra and Oyo states in Nigeria, for example--use mass appraisal systems to value both renter- and owner-occupied property.

3.35 Where it can be used, the direct market data approach is potentially more accurate than mass appraisal. (As an indicator of market value, nothing beats the real thing.) But in practice the reverse is true. The direct market data approach fails the test of objectivity, and the absence of a formula-driven basis for valuation leaves the valuer vulnerable to bribery.

3.36 The Calcutta case is illustrative. There the valuer is instructed to value rental property on the basis of actual rents, and he is authorized to seek rent information--including rent receipts--from the occupants. Occupants, however, routinely collude with landlords to understate rents, fabricating false receipts. The valuer then has two choices: he can accept a declaration he knows to be false, or he can make a counterproposal. While the law gives the valuer the authority to propose his own estimate of a property's rental

value--if he disbelieves the rental evidence provided to him--the incentive structure discourages this. In the absence of a credible basis for preparing a counterproposal, a valuer is in a poor position to defend a higher valuation. Faced with the prospect of lengthy court battles, local authorities prefer to negotiate valuation down to a level satisfactory to taxpayers. Reliance on direct market data therefore yields a pattern of undervaluation; the disparities between actual rents and reported rents reflecting the skills and rewards of the two negotiating parties.

3.37 A few ARV countries have found solutions to this problem, by exploiting alternative sources of accurate rental information or providing landlords or tenants with incentives to provide accurate data. In Jordan and Cote d'Ivoire, registered rental contracts are used as the basis for determining actual rents. (In these countries, government agencies register rental contracts, as a means of providing an official imprimatur to private agreements.) As the landlord and tenant have a financial interest in recording their agreement accurately, these contracts serve as a reliable source of rental data. But the coverage of legally registered rental agreements is limited. Even in Amman and Abidjan, the majority of rental agreements take the form of undocumented understandings between landlord and tenant. In Jordan, the government also employs the income tax law to provide tenants with an incentive to reveal accurate rents directly to the valuer: rent payments are deductible from the personal income tax. Again, the limited coverage of the personal income tax system limits the coverage of this enforcement technique.

3.38 Direct market information has a second limitation, in that it is applicable only to properties on the market. As a result, its use in ARV countries is limited to renter-occupied property. It has no application in countries valuing on the basis of capital value: as only a small proportion of properties are actually sold in any given year, few direct market observations of capital value are ever available at any given time.<sup>12</sup>

3.39 The more common approach to valuation is mass appraisal. Valuation by mass appraisal is accomplished in three steps:

- (a) First, a sample of recent property transactions (sales or rents) or construction data is analyzed to identify the physical characteristics that appear to determine a property's value;
- (b) The contribution of each of the principal determinants of value is then quantified and reduced to a formula (or more commonly, a table);
- (c) This formula is then applied to information on the physical characteristics of each property in the jurisdiction's tax base, to yield individual valuations.

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12/ Some cases also exist in which property sales are used as the basis for valuations. In the State of Tabasco, Mexico, property is revalued only when it is sold, and it is then valued at the reported sales price.

3.40 In principle, this approach avoids the worst aspects of the direct market information method. First, it is not dependent upon the honesty of taxpayers: the physical characteristics of property can be seen and measured. It is also less vulnerable to valuer corruption: the use of a formula reduces valuer discretion. And it can be applied to both owner- and renter-occupied property.

3.41 In designing a method for deriving valuations, two problems must be confronted:

- (a) how to get a basic core of reliable market information; and
- (b) how to extrapolate from this core of market data to produce defensible valuations for all properties in the tax base.

#### Address Data Constraints

3.42 Use Construction Cost Data to Value Buildings. In general, capital value countries address the data-constraint problem by limiting their reliance on sales data to the valuation of land. Buildings are valued separately, using data from a source that is considered more reliable: the construction industry. In the Philippines, the taxing authority makes its estimates of the cost of construction on the basis of materials costs obtained from lumberyards and hardware stores, and on standard material-cost to labor-cost ratios. In Brazil, taxing authorities rely on cost data supplied by local contractors, or compiled from professional building industry journals. These sources normally distinguish between the costs of construction in different exterior materials (brick, concrete, stucco) and different structure types (detached homes, apartment buildings, small commercial structures).

3.43 On the basis of this data, the taxing authority estimates the cost, per square foot, of constructing the buildings typical of the area to be valued. The unit costs yielded by this approach, while objective, are an extremely crude basis on which to estimate the market value of buildings. Most jurisdictions tend to elaborate on the methodology by adding variables: data on type of flooring, plumbing and electrical facilities, subjective estimates of the quality of repair, the state of technological obsolescence. These elaborations do not, however, improve the accuracy of valuations. Although these adjustment factors can dramatically affect a property's valuation, the weight assigned to them is not generally determined by an analysis of cost or market responses. Instead it reflects the deliberations of the valuation staff, and the views of the political leaders who must ultimately approve the tables.<sup>13v</sup>

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13/ The practice in developing countries suggests that this is not an inherent problem in mass appraisal systems. In the United States, for example, statistical analyses are used to determine with some precision the contribution of each factor to value. But in developing countries this opportunity to improve the accuracy and objectivity of individual valuations is not exploited.

3.44      Use Real Estate Agent Informants to Value Land. In valuing land--including the land under buildings--taxing authorities have no alternative but to seek evidence from the property market. In capital value countries, one might expect to find credible property market data reported in the legal documentation accompanying transfer of ownership--the contract or the deed of sale. Since government is the repository of deeds of sale, this might be thought to be easily accessible.

3.45      Developing countries' property tax regulations often reflect this assumption. In Brazil, the state agency responsible for administering a tax on property taxation as well as government-licensed registrars of deeds are required to inform the valuer of all recent transactions. In the Philippines, the same obligation is imposed on deeds registrars, and on both parties to the transaction.

3.46      But official data is unreliable. With startling uniformity, developing countries impose high taxes on real estate transactions. This prompts transactors to grossly underestimate actual prices in official documentation. In practice, therefore, taxing authorities tend not to rely on official sources. Instead they constitute valuation commissions, consisting of real estate agents and major property owners, who come up with market information based on their professional experience.

3.47      The process for converting individual observations into a standardized table parallels the one used in estimating the unit cost of buildings--with the same problems. It starts with a systematic ordering of data but then is overloaded with arbitrary adjustment factors. First, estimates of the market price of specific parcels in various locations in the jurisdiction are made. These are grouped by neighborhood and divided by their respective dimensions, yielding an estimate of the unit value of land by neighborhood. A variety of adjustment factors are then imposed. In Brazil, unit costs are adjusted to reflect the availability of specific public services and the steepness and squareness of the plot's layout. Similar adjustment factors are used in the Philippines. Again, there is no evidence that the value attached to these adjustment factors is based on the analysis of market conditions.

3.48      While mass appraisal is most common in capital values countries, it is also used in ARV countries, particularly in the valuation of owner-occupied property. Like the procedure used in capital value countries, the process begins with a survey of properties. Individual observations of current rents are then grouped and analyzed to yield an estimate of prevailing rents, per unit of floor area, in various neighborhoods. The extent of further elaboration varies. In Karachi and Lahore, the unit cost tables simply designate a standard value per room, cross-classified by neighborhood. The tables used in Jordan, in contrast, define a rental value per square meter of floor area, cross classified by class of municipality, neighborhood quality, and quality of construction materials. The process used to derive these more detailed tables is, again, obscure, even to the valuers using them. In Jordan, the most recent tables were developed by a committee set up for the purpose and since disbanded; Ahmedabad is still using a table of values established in the 1950s, based on deliberations long since forgotten.

