LESSONS OF TAX REFORM

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Lessons of Tax Reform

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Contents

Preface  v

Executive Summary  1
   Why Tax Reform?  2
   Lessons of Tax Reform in Developing Countries  4
   Review of Bank Advice  7
   Recommendations for Future Bank Work  10

Introduction  13

1. What Is Involved in Tax Reform?  15
   Typical Tax Structures in Developing Countries  15
   Tax Policy Reform in Developing Countries  17
   Tradeoffs and Interactions in Redesigning Tax Systems  27

2. Tax Reform Strategies and Experience  29
   Broadening the Base of the Tax System  29
   Rationalizing the Rate Structures of Taxes  41
   Coordinating Tax Instruments: A Systems View  43
   Improving the Administration and Implementation of Taxes  51
   Summary of Lessons of Tax Reform  54

3. World Bank Advice and Adjustment Lending  64
   Evolution of the Bank’s Role  64
   Patterns in the Bank’s Tax Advice  66
   Tax Advice and Technical Assistance in Adjustment Lending  73
4. Conclusions and Recommendations 76
   Country Economic and Sectoral Work 76
   Lending Operations 77
   The Research Agenda 79

Selected Bibliography 83

Boxes
1. User Charges: Revenue, Economic Efficiency, and Equity 20
2. Income or Consumption as a Tax Base? 24
3. Broadening the Base of Taxes on Goods and Services: The Case of Indonesia’s Value Added Tax 32
4. The Case for Environmental Taxes 34
5. Broadening the Base of the Company Income Tax by Limiting Promotional Incentives: The Case of Mexico 37
6. Broadening the Base of Personal Income Taxes: The Case of Jamaica 38
7. Broadening the Base of Taxation through the Use of Presumptive Indicators: The Case of Turkey 40
8. Tax Reform Takes Time 44
9. Tax Reform Needs Political Support: The Case of the Argentina Land Tax 54
10. Tax Policy for Centrally Planned Economies in Transition 55
11. A Useful Reference Set of Tax Instruments 57

Tables
1. Variation in Level and Composition of Tax Revenue by Region, 1985 16
2. Adjustment Loans with Tax Policy Components, 1980–89 73
This paper was produced under the supervision of Lawrence H. Summers, vice president for development economics, Johannes F. Linn, director of the Country Economics Department, and Shankar N. Acharya, chief of the Public Economics Division. The paper has benefited from comments of the Fiscal Affairs Department of the International Monetary Fund and was discussed at a regular meeting of the World Bank's Board of Executive Directors on April 16, 1991. The principal author of this paper is Zmarak Shalizi, principal economist in the Public Economics Division. He had support from Vinaya Swaroop and Chad Leechor, both economists in the Public Economics Division. The paper builds on contributions from the staff of the Public Economics Division and the Operations Complex. Blanca Moreno-Herrero and Lynn Khadiagala provided research assistance. Editorial assistance was provided by Fiona MacKintosh and secretarial support by Ann Bhalla and Nancy Barrett.
Executive Summary

The dominant motivation for taxation in developing countries is to finance public administration and the public provision of economic and social services. Secondary motivations are the redistribution of income and the correction of market imperfections. Although some level of taxation is necessary to achieve these goals, taxation always has costs—both direct costs of administration and indirect costs associated with the misallocation of resources and with consequences for the distribution of income. The appropriate level of taxation depends on a country’s desired role for the state, the efficiency and equity of its public spending, and the efficiency and equity of its tax structure and administration. Although the desirable level of taxation can vary greatly by country, experience over the past decade has shown clearly that:

- Tax reform as a component of broader fiscal reform is at the heart of the stabilization and adjustment process in many developing countries, as noted in *Adjustment Lending Policies for Sustainable Growth* (World Bank 1990a).
- Most tax systems in developing countries have high and avoidable costs.
- Tax reform can work and is inextricably linked with other aspects of development policy.

Taking these broad observations as a starting point, this paper assesses the lessons from experience in reforming general taxes administered at the national level. It is intended as a brief on issues and options in tax policy and as a review for World Bank economists evaluating tax reform in operational work. The paper provides a concise synthesis of current thinking and practice regarding tax reform in developing countries; reviews the Bank’s growing provision of advice on tax reform and its
growing use of loan conditions related to tax reform; and makes recommendations regarding the Bank's future country economic and sectoral work, operational lending (adjustment and nonadjustment), and research on tax policy. This is the first Bank paper dealing with issues of general tax policy. It draws on years of operational experience, on intensive research inside and outside the Bank, and on the findings of *World Development Report 1988* (World Bank 1988), which dealt mainly with public finance.

**Why Tax Reform?**

How to contain and rationalize an overexpanded public sector has become one of the principal challenges facing many developing countries in recent years. In this context, the rationale for tax reform is twofold: first, as part of structural adjustment, tax reform is designed to reduce severe distortions in economic incentives and the resulting inefficiencies and inequities in the allocation of resources; and second, as part of efforts to stabilize the economy, tax reform, in tandem with cuts in public expenditure, may be needed to generate public revenue in a reasonably nondistorting, equitable, and sustainable manner.