3.49      Use Points System to Value Low-Value Property. Some taxing authorities dispense with any attempt to reflect market conditions in their table of values and instead assign prices or "points" arbitrarily to specific property characteristics. In Ibadan, Nigeria,

for example, the tax on residential buildings made of corrugated iron sheets is a flat 50 kobo; the tax on a mud building is 75 kobo, plus 50 kobo for each additional floor. Taxes on commercial buildings are assessed on the basis of use and floor area; again without specific reference to market values. This is an appropriate system for valuing low value property (the arbitrariness is acceptable because the tax rate is low) and is particularly appropriate if the objective is to get all consumers into the tax net (even if their individual contribution is negligible).

3.50     Perform Individual Valuations on Unique, High Value Properties. While one mass appraisal approach is appropriate for the bulk of the tax base, the urban property tax base will also include unique, high value structures--particularly factories--for which observable rental or sales market does not exist, and mass appraisal techniques cannot be applied. Instead, more complex valuation methods--based on capitalized income, or property-specific estimates of depreciated replacement cost--may be required. As a small number of such structures can account for very large share of the tax base--sixty-three such buildings in Calcutta account for 74% of the city's assessed value, for example--taxing authorities can be justified in using more sophisticated methods to value them.

3.51     Use Hypothetical Market Value to Value Rent Controlled Property. Controls on residential rents can dramatically affect the performance of the property tax. While their impact tends to be severest in ARV countries, rent controls can also affect performance of the tax in capital value countries: by reducing expected rental income, rent control can ultimately reduce the market price of renter-occupied buildings.

3.52     How severe an impact rent control has depends upon the specific form of the controls, the nature of the market's response, and the valuation procedure adopted by the taxing authority.

3.53     In much of South Asia, the prevailing rent control regime freezes rents on existing tenancies at a historical date, allowing the rents on new tenancies to be set at "market" levels but then limiting any subsequent increases. If observed by the market, this regime would slow the rate of increase in rents--relative to uncontrolled conditions--and if observed by the taxing authority, it would slow the growth of assessed values.

3.54     Rent control's impact on the growth rate of the tax base is not its principal adverse effect, however. A taxing authority can compensate for stagnation in its tax base by increasing its tax rate. The problem, rather, is that rent controls distort the distribution of the tax's burden. Where they are observed by the valuer, rent controls constitute a de facto exemption of older properties from the property tax. This shifts the burden of financing municipal government onto more recently constructed structures, in effect forcing the owners or occupants of newer structures to subsidize the municipal services provided to older ones.<sup>14</sup>

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<sup>14/</sup> The reverse can also happen, depending upon the rent control law and the way it is interpreted by the taxing authority. In Anambra State, Nigeria, for example, the Rent Control Edict fixes rents on the basis of physical characteristics--a maximum amount per

3.55 It can be argued that, as long as owners are liable, valuations must be based on controlled rents to be equitable; because rent controls limit the revenues derived from older properties, it would appear that the tax on these properties should be proportionately low. The argument is valid only to the extent that rent controls are scrupulously observed by the market and tax liabilities fully borne by landlords. In practice neither of these conditions prevails. The widespread use of key money and illegal rent agreements suggests that any relationship between the rent dictated by law and actual income derived from property is coincidental. And there is no guarantee--laws to the contrary notwithstanding--that landlords may not pass the burden of the property tax onto their tenants.

3.56 This problem is most prominent in India, where severe forms of rent control are widespread and the courts have been most rigid in requiring taxing authorities to observe it. In a landmark 1983 decision, India's Supreme Court forced Delhi Corporation to abandon its traditional practice of valuing rented property on the basis of "actual" rent, ordering the corporation to instead derive its valuations from rental ceilings fixed in the city's rent control act. This decision--which reduced Delhi's assessed valuation by half--has had repercussions throughout India.

3.57 Taxing authorities have several options for dealing with rent control. One, obviously, would be to eliminate rent control itself. As a solution to a problem of property tax administration, however, this response would be disproportionate. Rent control--whether desirable or not--is a major element in a nation's housing policy. For the property tax, "rents" are simply an indicator used to determine distribution of the tax burden. Abolishing rent control under these conditions would, in effect, be using a major change in housing policy to address a relatively minor problem in local tax administration.

3.58 The approach to this problem used in the United Kingdom is more promising. Like its ex-colonies, the United Kingdom has widespread rent control and--until recently--valued residential property on the basis of annual rental value. To avoid the inequities resulting from this approach, rented properties are valued not on the basis of controlled rent, but rather on the basis of "hypothetical market rent," which is derived from an analysis of rental values in the uncontrolled segment of the market. (To avoid the consequent problem of landlords paying property taxes based on "market" rents when their actual incomes reflect the controls, the tax is imposed on occupants.) A variant of this approach has been under consideration in Madras, India. There, in the absence of an officially uncontrolled market, the taxing authority was proposing to base its mass appraisal on a survey of "actual [that is, illegal, market] rents." The proposal, however, has been rejected by the state government.

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room, varied according to dwelling and neighborhood characteristics. Rents on new buildings, as well as old ones, must conform to the law. Although the edict is flouted in the housing market, it is observed by the taxing authority. As a result, the burden of the local property tax falls disproportionately on older properties, because the disparity between actual rents and the valuer's estimate is wider on newer properties than on older ones.

### Updating Property Information

3.59 The valuer's job does not end once all the properties have been discovered and assigned values. To ensure that property records continue to reflect changes in the tax base, discovery and valuation must be ongoing. The more effective this "maintenance" function, the more buoyant the tax base and the less the taxing authority must depend on nominal tax rate increases and indexation to maintain the growth of the tax base.

3.60 Changes in the tax base are of two types. First are changes in property characteristics. New properties come into existence through subdivision or the annexation of rural areas. New buildings are constructed or existing ones improved. To maintain comprehensive coverage of the tax base, these physical changes must be incorporated as they occur. Second are changes in ownership, which must be captured on an ongoing basis to ensure the collectibility of the tax.

3.61 Cross Reference to Update Data on Physical Characteristics and Ownership. All developing countries use a combination of two methods to discover changes in the physical characteristics of the tax base and changes in ownership: regular field surveys and cross referencing.

3.62 In principle, all the data needed to update the taxing authority's property records should be already in the public domain. The entity responsible for approving subdivision plans should be aware of the creation of new parcels through subdivision. Data on new construction should be available in the agency that issues building and occupancy permits. Changes in ownership should be known to the entity charged with registering deeds or titles. Provided this information is accessible to the taxing authority, the administrative costs of tracking these changes down independently can, in theory, be eliminated.

3.63 Such cross referencing is often mandated by regulation. In the Philippines, surveyors (private or public) are required to provide the taxing authority with copies of approved subdivision plans within thirty days of their receipt from the Bureau of Lands. When property is sold, the registrar of deeds is required to provide the taxing authority with a copy of the deed of sale, and both the purchaser and the seller are required to separately notify the taxing authority within sixty days. In the case of new construction, both the official issuing the building permit--generally the municipal engineer--and the owner are required to notify the taxing authority.

3.64 Experience with cross referencing is mixed. In part this is because many of the changes in the property tax base occur outside the system of permit and registrations: land is subdivided illegally, buildings are constructed without permits; squatters establish de facto ownership. But its effectiveness is also limited by the difficulty of forcing agencies of government to cooperate with one another. In Pasay City, Philippines, the registrar of deeds has never provided the names of new purchasers to the taxing authority--even though both agencies are part of the municipal government and their offices are across the hall from each other.

3.65 Where cross referencing works, it works by harnessing the taxpayer's interest in obtaining something from the government. Tax clearance systems do this most effectively. In a tax clearance system, the taxpayer is required to obtain certification from the taxing authority before seeking a subdivision approval, building permit, or registration of deed from the relevant government agency. The cooperating agency is merely required to act as a policeman, rejecting applications that have not been cleared; the sense of urgency is provided by the taxpayer.

3.66 Such a tax clearance system functions fairly effectively in Brazil. Tax clearances, imposed by the public works department as a condition of granting an occupancy permit, serve to bring new construction to the taxing authority's attention. Tax clearances, imposed by cartorios (deeds registrars) as a condition of deed registration, serve to flag changes in ownership.

3.67 Taxpayers can also be induced to voluntarily supply information directly to the taxing authority, particularly where it involves changes in ownership. Where ownership is subject to dispute, purchasers will register their property with the taxing authority in an attempt to strengthen their claim.<sup>15</sup> Sellers, similarly, may notify the taxing authority to avoid liability for taxes on property they no longer own.

3.68 Cross referencing and voluntary compliance do not eliminate the need for site visits, however. Proposed subdivisions or new construction--though approved by the public works department--may never take place and therefore have to be verified. Subdivision plans and building permit applications may not provide sufficient information to permit an in-office valuation. Voluntary compliance is effective only in bringing changes in ownership to the assessor's attention. As a result, cross referencing, even where it works, serves only a limited function--that of bringing changes in the tax base to the taxing authority's attention.

3.69 To supplement these indirect means of discovering changes in the tax base, taxing authorities routinely rely on field work by their own staff, who regularly patrol designated zones of their municipalities, noting new construction and evidence of impending subdivision and sales. In India, where reliance on field surveys is greatest, taxing authorities retain large staffs on a permanent basis solely for this purpose. Calcutta Corporation, for example, maintains a staff of 768 field surveyors. Bombay employs 1,895.

#### Billing and Collection

3.70 Low collection efficiency is a major constraint on the yield of the property tax, and it can offset any gains made from improving discovery and valuation. The available data suggests that typically half of current property taxes are not paid in the year in which they are due. In Amman, Jordan, the collection ratio is 62%; in Rio, 60%; in Calcutta,

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15/ Registration with the taxing authority does not legally constitute a recognition by government of a taxpayer's claim, but in the absence of contrary evidence it is often accepted as such by the courts.

55%. Ibadan, Nigeria, has the lowest collection efficiency among the cities surveyed, at 9%.<sup>16</sup>

3.71 Success at collection is essentially a matter of information management and leverage: knowing who owes what, and having the means and incentive to induce them to pay. There are two targets for reform: (1) the legal framework--defining what is liable, what constitutes notification, and what penalties may be imposed; and (2) collection administration: managing the production of bills, the monitoring of payments, and the pursuit of delinquents.

### **The Legal Framework**

3.72 **Define Owner as Liable, but Define Ownership Broadly.** An appropriate legal definition of liability and notification can simplify the billing function and increase the taxing authority's leverage over delinquents. For tax purposes, the sole objective in defining tax liability is to make the tax collectible--to find a person to whom the taxing authority can apply sufficient leverage to extract the tax. The first decision to be made is whether to designate the owner or the occupant as liable.

3.73 Most countries--both developed and developing--define the property owner, rather than the occupants, as ultimately liable for the property tax. This has two administrative virtues:

- (a) It reduces the number of individual taxpayers, because only one bill need be issued for structure housing multiple occupants; and
- (b) It exploits one of the few administrative benefits of property--its immobility. If the tax is imposed on occupants, they can evade by decamping. If the owner leaves, he sacrifices the use of his property.

3.74 In developing countries, however, ownership is subject to dispute. In much of Africa, land on the urban periphery has never been formally adjudicated. In Latin America, formerly adjudicated claims are disputed because of years of illegal occupation. Even where claims to ownership are not disputed, title data may be inaccessible to the taxing authority. In the Philippines, title records are organized by claimant and date of issue, rendering them useless to a valuer who knows only the location of a given property.

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**16/** Data on property tax collections often are not organized in a way that would permit an accurate analysis of collection performance. Some jurisdictions (Onitsha) combine current payments and payments on arrears (including interest and penalties), overstating the numerator. Others do not distinguish current liabilities from liabilities on arrears, overstating the denominator. Some do not report collections on arrears as part of property tax revenue at all. In Brazil, for instance, payments recovered through lawsuits are grouped with receipts from other fines. Results can therefore be misleading. In some Indian cities in particular, high rates of collections on arrears compensate for low collection efficiency on current account. In Calcutta, for example, late payments comprise 45% of total property tax receipts--suggesting that most liabilities are paid, eventually.

3.75 Taxing authorities have addressed this problem by adopting definitions of ownership that effectively absolve the taxing authority of any obligation to prove legal ownership. Such definitions enable the taxing authority to exploit the leverage that comes from being able to deprive the taxpayers of the benefit of de facto ownership, without obligating the taxing authority to meet an impossible standard of proof.

3.76 Two specific legal strategies are used. (1) In the Philippines and Liberia (and the United States), the tax law defines the property itself as liable for the property tax. Under this ad rem definition, if the property does not pay its tax, it can be seized and sold--a threat intended to bring the de facto owner forward. (2) In Latin America, sub-Saharan Africa, and South Asia, the strategy entails a very broad ad personam definition. In Brazil and Nigeria, the owner is defined as liable, but ownership may include anyone in beneficial occupation of the property.

3.77 Define Notification as Delivering the Bill to the Property. An "ownership" definition of liability also requires an appropriate legal definition of notification. The owner--unlike the occupants--may live off the premises. If the law requires the owner to be notified in person, finding the owner can be a major obstacle to the imposition of the tax. In Abidjan, for example, an estimated 40% of tax bills are uncollectible because the owner's address is unknown. Amman faces a similar problem because of the large number of property owners working in neighboring countries.

3.78 Two measures can address this problem. First the taxing authority can be absolved of the legal obligation to personally notify the taxpayer as a condition of imposing the tax, by defining legal notification as delivery of a bill to the taxable property. In Nigeria, delivery of a tax bill to the taxable property--even to the extent of pasting it to the door if no person is willing to accept receipt--constitutes legal notification.

3.79 Second, a secondary level of liability can be imposed upon the occupants. Tenants have the virtue of being on site. Their tendency to evade taxes by decamping can be addressed by permitting them to deduct property tax payments from their rents--an arrangement that takes advantage of the divergence in interests between landlords and tenants. (Such arrangements are provided for in Lagos and Calcutta.)

3.80 Increase Penalties for Late Payment. Stiff penalties are also essential to collection enforcement. Penalties have to be set up to address two different problems: the first is to get people to pay on time; the second is to get them to pay at all. To encourage people to pay on time, interest penalties are typically imposed on payments made after the due date. To be effective, the rate of interest has to be high enough to constitute a clear financial incentive. If interest rates are below the rate a taxpayer can earn on short term savings deposits, the financially astute taxpayer has an incentive to delay payment as long as possible, even if he eventually has to pay the interest charge. (Except in countries recently overtaken by inflation, however, these cases are rare. In the Philippines, the effective annual interest rate was 27%, during a period in which the official rate paid on short term deposits fluctuated between 8% and 22%. In Ibadan and Onitsha, the effective annual rate was 10% per month, during a period in which official rates on short term

deposits never exceeded 10% per year.) Prompt payment is particularly critical under inflationary conditions, as delays can seriously erode the real value of the amount received. Countries with permanent inflation have managed to adapt. In Recife, Brazil, late payments are subject to a penalty surcharge of 20%. Both the principal outstanding and the penalty surcharge are then indexed to inflation; the amount due being calculated on the day the tax is actually paid.

3.81     Triage Enforcement against Longstanding Delinquents. Interest rate penalties are effective only in speeding up the receipt of tax payments. They are not effective in extracting payments from taxpayers who never intend to pay at all. To reach these taxpayers stronger measures are required.

3.82     In virtually all developing countries, taxing authorities are legally authorized to take enforcement actions whose consequences would far outweigh the cost of paying an outstanding property tax bill. In all five of the cities identified in Table 3, the taxing authority is permitted to seize and sell the property itself. In four of the five, the taxing authority is also permitted to seize and sell the personal effects of a delinquent taxpayer, using the proceeds to pay outstanding taxes. Three of the five permit the taxing authority to pursue delinquents through the court system, as debtors of the taxing jurisdiction.