Patterns of taxation (both in level and in composition) differ from country to country because of economic, cultural, and historical factors. Ratios of tax revenue to gross domestic product (GDP) in developing countries are typically in the range of 15 to 20 percent, compared with about 30 percent in industrial nations. The ratio of public expenditure to GDP is usually between 20 and 30 percent in developing countries, whereas in industrial countries the average ratio is above 30 percent. Developing countries rely much more heavily on taxes on goods and services, particularly trade taxes, than do industrial countries. Another notable difference between industrial and developing countries is that the latter rely more on company income taxes than on personal income taxes. Personal income taxes are hard to collect in predominantly rural economies or economies with large informal sectors.

A poorly designed or improperly functioning tax system can lead to the following problems, which tax reform attempts to address:

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*Sectoral and local taxes, social security taxes, and intergovernmental fiscal relations are not discussed in this paper, in part because they are the subject of ongoing research in the Bank. In addition, the details of designing and implementing reforms will be treated in a handbook on tax reform, currently under preparation.*
• **Insufficient revenue.** In all economies, the appropriate level of taxation depends on several strategic factors, including the benefits being reaped from the public expenditure program and the costs of relying on nontax sources of financing, such as external and internal borrowing. Most developing countries are plagued by chronic fiscal deficits and by inadequate social and economic infrastructure. Increasing tax revenue provides an obvious avenue to address these problems. Before recommending measures to increase tax revenue, however, it is important to answer some critical questions. What is the economic cost of additional taxation? Is it less costly to curb public spending? Will revenue increases lead to higher public savings or be absorbed by low-priority public current expenditures? Are there alternative, less distortionary sources of revenue, such as user charges? In addressing these questions, it will frequently become clear that increased taxation is not the best way to close fiscal deficits or finance public services. There will be occasions, however, when the only serious alternatives to increasing tax revenue immediately are to expand government borrowing and to either increase tax revenue in the future or allow excessive monetary expansion and the associated inflation. Inflationary financing of fiscal deficits acts like a tax, but one that exacts a heavy toll on social cohesion, on the functioning of the explicit tax structure, and on economic efficiency. In such contexts, it is clearly better to seek higher revenues from explicit taxation. *Since the primary function of a tax system is to generate revenue, the first goal of tax reform must be to ensure that this function is discharged adequately.*

• **Distortions that reduce economic welfare and growth.** Taxation frequently creates distortions in the economy that reduce the real income of society by more than the amount of revenue raised by government. The reduction in real income is often referred to as the economic efficiency costs of taxation. For example, taxes on foreign trade frequently induce misallocation of resources. Poorly designed and implemented tax systems can also encourage companies and individuals to waste effort on avoiding and evading taxes. Reliable estimates of the efficiency costs of taxation in developing countries are rare. An often-cited study (Ballard, Shoven, and Whalley 1985) for the United States indicates that in the early 1980s a 1 percent increase in all existing tax rates would have led to incremental efficiency costs ranging from 17 to 56 cents for each dollar of extra revenue raised. There is reason to believe such costs of taxation are even higher in developing countries. Some estimates suggest that the social cost of increasing import tariffs, which
account for 20 percent or more of revenue in developing countries, is several times the revenue collected. Furthermore, evidence suggests that the marginal efficiency costs of taxation often rise sharply with the level of tax rates, especially for taxes on foreign trade. A second goal of tax reform, therefore, must be to reduce the efficiency costs of taxation.

- **Inequities.** The poor often bear significant tax burdens. At the same time, many of the better-off pay little in taxes because a large part of nonwage income, self-employment income, or in-kind income is excluded by design or by weak administration. In most developing countries, the effective taxation of the rich is particularly weak. As a result, both horizontal equity (treating taxpayers with the same amount of income equally, irrespective of the source of income) and vertical equity (distributing the tax burden among the nonpoor in line with their ability to pay) suffer. Lifting the tax burden off the poorest households and ensuring that actual tax structures become more equitable both horizontally and vertically is a third goal of tax reform.

- **Administrative problems.** In most developing countries the administration of taxes is weak, and the problems of evasion and corruption are serious. The weakness in tax administration stems from several interacting factors, including unduly complex tax laws and procedures, poor information systems, corruption, and political interference in tax administration. Strengthening tax administration, which will often require simplifying the determination of the tax base, is a fourth objective of tax reform.

**Lessons of Tax Reform in Developing Countries**

Despite the difficult and unpopular choices involved, a number of developing countries have successfully undertaken major tax reforms. In the light of their experience, some lessons can be drawn for other developing countries that are contemplating or are in the process of making significant changes in the structure of their tax systems.

**The Design of Tax Systems**

- **There is no optimal tax structure, but a useful reference set of taxes has emerged.** There is no unique prescription for the design of a system of taxes or even of a particular tax. Nor is there a single country in which all taxes are optimally designed. Some broad principles of tax reform can be developed that apply across the board, but the design and implementation of taxes are complex
matters requiring detailed assessment and careful tailoring country by country. A useful reference set of instruments for taxation is summarized in box 11.

- **Broadening the base of the tax system should be a high priority.** In developing countries the tax base is often narrow so governments must rely on relatively high tax rates to generate revenue. The higher the rate, the greater the distortion in private economic activity and the greater the associated efficiency costs of taxation. Reducing rates in the presence of revenue constraints or raising additional revenue without aggravating economic distortions requires broadening the base. In doing so, governments must attend to three important points:

1. Successfully reforming the taxation of goods and services in developing countries often involves shifting from a reliance on a narrow international trade base plus a limited domestic production base to a broader domestic consumption base.

2. The value added tax (VAT) should be the instrument of choice for most developing countries that are thinking of reforming their general taxes on goods and services. Replacing cascading turnover and manufacturers' sales taxes by a value added tax can increase revenue, reduce reliance on foreign trade taxes, and substantially reduce economic distortions. The VAT and simplified versions of it have been successfully implemented in many developing countries. To ensure that broadening the base through the VAT does not adversely affect the poor, products that account for a large part of spending by the poor (such as unprocessed foods) can be excluded from the base.

3. The use of so-called tax expenditures (tax preferences and exemptions to promote specific economic and social objectives) should, in general, be reduced. The already narrow tax bases in developing countries are eroded further by the provision of fiscal incentives in the form of tax preferences and exemptions (in the case of income taxes as well as taxes on goods and services). These provisions usually are a major drain on the national treasury and significantly complicate the administration of taxes. In devising tax expenditures to meet economic and social objectives, the potential gains must be weighed explicitly against the potential losses in revenue and efficiency that might be associated with these measures.

- **Rates need to be rationalized.** Rationalizing rates usually involves several elements:
6 Lessons of Tax Reform

1. Reducing the number and dispersion of customs tariff rates and, over time, lowering average tariff rates to reduce distortions created by trade policy
2. Setting the central rate for a VAT on goods and services in the range of 10 to 20 percent
3. Setting three or four selective tax rates on luxuries and non-essentials, with the rates ascending according to the item's role in the consumption of the rich
4. Lowering the top marginal rates for personal income taxes to between 30 and 50 percent
5. Unifying the company tax rate structure to a single statutory rate equivalent to the highest personal tax rate.

- **Tax reform can lower the burden on the poor.** To relieve the tax burden on the poor, a portion of household income, approximately equivalent to per capita GDP (and up to twice per capita GDP where income tax administration is not well developed), can be exempted from the base of personal income taxation. Goods and services that account for a substantial fraction of expenditures of the poor, such as products of the informal sector and unprocessed food, can also be exempted from the base of general taxes (such as VAT) on goods and services. In any case, it is usually administratively impractical to bring the producers of these items into the tax net. Such targeted relief to poorer groups is more feasible if other, more dubious tax expenditures are eliminated and the basic strategy of broadening the base is effectively pursued. Selective excise taxes on luxuries and nonessentials can simultaneously enhance the revenue take and the progressivity of the tax system without significant efficiency losses.

The Process of Tax Reform

- **Tax reform benefits from a systemic view.** Since tax reform typically involves the balancing of multiple objectives (revenue, economic efficiency, equity, and administrative effectiveness) and the assessment of interactions among different tax instruments and bases, a systemic view of tax reform can yield significant gains. For example, reductions in customs tariffs to promote efficiency gains are likely to be more sustainable if the taxation of domestic production and consumption is simultaneously broadened to offset the lost revenue from reduced tariffs. Even when there are significant gains to be reaped from piecemeal reforms of particular taxes or improvements in tax administration and enforcement, as is often the case,
partial reforms must be designed with a view to enhance, rather than weaken, the overall tax system.

• **Reform of tax structures is generally more effective when accompanied by improvements in tax administration.** Improvements in tax administration are a desirable complement of any tax reform. A major contributing factor to weak tax administration is the excessive complexity of tax laws and the burden this places on the limited enforcement capabilities of most developing countries. Simplifying tax laws and procedures can facilitate compliance and make tax administration more efficient. For example, more audits can be done at lower cost. Administrative reform must not only improve technical procedures (as through computerization and the creation of master data files) but also institute organizational and managerial changes to increase staff productivity and minimize corruption.

• **Tax reform must take account of initial conditions, both domestic and foreign.** Country experiences suggest a need to assess carefully the institutional features and tax cultures in each country. In India, for example, the reform of the federal excise tax system along the lines of a VAT could not be extended to encompass sales taxes because the constitution allocates the responsibility for levying sales taxes to the states. In reforming their tax systems, capital-importing developing countries must also take account of the tax structures in capital-exporting countries. For example, if the capital-exporting country credits foreign income tax payments made on overseas investment, a capital-importing country may needlessly be giving away revenue through promotional investment incentives. In other cases, the foreign income tax credit regime (such as that in the United States) can restrict the extent to which a developing country (such as Mexico) can shift from an accrual system to a cash flow system for its company income taxes.

• **Domestic “ownership” of tax reform proposals is necessary for their success.** Tax reforms cannot be imposed on countries. Those who wield power in politics and in the civil service must be committed to the proposals if the reform is to succeed. Making tax changes without adequately considering transitional arrangements can also undermine the credibility and sustainability of changes in the tax regime.