Table 3: ENFORCEMENT MEASURES, SELECTED CITIES

	Manila	Onitsha	Calcutta	Karachi	Rio
<b>seize and sell:</b>					
personal property	x		x	x	x
real property	x	x	x	x	x
<b>sue for debt</b>					
garnish rents	x	x		x	x

3.83     These penalties, however, also impose high political and administrative costs on the taxing authority. Politically, the costs of seizing one's constituents' real estate or personal effects can be high. The administrative costs of doing so can also be disproportionate to the amount of revenue gained. In Onitsha, obtaining a distress order requires the local authority to retain a lawyer and pursue a case through the magistrate courts--a process taking at least six months. In Recife, the treasurer estimates the legal route to take five years.

3.84     High profile penalties do, however, have a salutary effect on collection performance--not only on the immediate target but on taxpayers in general. A strong case therefore exists for applying these penalties selectively--against major delinquents, where payoff is likely to be greatest both in terms of public relations and in tax revenue.

3.85 Delhi, for example, followed this strategy. There, the taxing authority decided to focus collection efforts on the two hundred largest delinquents--those with liabilities over Rs. 10,000. Although the decision to concentrate on major delinquents reduced the number of cases to about 5% of its former level, collections doubled from Rs. 136.38 laks to Rs. 249.13 laks.

3.86 Use Cross Referencing for Enforcement, Where Administratively Feasible. Tactical use of severe penalties should be supplemented by less costly and controversial enforcement mechanisms. The most promising of these are in effect quids pro quo: arrangements by which the taxing authority provides something valued by the taxpayer, in return to payment of the tax. While the application of these enforcement mechanisms tends to be limited, the mechanisms are relatively inexpensive to implement--both politically and administratively.

3.87 The most obvious quid pro quo a taxing authority can offer to a property tax payer is its guarantee of tenure security. Clear title tends to be highly valued in developing countries, and government's position as repository of claims to property ownership would appear to give it a high degree of leverage.

3.88 In Brazil and Turkey, the exchange of tenure for tax payment is explicit. In these countries, registrars of deeds are legally forbidden to register a deed of sale unless the purchaser can demonstrate that all back taxes on the property have been paid. In the Philippines, the enforcement mechanism is passive: outstanding property tax liabilities have the status of liens against title, and--at least in theory--they can cloud title and reduce the value of property for purpose of mortgage or sale.

3.89 This form of quid pro quo is limited in its scope, however. Liens or tax clearances cannot be imposed on properties for which no title documents exist.<sup>17/</sup>

3.90 Some countries have experimented with other types of quids pro quo. In Brazil, a property tax clearance is required before a company can bid for municipal contracts. Success is also reported in using tie-ins with utilities. In Caracas, electric power is shut off for nonpayment of property taxes, a penalty that is reportedly extremely effective. There is some risk in linking utility service to property tax payment, however. Onitsha, Nigeria, attempted to use the threat of interrupted water service as an enforcement mechanism. But as the service itself was unreliable, the threat was not significant, and taxpayers took to not paying their property taxes in retaliation for poor service delivery.

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17/ Ironically, improvement in tenure security can be harmful to collection performance. In Lagos, for example, the most compliant taxpayers are owner-occupants with questionable titles. Paying property taxes, they believe, is a means of strengthening their claim to ownership--a belief that tends to be denied in law but supported by the behavior of adjudication courts.

### Administrative Targets

#### **3.91      Organize System for Recording Payment and Tracking Delinquencies.**

Improvements in collection administration must accompany changes in the legal framework of the property tax. To impose penalties, the taxing authority must know who to impose them against. Finding out can be a major exercise. The city of Amman, for example, confronts a minimum of four hundred thousand property tax payments annually, each of which must be recorded and credited against the appropriate taxpayer's liability. All four hundred thousand records must be reviewed periodically to assemble the list of major delinquents, against whom enforcement action will be taken. Where payment can be made in installments, the volume of transactions increases proportionately. The municipality of Rio permits payment in monthly installments and confronts a potential flood of 12 million transactions.

**3.92      Where clerical labor is cheap and the volume of transactions is relatively small, a well organized manual system can cope effectively with collection monitoring.** Onitsha, with a population of two hundred thousand, records payments in a large ledger (permitting fifty records to be viewed at a time) and is reportedly able to easily identify the major delinquents. With the falling price of small computers, the case for computerizing billing and collection records is fairly strong--particularly in large cities. Brazil is promoting the use of microcomputers for billing and collection in the larger cities served by its national technical assistance program. Smaller jurisdictions are encouraged to share regional computers, through individual terminals linked through telephone lines.

**3.93      In Indonesia, a pilot project in Tangerang is addressing the information management problem by shifting it to private banks.** Within the pilot project area, taxpayers are instructed to make their property tax payment at a specific bank branch, which is responsible for receiving payment and identifying delinquents.

**3.94      Decentralize Collection Facilities.** The sheer inconvenience of the procedures required to pay the property tax can also adversely affect collection efficiency, discouraging taxpayers who would otherwise be willing to comply. It is not unusual--given the unreliability of the mails--for local government to require property taxes to be paid in person. In Manganilla, Philippines, taxes must be paid in person at city hall, during the first two weeks of January. Taxpayers report waiting times of several days.

**3.95      Collection can be made more convenient by decentralizing it.** In Calcutta payment can be made at branch offices of city hall. In Rio and Karachi, payment can be made at any branch of an authorized commercial bank. (These banks are required to deposit the receipts in the account of the municipality after a specified time period. Interest on the float in the interim provides the banks' compensation.)

**3.96      Administrative solutions alone are unlikely to have much impact of collection performance however.** Dysfunctional collection monitoring systems often reflect deliberate political choices, as they prevent embarrassing delinquencies from coming to light and maximize opportunities for discretionary enforcement. They are, however, a necessary complement to changes in the institutional and political incentives confronting taxing authorities, discussed below.

#### IV. CHANGING INSTITUTIONAL INCENTIVES

4.1 A variety of institutional arrangements are used to administer the property tax. Responsibility for valuation, for example, can be assigned to either central or local government. Collection, similarly, may be either a central or local government function. Private companies may play a role in either phase of the administration of the tax.

4.2 A typology of administrative arrangements for valuation and collection is illustrated in Table 4. As shown, examples of all four basic options are found in both industrial and developing countries. Completely centralized systems--with the central government both valuing and collecting--are found in France and Sweden, and in Turkey, Jordan, Cote d'Ivoire, Indonesia, and Pakistan.<sup>18/</sup> Completely decentralized systems--with local government performing both these functions--are found in the United States, Japan, Brazil, the Philippines, India, and some Nigerian states. Split systems--where the central government values but local governments collect--are found in the United Kingdom and Germany. Among developing countries, Colombia and Kenya employ split systems, except in their largest cities (where administration is completely decentralized). The obverse form of split system--where local governments value and central governments collect--exist in the Netherlands and Tunisia.

4.3 If Centralized, Provide Incentives; If Decentralized, Address Competence. Experience with the four options suggests that none is a guarantor of success or of failure. Under the right conditions, any of the four can work. Reorganization is therefore not a sine qua non of property tax reform, regardless of the existing administrative structure.

4.4 A comparison of the four options nevertheless suggests that some patterns are more likely to succeed than others, because of the way they exploit differences in the incentives confronting central and local government, and the way that they deal with the need for disinterested technical expertise in certain aspects of administration of the tax.

4.5 The choice between central and local administration can be characterized--with some exaggeration--as a tradeoff between indifference and incompetence. As central governments derive no revenue from the property tax, the tax tends to get low priority when it is centrally administered. In Cote d'Ivoire the central government's taxing authority assigns much less priority to the property tax than it does to the principal taxes supporting the central government.