**Review of Bank Advice**

With a few notable exceptions, the Bank’s advice on taxes in the 1970s focused on specific sectors of the economy. Project- and sector-specific
advice was often not linked to the general tax structure. The most frequent fiscal prescription for the general tax system was to increase taxation. Less attention was paid to the overall structure of taxes and the need to strengthen tax administration to support a reformed tax structure.

The Bank expanded and intensified its analysis and policy dialogue on the broader issues of tax systems with the initiation of adjustment lending in the late 1970s. Initially, it relied heavily on the analysis and recommendations made by other institutions. In the mid-1980s, as requests from borrowing member countries for policy advice on taxation and for technical assistance increased significantly, the Bank started producing its own detailed reports and recommendations, and, in many cases, these findings were reflected in adjustment programs supported by the Bank. The Bank’s increasing involvement in tax policy can be seen from the fact that during the three-year period 1987–89, forty-nine adjustment loans approved contained conditions related to tax policy, compared with forty-five such loans during the preceding seven years.

The Bank’s advice on taxation generally reflects the prevailing best practices. For example, the Bank’s current emphasis on broadening the base by recommending the VAT is clearly consistent with the professional consensus. Since the late 1980s, the need to consider the interaction of selective taxes with broadly based taxes and to coordinate customs tariff reform with domestic tax reform has been increasingly recognized in Bank reports. In the area of rationalizing rates, the goal is to reduce the number of rates to facilitate collection. Lowering the top marginal rates in the case of income taxes and reducing the dispersion of rates in the case of taxes on goods and services are often recommended to reduce distortions in allocating resources more efficiently.

The Bank has also stressed equity in its advice on tax reform. First, consumption taxes recommended by the Bank (such as the sales tax and the VAT) generally contain an exemption for products, such as unprocessed food, that account for a large share of the expenditures of low-income groups. Second, the Bank frequently suggests heavier taxation on income-elastic items, such as vehicles, petroleum products, and luxury goods, that are consumed primarily by the rich (these suggestions appear in its reports on Bangladesh, Ghana, and Malawi). Third, in many cases it recommends raising personal exemptions in the income tax structure to relieve the tax burden of the poor (as was done in the cases of Brazil, Ghana, the Philippines, and Turkey). Fourth, in a few cases the Bank has recommended that the personal income tax structure be made more progressive by eliminating loopholes that benefit the rich (as in the cases of Brazil and Mexico).
Fiscal advice on particular sectors of the economy is sometimes poorly coordinated with national fiscal policies, even though sectoral reports, particularly on energy and transport, more systematically analyze the incentive and equity aspects of taxing these sectors. In some areas the Bank's sectoral tax advice is at variance with its general tax advice because consensus has not been reached by fiscal professionals. For example, in the case of company income taxation, there is a notable ambivalence about using tax incentives to promote investment and exports. On the one hand, project-related and sectoral advice tends to favor using fiscal incentives in the form of tax expenditures. On the other hand, general fiscal advice counsels simplifying tax bases by limiting the number of special provisions. Such advice is critical of using tax concessions to stimulate investment for reasons described in more detail under "Taxes on Income and Wealth," in section 2, and it favors a more neutral tax treatment across firms, industries, and assets (as in Argentina, Bangladesh, Brazil, Ghana, Malawi, and Morocco). The Bank is also restrained in its attitude toward export promotion: fiscal studies recommend freeing exports from the burden of tariffs and of domestic indirect taxes rather than giving them preferential treatment (including explicit subsidies when revenue constraints are significant).

Many Bank reports are optimistic about the speed with which large amounts of additional revenue can be generated, although they generally recognize that many recommendations on tax reform will take a long time to implement. Projected increases in the tax-GDP ratio are sometimes in the range of three to five percentage points over a couple of years. A review of data in the Government Finance Statistics Yearbook (IMF 1990) and its background data base for the past sixteen years shows that increases in excess of two percentage points in the tax-GDP ratio from year to year are not unusual, but for such increases to be sustained over three years is exceptional.

In the early 1980s, the Bank gave little tax advice on administrative issues. One lesson emerging from recent tax reforms is that effective tax administration is crucial. Administrative reform recently has been recommended in nearly all structural adjustment loans, in about half of sectoral adjustment loans, and in numerous reports on economic and sectoral work dealing with taxation. These recommendations sometimes have been accompanied by the financing of technical assistance to support administrative reform (as in Argentina and Malawi); in the case of Thailand, a freestanding tax administration project has recently been approved.

In sum, the Bank's advice on tax reform has evolved. Initially it focused on generating revenue to stabilize the economy. Now it encom-
passes broader policies of encouraging more efficient allocation in private production and investment and pays greater attention to equity and tax administration.

**Recommendations for Future Bank Work**

Attention to tax reform should be incorporated into the work of the World Bank in three areas: country economic and sectoral work, lending operations, and research.

**Country Economic and Sectoral Work**

The Bank’s continued involvement in tax work is important because it is closely related to its work on trade and tariff reform, on issues of public pricing in various sectors, and on public expenditure reviews. As Bank staff design structural adjustment programs, knowledge of lessons of tax policy reform can improve the quality of decisions about equity and the allocation of resources.

Economic analysis of tax systems must be embedded in a broader analysis of macroeconomic and fiscal policy; specifically, any recommendation to increase tax revenue should be made only after having considered the relative merits of other ways of closing fiscal gaps and of financing required public expenditures.

When tax measures are recommended to raise additional revenue, projections about feasible revenue increases must be realistic. Even when tax reforms are successful, sustaining a cumulative increase in excess of two percentage points of GDP over three to four years is rare.

When additional revenue is not needed but, because of prevailing fiscal imbalances, revenue cannot be allowed to drop, the Bank should attempt to identify the distortions created by the existing tax structure and to recommend less distorting alternatives in a revenue-neutral way—in other words, it should attempt to ensure that revenue will be forthcoming from elsewhere in the tax system to compensate for revenue lost when the most distortionary taxes are reduced.

Whether the goal is to increase revenue or not, the issues of efficiency and equity need to receive special attention in the future. In addition, it will often be necessary to explore ways of improving tax administration.

Where reforms are implemented incrementally, this must be done with a view to improving the overall structure and functioning of the tax system. Special attention must be given to coordinating recommendations on domestic taxes and trade taxes and to coordinating recommendations on general taxes and sector-specific taxes.
Country economic and sectoral work must be used to prepare recommendations for structural adjustment loans with tax conditions (and to ensure that the recommendations are consistent with one another). This preparation is important because structural adjustment loans are often arranged quickly, and inappropriate tax reforms are difficult to undo. Because advice on taxes applies to the long term, Bank staff must follow up on past advice to ensure consistency over time, unless explicit analysis justifies a change in course.

The Bank is planning to expand technical assistance in support of the design and implementation of tax reform in particular countries. This assistance would focus on systemic reform in the tax structure and tax administration and would seek to integrate sectoral tax reform into overall tax system reform, thus complementing the technical assistance program of the International Monetary Fund (IMF). Given the limited resources available in the Bank and the IMF to provide tax reform advice and technical assistance, continued and stronger cooperation between the two institutions will further the agenda of tax reform in member countries.

**Lending Operations**

Most tax reform measures have been components of adjustment loans that primarily had macroeconomic and sectoral objectives. As an extension of current practice, it may be appropriate in the future to make adjustment loans that incorporate more tax reform measures to improve the mobilization and allocation of resources and to address equity. However, because systemic tax reform, including the reform of tax administration, takes a long time to implement, these adjustment loans would have to carry conditions with target dates that reflect the likely pace of reform. Other alternatives include technical assistance loans (because technical assistance is often a prerequisite for successful implementation) and freestanding tax reform investment projects (these would principally finance the expenditures required for the improvement in tax administration, as in the case of the recent project for Thailand). Individual tax measures supported by Bank loans should always embody a systemic perspective on tax reform that will often extend beyond the scope and time horizon of the loans concerned.

**The Research Agenda**

In recent years, the Bank has expanded its own research on taxation through its internal work program and the research support budget,
which has financed research projects undertaken both within and outside the Bank. Having concluded its research program on general tax policy with the completion of this paper, the Bank is shifting the focus of its research to other fiscal policy issues. Nevertheless, some important unresolved tax issues remain to be studied. Significant areas for further work are:

- Exploring environmental and resource taxation
- Identifying cases in which fiscal incentives may be justified
- Analyzing international tax competition and harmonization, which affect international capital flows
- Analyzing social security taxes and their role in determining the types of safety nets that can be financed
- Identifying practical ways of reforming intergovernmental fiscal relations
- Exploring options and interim tax arrangements for socialist economies in transition.
Introduction

The Bank has a long tradition of analyzing and providing advice on fiscal issues. In the decade since the last functional review of the Bank's fiscal work, this work has substantially expanded and intensified, particularly in the area of tax analysis and advice. This shift reflects the Bank's increased recognition of the need for adjustment in the domestic policies of developing countries. As noted in the most recent report on adjustment lending, *Adjustment Lending Policies for Sustainable Growth* (World Bank 1990a), restoring fiscal balance is at the heart of the adjustment process in many countries. In particular, moving from stabilization to growth usually requires increases in domestic investment and savings. More efficient public investment and greater public savings are critical to this process. Adjustment also requires that the structural efficiency of the economy be increased. One way to achieve this is to reform the tax system to generate revenue equitably and with limited distortions in private behavior. Tax reform has emerged as an important component of fiscal adjustment and now plays a major role in the World Bank's dialogue with member countries.

The objectives of this paper are (a) to provide a concise synthesis of current thinking and practice on tax reform in developing countries; (b) to review the Bank's growing provision of tax reform advice and its growing use of loan conditions related to tax reform; and (c) to outline likely future directions of the Bank's country economic and sectoral work, its operational lending (adjustment and nonadjustment), and its research on tax policy issues.