4.6 Local administration, in contrast, tends to be characterized by apparent incompetence. This is in part due to the technical difficulty of certain aspects of tax administration--particularly the calibration of unit costs and the valuation of unique forms of property. It also reflects local government's greater vulnerability to local political pressure--a case of political responsiveness acting in the guise of technical incompetence.

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18/ In Pakistan, responsibility for valuation and collection rests with provincial governments, which transfer collections to municipal authorities.

**Table 4: VARIANTS OF ADMINISTRATIVE ARRANGEMENTS**

<u>Valuation</u>		
<u>Central Government</u>		<u>Local Government</u>
C	France	Netherlands
E	Turkey	Tunisia
N	Cote d'Ivoire	
T	Pakistan*	
C	Indonesia	
O	Sweden	
L	Jordan	
E		
C		
T	United Kingdom	United States
I	Nigeria (Anambra)	Brazil
O		India
O	Kenya**	Nigeria (Oyo)
N	Germany	Japan
A	Colombia**	Mexico***
L		Philippines

\* Provincial government values.  
 \*\* Except in largest cities, where local government values.  
 \*\*\* Valuation or collection performed by state governments in some jurisdictions.

4.7 In making the tradeoff between incompetence and indifference, the balance may fall differently for valuation than for collection. Valuation is a more technically difficult task, involving some degree of discretion (and therefore vulnerability to political influence). In valuation, the competence of a central government may therefore be worth the risk of its indifference. Collection, with its immediate impact on revenue and its relatively straightforward administrative requirements, may be more appropriately assigned to local government. This would suggest a system of split administration--with central valuation and local collection--as is found in Germany and, until recently, the United Kingdom.

4.8 But there are equally effective ways to resolve the problem. Except in its largest cities, Colombia relies on central government to perform the valuation function. It addresses the indifference inherent in central valuation by assigning this function to a parastatal, whose income is based on valuation fees paid by local government. Brazil and the Philippines, in contrast, assign the valuation function to local government but address their incompetence through national programs of technical assistance.

4.9 In allocating administrative responsibilities between levels of government, governments also can distinguish between the pattern appropriate to large cities and that appropriate to smaller jurisdictions. Colombia and Kenya both permit local valuation in their largest cities, where the magnitude of valuation work would justify retaining technical expertise, while providing central valuation services to smaller jurisdictions.

## V. CONCLUSION: STRATEGIES FOR REFORM

5.1 In the last twenty years, international donor agencies and central governments have made numerous efforts to increase property tax revenues in developing countries. Approaches to reform can be grouped in three categories.

- a. Studies: World Bank interventions have most often taken the form of project-financed studies. Major studies of local taxation have, for example, been financed under projects in Madhya Pradesh (India) and Karachi (Pakistan). An urban project in Madras (India) financed a major investigation into alternative means of addressing the valuation problem posed by rent controls. In Mali, the Bank financed a study of the feasibility of a property-linked refuse collection tax.
- b. Loan conditions: The Bank has also used loan conditions to encourage property tax reform. The second Kenya urban project, for example, required the government to establish a rating and valuation unit in the Ministry of Local Government and to undertake a general revaluation of properties in the project cities. The third Calcutta urban project similarly required the establishment of a metropolitan valuation authority and mandated general property revaluations in the project jurisdictions.
- c. Financing for implementation: More recently, Bank projects have also financed implementation costs of property tax reforms. In Jakarta (Indonesia) the Bank is financing a revaluation of high-value property and a pilot program in collection administration. In Accra (Ghana) the Bank recently financed a remapping and revaluation exercise. A similar attempt is under discussion in Lagos, Nigeria.

5.2 Other donors and central governments are equally active in the field. USAID has been a longtime supporter of the Philippines' Real Property Tax Administration (RPTA) program, an effort to introduce map-based property identification and mass appraisal on a national scale. The Brazilian government similarly is the sponsor of a remapping and revaluation program that has been implemented in more than twelve hundred Brazilian municipios.<sup>19</sup>

5.3 The available evidence suggests that these interventions have had relatively limited impact on revenues. Detailed studies of the Philippine and Brazilian programs and other, anecdotal, evidence suggests that even where administrative reforms have been carried out, these have had little long term revenue impact. At best, projects have improved the fairness of property tax administration, by increasing the comprehensiveness of coverage and increasing the accuracy of property information used in deriving valuations. But the revenue effects of these improvements have been reduced by low tax rates and low collection efficiency. This record provides several lessons for future interventions.

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19/ The Philippines and Brazil programs are described in Annex 2.

5.4        Address Collection As Well As Valuation. One frequent problem in the design of interventions is an excessive concentration on the "upstream" stages of property tax administration--discovery and valuation--to the neglect of collection. Given the extremely low level of collection efficiency in developing countries, much of the effort spent in mapping and valuation is likely to be wasted if corresponding efforts are not made to improve collection administration: newly discovered and valued property does not yield revenue if the system of collection administration is dysfunctional. Evidence from the Philippines and Brazil programs suggests, in fact, that collection efficiency--which had averaged 50% before project intervention--declined following the completion of tax administration projects, substantially offsetting the programs' impacts on yields.

5.5        Under some conditions<sup>20/</sup> there is, in fact, a good case for starting the process of administrative reform at the collection end of the taxation process. This can be a more efficient use of effort--in that collection improvements directly result in increased revenue, without depending upon a subsequent phase of administration. And it can yield results more quickly: sorting records to identify major delinquents, combined with conspicuous enforcement of penalties, can produce a major one-time increase in collections on arrears, as well as have a salutary effect on collection efficiency over the long term.

5.6        Address Policy As Well As Administration. Reform efforts have also tended to focus too narrowly on administration of the tax, to the neglect of property tax policy. Property tax policies--the rate structure and the method of revaluation--are key determinants of the level and buoyancy of the property tax. If nominal tax rates remain at low levels, administrative improvements will have little revenue impact in absolute terms. Even substantial one-time impacts can be offset if procedures permitting annual adjustments in valuations are not introduced.

5.7        The experience of property tax administration projects in the Philippines and Brazil suggests that improvements in administration of the tax will, in fact, tend to increase political pressure for rate reductions: as valuations rise, property owners will campaign for lower rates to keep their tax liabilities from increasing. Bowing to that pressure can reduce tax revenues to the level at which the tax is not worth collecting. In the Philippines, the central government refused to permit RPTA valuations to be made in current prices. As a result, tax liabilities, post project, averaged only \$3.80 per property. In Brazil, similarly, tax liabilities in the northern municipios averaged less than \$9.80, post project. Rough cost calculations from the Brazil program suggest that if local authorities had been forced to amortize the full cost of the program out of revenues (along with recurrent costs of administration), many would not have seen a positive cash flow from the property tax for up to five years.

5.8        Address Underlying Political Disincentives. The failure to increase rates, to adjust valuations to reflect current prices--as well as the failure to devote sufficient resources to recurrent costs of administering the tax--reflect political as well as technical

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20/ That is, provided the gaps in coverage and the inequities in valuation are not too egregious.

constraints on the property tax. Project experience suggests that unless these constraints are addressed, interventions aimed solely at administration or policy will have little sustained impact.

5.9 The property tax generates a level of political opposition that is disproportionate to its yields. As noted earlier, the property tax accounts for only 1.3% of the average tax burden in developing countries. A doubling of property tax yields therefore would represent only a minor increase in the average tax burden. But in developing countries the property tax stands out as one of the few occasions where a large proportion of urban households confronts a tax bill. Two thirds of government tax revenues in such countries are derived from indirect taxes, whose ultimate incidence is largely hidden in the form of higher prices. In middle income developing countries, direct taxes on personal income and payroll taxes are also significant, but even their political profile is moderated. Coverage--particularly of the personal income tax--is still far from universal. And because these taxes are effectively collected only through withholding, opportunities for evasion are limited.