The emphasis of this paper is on the system of general taxes administered at the national level. To limit the length of the paper, no attempt is made to cover sectoral tax issues such as how the agricultural, manufacturing, transport, energy, or financial sectors should be taxed, even though these

13
taxes may be important for some countries. Similarly, implicit taxes arising from institutional arrangements (such as marketing boards), from regulations (such as reserve requirements for banks), or from administered prices (such as ceilings or floors on prices of key commodities) are not covered because these taxes are also closely linked to sector-specific issues. Finally, topics such as social security taxes (which shift the incidence of the tax within the life cycle or across generations) and local and intergovernmental fiscal relations (which involve questions of tax and expenditure devolution) are excluded from the paper because they are the subject of ongoing work in the Bank. Many detailed technical issues of tax design not covered in the text are discussed in the references cited in the bibliography (for example, designing the VAT is extensively reviewed in Tait 1988 and Gillis, Shoup, and Sicat 1990). The paper draws on a substantial body of conceptual and empirical work. The relevant literature includes several projects on taxation funded by the Bank’s Research Committee, World Development Report 1988 (World Bank 1988), a set of papers presented at the 1990 World Bank Conference on Tax Policy (Khalilzadeh-Shirazi and Shah, forthcoming), and a series of recent books and papers by Bank and non-Bank authors (see the selected bibliography). Thus the paper synthesizes hypotheses and evidence from the literature with the lessons emerging from an ongoing review of the Bank’s advice and loan conditions in the area of tax reform.

Section 1 discusses the issues that must be addressed when reforming taxes. Section 2 summarizes current best practice in tax reform, including examples of countries that have adopted measures consistent with best practice. Section 3 reports on the tax advice that the Bank has been giving and places it in the context of the evolving best practice. Section 4 concludes with recommendations on future Bank operational and research work in the field of taxation.
What Is Involved in Tax Reform?

Tax revenue is typically generated either through direct taxes on individuals and firms or indirect taxes on transactions of goods and services. Direct taxes include taxes on personal and company income as well as payroll taxes, social security taxes, and taxes on property and wealth. Indirect taxes include domestic taxes, such as general taxes on sales, value added, or turnover, as well as selective taxes on specific goods, such as excises, and taxes on international trade, such as import duties and export taxes.

Typical Tax Structures in Developing Countries

Patterns of taxation differ from one developing country to another both in level and in composition. The lack of data and of common definitions makes it hard to compare tax patterns across countries. Nonetheless, a few generalizations can be supported. In 1985, the ratio of tax revenue to gross domestic product (GDP) in developing countries clustered around 17 percent, or about half the tax-GDP ratios in industrial economies (see table 1). Expenditure-GDP ratios in developing countries are much closer to those of industrial countries, net of social security transfers (which are not prevalent in developing countries). Tax-GDP ratios appear to rise with per capita income, but there is wide variation across countries, which suggests that the level of income is only a partial explanation. For example, the average tax-GDP ratio for countries in Sub-Saharan Africa, which are primarily low income, is similar to that for countries in Latin America, which are primarily middle income, and higher than that for Asia, which includes many low-income countries.

Historical and economic factors influence the composition of taxes in developing countries. Personal taxes are hard to collect in predomi-
nantly rural, agricultural economies, where people are widely dispersed. As a result, the personal tax base is often limited to public employees and employees of large firms, particularly multinational firms. In general, personal income taxes account for about a tenth of total tax revenue, and social security taxes are relatively insignificant except in Latin America. Taxes on the income of large companies—including taxes levied on the profits of large mining operations and agricultural estates—present fewer administrative difficulties. Developing countries, therefore, depend more on company income taxes than on personal income taxes. Company income taxes account for about a fifth of tax revenue.

Table 1. Variation in Level and Composition of Tax Revenue by Region, 1985

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<th>Middle East</th>
<th>Africa</th>
<th>Sub-Saharan and North Africa</th>
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<td>Goods and services (indirect)</td>
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<td>International trade</td>
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a. The most significant taxes in this category are manpower and payroll taxes. It also includes some schedular nonrecurrent taxes.
b. This residual category includes a series of miscellaneous taxes such as stamp duties, airport taxes, and vehicle taxes.

Developing countries also rely much more on taxes on goods and services, especially trade taxes, than do industrial countries. Taxes on goods and services account for one-half to two-thirds of total tax revenue in developing countries. As much as a quarter of tax revenue comes from trade taxes.

**Tax Policy Reform in Developing Countries**

Poorly designed or poorly functioning tax systems create a variety of problems in developing countries.

**Fiscal Imbalances and Insufficient Tax Revenue**

Tax revenue is needed to fund the public provision of goods and services. The primary function of the tax system is to generate revenue. The first goal of tax reform, therefore, is to ensure that this function is discharged effectively. Even though the level of taxation in developing countries is substantially lower than that in industrial countries, there is no a priori supposition that taxes must be increased in all developing countries. For some countries, however, fiscal deficits are too large and public expenditure needs are too pressing for a fiscal balance to be achieved by cuts in expenditures alone. In practice, the only serious alternatives to higher revenues are larger government borrowing, excessive monetary expansion, and the associated inflation. Inflationary financing of fiscal deficits acts like a tax, but one that exacts a heavy toll on social cohesion, on the efficiency of relative price signals, and on the functioning of the explicit tax structure. Generally, explicit taxation is to be preferred to implicit inflationary taxes.

In a sample of thirty-three developing countries, public sector deficits averaged 7 percent of GDP in 1986 (Chhibber and Khalilzadeh-Shirazi 1988). The two recent World Bank reports on adjustment lending (1988, 1990a) have highlighted the need to reduce public deficits either through decreases in public expenditure or increases in public revenue. In practice, it is often necessary to do both to promote growth-oriented adjustment.

The limited ability to tax in developing countries is well recognized. Tax analysts have tended to try to determine a country's potential ability to tax in the light of its characteristics and to identify tax handles to tap the unutilized potential. The ratio of tax revenue to GDP has been used regularly to measure and to judge the success of a country's fiscal management. The tax-GDP ratio in itself, however, is not an adequate measure of revenue performance (either potential or actual). Countries with low to
moderate tax-GDP ratios (in the range of 15 to 18 percent) may not be under revenue pressure, as was the case for the Republic of Korea and Thailand in the 1980s, whereas countries with moderate to high tax-GDP ratios (20 to 25 percent), such as Brazil, Zaire, and Zambia, may still need to mobilize additional revenue. Incremental changes in the level of taxation should reflect, among other things, the benefits derived from incremental changes in the public expenditure program and the relative costs of financing it by means of taxation or nontax revenue. Although meeting legitimate needs for revenue is a valid objective of tax reform, it is important that tax measures not be chosen without having made a broader assessment of the role of government in the country concerned. It may be more appropriate to reduce the size of government, as indeed is the explicit objective of an increasing number of developing countries, than to increase the level of taxation significantly above historical levels.

Therefore, when a country embarks on a program to increase revenue, whether in the context of stabilization or adjustment, a few key questions need to be addressed as part of a broader assessment of a country’s fiscal policy. First, can public expenditure (both capital and recurrent) be cut back further? In many countries, the public sector is extended beyond its ability to manage resources efficiently and to deliver the goods and services. Retrenchment and cutbacks in the public sector can bring about reductions in expenditure that shrink the deficit. Whether such reductions will be sufficient to preclude the need for revenue increases will depend on a number of other factors. For example, in many developing countries, there is a backlog of unmet public expenditure needs that are reflected in low social indicators and standard of living measures. There is also a need to maintain and expand physical and social infrastructure, much of which complements and supports private investment and can help it to grow. In such cases, the returns to public spending need to be compared with those to private spending at the margin. It is possible that restructuring public spending so that resources flow to areas in which the state has a comparative advantage might limit the extent to which aggregate public spending, including public investment, can be cut. Increasing or maintaining an appropriate level and composition of public investment without crowding out private investment may then require an increase in public savings.

Second, will public savings be increased through increases in public revenue? This depends on the ability and willingness of government to restrain the growth of current public expenditure. Expenditure must not increase as much as revenue in absolute terms. Restraining the growth of current public expenditure does not preclude a shift in its composition. Growth-oriented adjustment may require that safety nets be expanded to facili-
What Is Involved in Tax Reform? 19

tate the efficient reallocation of resources without undue social stress. In addition, recurrent expenditures to operate and maintain existing public assets may have a higher return than would creating new assets. However, overall public current expenditure must not increase faster, in absolute terms, than public revenue if public savings are to increase.

Third, do additional public savings add to or substitute for private savings? There is no reason to believe a priori that national savings will increase by an amount equivalent to the full increase in public savings. It is also unlikely that an increase in public savings will be fully offset by an equivalent drop in private savings. The manner in which public savings are increased—through making different kinds of expenditure cuts or through increasing revenue from different instruments—will affect the response of the private sector. The response of private savings in the special case in which public savings are increased while public expenditures are held constant has been subject to empirical testing in a number of studies. Estimates vary (see Kormendi 1983; Poterba and Summers 1987), but it can be inferred from these studies that the private sector is likely to reduce its savings by a significant fraction—on the order of a third—of the increase in public savings generated through additional taxes.

Fourth, can public revenue be increased without activating tax instruments? Taxes are not the only way for governments to mobilize revenue. Another policy that has similar, and potentially significant, effects on revenue is to reform the administered prices of publicly provided goods and services (see box 1). Transfers from public enterprises to the budget and other nontax revenue sources have hitherto not been very important—they often provide less than 10 percent of total public revenue. Where public prices do not cover the marginal costs of supplying the good or service, there is scope for revenue increases that do not compromise the efficiency of resource allocation (as can occur with general taxes). Reforming public prices can yield potentially significant revenue increases (Anderson 1989). The problems of reforming public pricing, while formally similar to those arising from taxation, vary from sector to sector and are not covered in this paper.

Fifth, will additional taxation create disincentives to private economic behavior that might further undermine efficient allocation of resources and growth or worsen the distributional features built into the tax system? Any increase in tax revenue will involve one or more of the following: increasing the rate of an existing tax instrument, expanding that instrument’s base, or introducing a new instrument. Each of these changes, if incorrectly conceived, can worsen the distortions or inequities built into the prevailing tax structure. Therefore, even tax measures motivated by the goal of
Box 1. User Charges: Revenue, Economic Efficiency, and Equity

User charges are a potentially important and neglected source of revenue. Unlike taxes, properly designed user charges can generate revenue without creating distortions in the economy. Efficiency requires that user charges be set equal to the marginal cost of providing an additional unit of service. This pricing rule induces an amount of consumption that is best for society as a whole. If this rule results in an inequitable distribution of services, a "lifeline charge" for poor consumers can be designed that will allow subsidized charges up to a threshold amount and charges at marginal cost thereafter. Although subsidized charges for the poor improve equity, they create some inefficiency. This loss in efficiency, however, could be less than that associated with increasing taxes elsewhere in the system to support subsidized charges for the nonpoor.