5.10 The property tax, in contrast, has none of these political virtues. Unlike indirect taxes, it is highly visible to the individuals who bear its ultimate incidence--particularly the owner-occupants of residential property. Unlike income taxes, its burden falls broadly. And because it cannot be imposed through withholding, opportunities for evasion are rife. It is therefore not popular and is regarded with ambivalence by both central and local government.

5.11 **Recheck Objectives.** The inherent political liabilities of the property tax suggest that any effort at reform should begin, first, with a clarification of objectives--specifically whether intervention is aimed solely at increasing revenues, or whether it is intended to promote wider efficiency objectives.

5.12 The property tax is only one of several means of increasing municipal revenues. As shown in Annex Figure 2, intergovernmental revenue sharing and local indirect taxes are also used to finance the nonchargeable services provided by municipal government. If the objective of intervention is simply to increase recurrent revenues, then revenue sharing and indirect taxes may be better targets. Revenue sharing provides local governments with a means of exploiting the less politically sensitive central government tax instruments. And local indirect taxes share the political advantages of central indirect taxes: to a great extent, their ultimate burden can be disguised in the form of higher prices and exported onto taxpayers in other jurisdictions.

5.13 But neither revenue sharing nor local indirect taxes provides the efficiency benefits of local property taxation. Revenue sharing cannot reflect willingness to pay. Local indirect taxes disguise the burden of local services, and under some conditions allow taxpayers to impose it on taxpayers in other jurisdictions. If efficiency--as well as revenue--is the objective, then the property tax is the appropriate target. To achieve it, the political constraints must be addressed.

5.14 **Reduce Central Policy Control.** Given the diversity of institutional arrangements for property taxation, the definition of which government agency is relevant will vary.

Project experience nevertheless provides several general principles. First, as noted earlier, there is a clear case for reducing central control over the key policy variables--the setting of tax rates and the timing and extent of valuation adjustments. Central governments' incentives in this regard are inherently suspect, as they derive no revenue from the tax. Decentralizing control over policy to local government removes one layer of disincentives and shifts control to the level of government most directly affected by it: local government.

5.15 Second, where central government is responsible for administering the tax, there is a strong case for allowing this function to be performed on a contractual basis. Reversing the client-contractor relationship between the valuation office and the local authority can be a means of addressing central government's inherent lack of interest in making the tax work well.

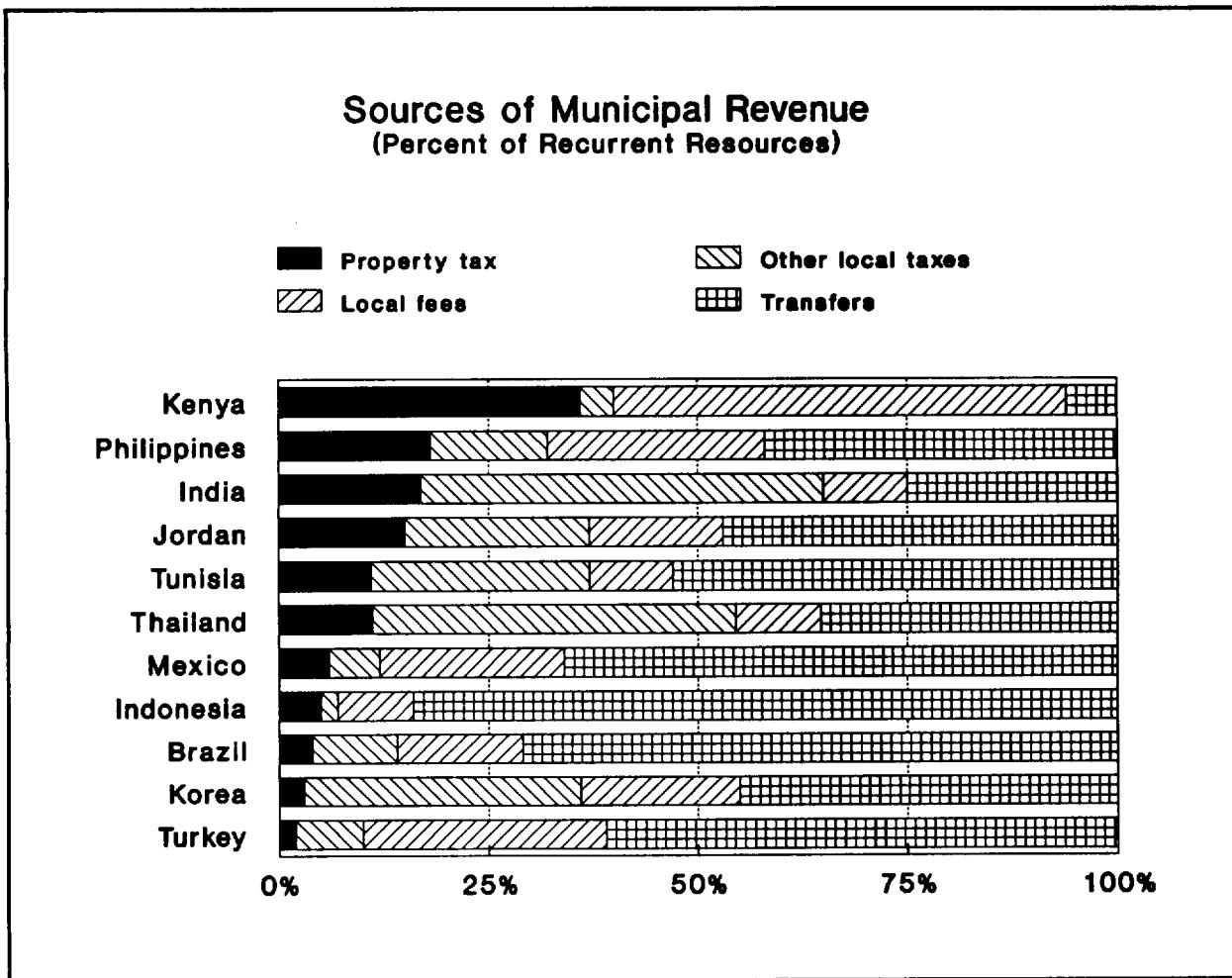
5.16 Restructure Local Revenue Sources. Disincentives at the local level must also be addressed. Given the inherent political liabilities of the property tax, sustained improvement is unlikely as long as more politically attractive means of increasing resources are available. The availability of open-ended or discretionary grants, or unrestricted indirect local taxes, has generally undercut efforts to improve property tax administration by local government. In Brazil, for example, large-scale recurrent transfers, combined with discretionary grants and vaguely defined functional responsibilities, have largely eliminated any sustained local support for property taxation in small municipalities.

5.17 Where these alternatives have been reduced, in contrast, political support for property tax reform has been greatest. The elimination of intergovernmental grants to Accra, for example, is credited with providing the motive force behind that city's recent property tax reforms. Similarly, the elimination of discretionary grants to the municipality of Rio following the election of an opposition mayor is credited with motivating Rio's property tax reform during the late 1980s.

5.18 The objective of changing the structure of local revenues is not to increase property tax revenues per se. High property tax revenues are not an end in themselves. But in reducing the extent of arbitrary subsidies between jurisdictions and confronting local taxpayers with the cost of the services they consume, these changes are consistent with, and necessary to, the pursuit of the efficiency objective that is the principal justification for property tax reform.



**ANNEX I**  
**Sources of Municipal Revenue**



**Figure 2**

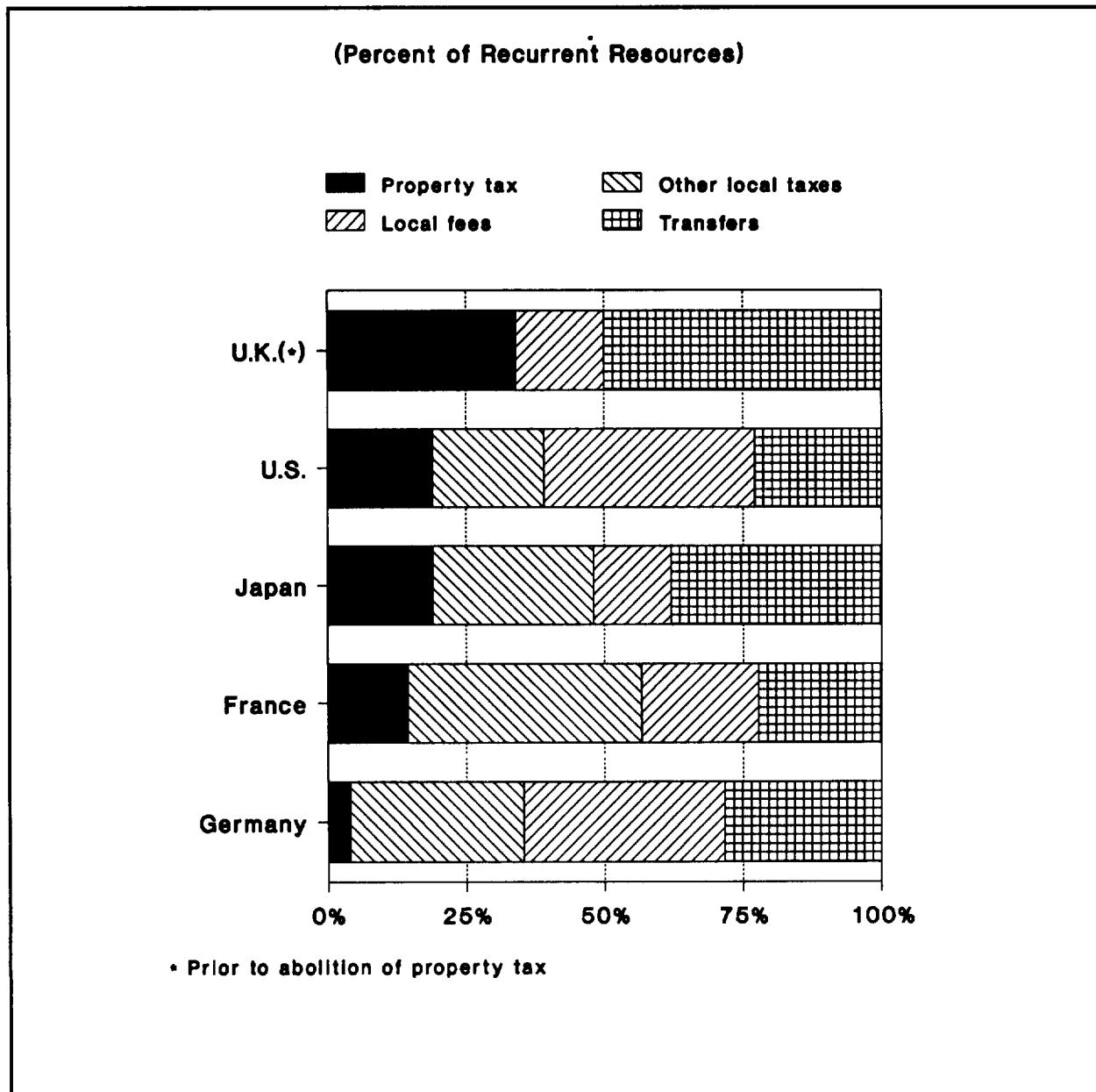


Figure 3

## ANNEX II

### Description of Property Tax Administration Programs in Brazil and the Philippines

1. For purposes of this study, two detailed case studies of property tax intervention were evaluated. While both have received World Bank funding, neither represents a Bank-led initiative. The first is the Philippines Real Property Tax Administration Project (RPTA), financed by USAID; the second, the Brazilian Program for Municipal Technical-Administrative Improvement (CIATA), financed by the Brazilian government.
2. Both programs are ambitious: they aim to reform property tax administration on a national scale, in countries where both valuation and collection are local responsibilities. Both aim to have lasting impacts, by introducing procedural change. As targets for evaluation, the two projects have an additional virtue: they are longstanding, providing the opportunity to evaluate their impacts ex post facto, and to benefit from modifications made in response to early problems in implementation.

#### Project Description

3. RPTA and CIATA were both initiated in response to a similar diagnosis of the problem. Local governments were perceived as having inadequate revenues. This was attributed to a failure to exploit the property tax, which was in turn attributed to problems in administration of the tax--specifically the failure of existing procedures to produce comprehensive, accurate information on the physical characteristics of the tax base.
4. The design of both programs responded to this diagnosis. Both aimed to change the way property is discovered and identified. Both jump-started the procedural reform by producing: (1) a new set of parcel maps, incorporating all properties in the jurisdiction; (2) new property records, based on field surveys of all properties in the jurisdiction, and (3) a new set of billing records, incorporating the revised property data. Transmission of knowledge was ensured by involvement of TA recipients in the production of these products.<sup>1/</sup>
5. The two programs are executed in the form of a standardized package of technical assistance, delivered over a fixed time period to preselected groups of municipalities. In the Philippines, the program is managed by the Office of Local Government Finance in the Ministry of Finance. In Brazil, the program is sponsored by the equivalent unit in the Ministry of Finance but is executed by staff of the government data-processing parastatal.

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1/ The details of the programs differed slightly in response to differing preproject conditions: The Brazilian program aimed at resuscitating an existing map-based inventory system that had fallen into disrepair in smaller municipalities. The Philippines program aimed at a fundamental change in the system of discovery; replacing a system based on owner-declarations with one using map-based government inventories.

6. Individual projects are executed in five steps:

**Mobilization.** At the outset, the program manager arrives on site, assembles a project team (consisting of staff of the local valuer and temporary hires), organizes office space, and procures materials and equipment.

**Preparation of Reference Map.** The project team then assembles an initial reference map on the basis of existing parcel maps, subdivision plans, and road and utility maps; it then makes an initial reconciliation of existing property tax records with parcel information.

**Field Work.** Project teams then take to the field to verify and supplement data on the physical characteristics of the land and structures--to be subsequently used in preparing parcel maps calculating individual property valuations--and information on claimants to ownership--to be subsequently used in billing and collection.<sup>2</sup>

**Calculation of Unit Costs.** While the field work is ongoing, the project manager oversees preparation of new unit cost tables.

**Preparation of Assessment Roll.** Post-field, the project team then converts parcel sketches into base maps, calculates individual property valuations by applying the unit cost tables to the characteristics of each property, and--after the appeal opportunity--prepares individual property records for delivery to the treasurer.

7. In Brazil, the sequence is normally implemented in three to five months; in the Philippines, one year.

**Technical Impact**

8. Within the confines of their specific objectives, the programs appear to be an effective means of delivering technical assistance on a mass scale. The average RPTA project is estimated to increase valuations by about 40%: 20% of this increase is due to the discovery of missing land parcels; the remainder is due to the application of more accurate property information to the valuation of properties already on the rolls. In Brazil, CIATA's impact is more difficult to document, but it appears to be substantial. The average project increases the number of discovered properties by about 50%. The application of more accurate property data to existing properties also, presumably, increases valuations, although

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2/ In the Philippines, this work is carried out by teams of four, consisting of a supervisor, a tax mapping aide (responsible for sketching parcel boundaries on the base map), a data gatherer (who acts as custodian of tax declarations and is responsible for verifying and updating the data), and the local ward captain. Production averages twenty parcels per day. In Brazil, field work is carried out by teams of two, with average of fifteen completions per day.

the extent of this impact cannot be measured accurately.<sup>3/</sup> And preliminary evidence suggests that procedural reforms introduced under the programs have been successfully picked up and run with by local valuers.

9. These impacts were achieved on a mass scale and at relatively low cost. In twelve years of operation, 1,282 CIATA projects were completed, at an average cost of \$6.50 per parcel. The Philippine's RPTA completed 571 projects in five years, at an average cost of \$5.60 per parcel.

10. The success of the programs as delivery mechanisms for technical assistance is attributable to a number of characteristics:

- (a) good bureaucratic fit: In both programs, the government agencies that had veto power over technical improvements were coopted into the program. In the Philippines, the program was initially managed by the Ministry of Local Government; local valuers, however, report to the Ministry of Finance--bureaucratic obstacles were resolved when the management of the program was shifted to MOF.
- (b) experienced on-site project management: Individual projects are directed by a project manager--who remains on site throughout project implementation--and as a member of a permanent TA staff is able to draw on experience gained in prior projects.
- (c) packaged technical material: TA is delivered as a standardized package, using identical materials and following essentially the same sequence of steps in each project municipality, eliminating the need to reinvent the wheel for each project.
- (d) integration of TA recipients in project implementation: The division of labor between the program management staff and local counterparts ensures that TA is successful in transferring knowledge to users. TA staff responsibility is confined to management; projects are implemented by the regular assessor's staff and locally hired interns.
- (e) appropriate technical standards: The projects' low costs were due in part to adoption of technical standards minimal to meet fiscal requirements. Neither project aimed to make a precise determination of boundaries or to adjudicate title; the number of variables used as basis for valuation was limited.

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3/ Because all property valuations are indexed each year, the impact of better property data cannot be separated from the impact of across-the-board inflation adjustments on the basis of the data at hand.

- (f) local hiring: Staff costs were minimized by hiring temporary inexperienced locals and giving crash training courses.<sup>4</sup>

### Revenue Impact

11. Despite their success in improving data on the physical characteristics of the tax base, neither program had the expected income on tax revenues. The rate of growth in actual collections was lower than expected, and absolute levels of tax liabilities remained trivial. In the Philippines case, actual collections increased by only 1.1%, with revenue per parcel averaging only US\$3.80. In Brazil, revenues increased, in real terms, by an average of 4%; with revenues per parcel averaging \$9.80.

12. This perverse outcome was largely the result of a series of de facto policy decisions. While the programs were expanding the physical definition of the base, policy makers were offsetting the expansion's revenue impact by reducing valuations on existing properties, lowering nominal tax rates, and relaxing collection enforcement. Three policy levers were used: the unit cost tables (which are the basis on which physical data is converted to estimates of value), the tax rate (or, in Brazil, the rate of inflation indexation), and the extent of collection enforcement.

13. In the Philippines, the central government played a prominent role, prohibiting the use of current prices in the calculation of unit costs--thereby forcing valuations to be made in obsolete prices. Tax rates and assessment ratios continued to be restricted by the central government, in effect forcing individual tax liabilities to decline in real terms. Local officials, for their part, refrained from any provocative collection enforcement, allowing average collection rates to drop below 50%.

14. In Brazil, the key decisions were made locally. Municipalities adopted below-market unit cost factors and continued to adjust valuations at below the rate of inflation. As in the Philippines, local collection effort declined. While these decisions were made locally, they reflect incentives implicit in the structure of intergovernmental relations that remove incentives for taking political risks with local taxation. Smaller municipalities benefit from large transfers under Brazil's system of revenue sharing, obviating the need for a high absolute level of local taxation. Politically innocuous means of increasing local resources at the margin also exist. Ambiguities in the division of functional responsibilities raise the prospect of negotiated contributions in kind. A variety of ad hoc grants are also available.

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4/ Neither the Brazilian nor the Philippine program reported any problem in hiring and motivating trainable staff. The Philippine program preferred unemployed college graduates, who had backgrounds in engineering or planning. Brazil preferred less well-educated staff, having found that university graduates are more adept at outwitting program supervision and verification systems.

## ANNEX III

### Terms of Reference Preparation of a Property Tax Rehabilitation Program for Country x

#### Background and Objectives

1. The Government of Country x is considering a major effort to rehabilitate its existing system of urban property taxation. At present, the property tax is administered by municipal councils. Systems of valuation and collection are badly deteriorated. A large number of properties are missing from the tax rolls, the property information used for valuation is out of date, and collection performance is poor.
2. The World Bank has expressed interest in supporting such an effort as part of an upcoming urban development project. To assess the merits of the idea, both the Government and the World Bank require a more detailed definition of what it would entail. The objective of this assignment, therefore, is to prepare a detailed proposal for a nationwide property tax rehabilitation program for Country x. The proposal will be the basis for a project appraisal and would then guide the implementation of the program itself.

#### Scope of Work

##### Task 1: Diagnosis

3. The consultant will review the existing system of property taxation in the capital city and a limited number of smaller councils. This review will encompass the entire sequence of steps involved in the administration of the property tax:

- discovery and identification (that is, the system for ensuring that all properties are included on the tax rolls and that changes in the tax base are discovered and incorporated as they occur);
- valuation;
- rate setting;
- billing (including procedures for initially notifying taxpayers of their liability); and
- collection (including systems for monitoring delinquent accounts and enforcing payment).

4. On the basis of this assessment, the consultant will identify:

- (a) key stages in administration of the tax where revenue losses are occurring; that is, (1) what proportion of properties are missing from the rolls, (2) whether valuations are accurate, (3) the nominal tax rate and exemption policies, and (4) the proportion of demand that is collected.

(b) the procedural problems behind the leaks: (1) how are properties discovered and new valuations made; (2) what is the system for adjusting rates; (3) what is the billing and collection system.

(c) the environment in which reform must operate: (1) characteristics of the market: prevailing system of tenure, extent to which market data of any type readily available, etc. (2) characteristics of policy setting environment: what other revenue sources; what level (levels) of government set policy.

### Task 2: Outline Rehabilitation Strategy

5. Based upon his review of the existing system, the consultant will outline a strategy for property tax rehabilitation, describing the major phases of the work and the institutional arrangements for implementing them.

6. It is anticipated that the program would be implemented in three phases:

- detailed design (including revisions in legislation and preparation of manuals for the new systems of discovery, valuation, billing, and collection to be adopted);
- implementation of a general resurvey and revaluation of all properties; and
- an initial operating period, following the general resurvey, during which the new procedures, staffing, and institutional arrangements would be tested.

7. This specific phasing of the program should not be considered binding on the consultant.

8. In outlining the rehabilitation strategy, the consultant will be cognizant of two primary concerns:

- costs: Given the limitations on the underlying tax base, extremely low administrative costs will be required if the system is to show an acceptable administrative cost ratio. The proposal should therefore be judicious in its requirements for technical assistance (particularly in the labor-intensive implementation phase) and in its choice of technology.
- sustainability: The proposal should aim at producing a sustainable system of property taxation, rather than a one-time general resurvey and revaluation. The proposal will therefore identify the means by which lasting institutional, procedural, and staffing improvements would be achieved.

### Task 3: Detailed Program Design

9. The consultant will prepare a detailed program proposal, encompassing the following elements:

- a listing of specific steps to be undertaken in implementing the program, including a timetable for implementing each step and a designation of the position or institution responsible for doing so;
- an identification of complementary Government actions that are considered critical to the program's success (including, if appropriate, changes in the institutional arrangements for administering the property tax and major changes in property tax legislation);
- an estimate of the cost of implementing each phase of the program, detailed by component (such as expert consultants, vehicles and equipment, permanent government staff, and fixed term unskilled staff);
- an estimate of the staffing implications of the proposed strategy, including a breakdown by skill category for both the resurvey-and-revaluation phase and the subsequent operating phase;
- an estimate of the long term annual cost of operating the system, the expected yield of the tax (at rates agreed with Government), and the resulting expected administrative cost ratios; and
- a set of job descriptions (and draft terms of reference, in the case of consultants) for key managerial and professional positions.

### Outputs

10. The consultant will report the findings and recommendations of all three tasks in the form of a report, to be submitted to the \_\_\_\_\_ upon completion of the assignment.





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