Developing countries often underutilize user charges in financing economic infrastructure services such as water and power. Charges for such services are generally set (for nearly all users and not just the poor) at a level that is lower than the marginal supply cost. The resulting excess demand increases consumption beyond the optimum level, and the price subsidy disproportionately serves the better-off. If user charges are appropriately designed, both efficiency and equity can be improved and more revenue can be obtained. For some publicly provided urban services such as higher education and curative care, user charges are virtually nonexistent. These services are primarily used by the rich. User charges based on marginal cost principle can be levied so that the burden of spending is borne by the beneficiaries. Greater reliance on user charges as appropriate can reduce the need to increase taxes when spending cannot be cut further.

Increasing revenue need to take into account the efficiency, equity, and administration of the resulting tax structure. Tax reforms motivated by the goals of reducing tax-induced inefficiencies and inequities will, of necessity, have to address these issues. They may have to address these issues, however, in the context of constraints on the extent to which aggregate tax revenues can be lowered and on the ability to administer the reformed system.

If this assessment of a country's fiscal policy implies that additional tax revenue needs to be generated and if the basic structure of the tax system is reasonable, short-term pressures to reduce the fiscal deficit can be met by higher rates on existing bases of general tax instruments. Where the prevailing tax structure is deficient, however, increasing rates
on existing bases, such as imports, will aggravate the distortions arising from taxation and complicate the pursuit of other goals, such as trade liberalization. Sometimes, in lieu of higher rates on narrow existing bases, additional revenue can be generated by redefining and expanding an existing base or identifying a new one. These changes in the base are often ad hoc and are characterized primarily by their immediate administrability rather than their longer-term desirability. Often, when the revenue pressure persists, ad hoc measures cumulate to result in a highly complex and internally inconsistent tax structure that is difficult to administer and costly in terms of efficiency, growth, and equity. Although it is not uncommon for these ad hoc revenue measures to generate additional revenue, this does not demonstrate the adequacy of a tax system's revenue-generating capacity. Regular recourse to discretionary measures should be avoided because such measures typically introduce much uncertainty into decisionmaking in the private sector and because, in the absence of a systemically designed reform, they tend to compound the distortions and inequities of the tax system. Of course, there will be some exceptional situations in which high fiscal deficits and rapid inflation warrant recourse to short-term revenue-raising measures that may not be wholly consistent with a desired long-term tax structure. In general, however, tax systems should be designed to generate adequate revenue to keep pace with the growth in necessary public expenditure without having to resort to frequent discretionary measures.

If a sustained increase in tax revenue is warranted, a tax study should be undertaken to determine the best and most feasible course of action, because conventional analysis of tax policy involves weighing revenue requirements against concerns of efficiency, equity, and ease of administration. A tax study that identifies directions for reforming the tax system in the long term will also make it easier to avoid ad hoc revenue-raising measures in the short term that might be inconsistent with the structural reform of the tax system. Nonetheless, where there is a long-term orientation to improve a tax system's revenue-generating capacity, more time is usually required to implement reforms because administrative capacity must also be strengthened.

Distortions in Resource Allocation That Can Reduce Economic Welfare and Growth

Taxes create distortions in the economy that reduce the real income of taxpayers by more than the amount of revenue that is transferred to the government. This occurs when taxpayers either modify their behavior in an attempt to reduce their tax burdens or spend resources in evading
taxes. When firms and households are influenced by the goal of reducing their tax payments, they make decisions based more on their tax implications than on their inherent economic virtues. Thus tax avoidance induces firms and households to make decisions about production and consumption that are not socially efficient. The difference between the resources that the government gains and the sacrifice that is made by taxpayers represents the so-called excess burden or efficiency cost of taxation. It is estimated that the efficiency cost of a 1 percent increase in all existing tax rates in the early 1980s in the United States would have been between 17 and 56 cents for each dollar of extra revenue raised (Ballard, Shoven, and Whalley 1985). Although reliable estimates for developing countries are rare, the economic cost of mobilizing extra tax revenue is likely to be significantly higher than in industrial countries because developing countries have narrower tax bases and weaker tax administrations. A second goal of tax reform, therefore, must be to reduce the efficiency cost of taxation for a given level of revenue.

The effects of taxes on economic incentives have traditionally been examined only for programs that have been explicitly designed to intervene in market allocations to promote certain types of saving or investment, to encourage certain types of production or trade, or to discourage certain types of consumption. Both general and selective revenue-generating taxes, however, can interfere with the efficient allocation of resources. It is not appropriate, therefore, to treat the distortionary effect of revenue-oriented tax measures on economic behavior as a secondary issue. Attempts must be made to raise revenue not only at minimum administrative cost but also at minimum economic cost. For economic costs to be reduced, the tax system should interfere as little as possible in decisions made by firms (about production, trade, and investment) and by households (about consumption and saving). In both cases, the intention is to minimize distortions in the allocation of resources in the current period (to promote static efficiency) as well as over a sequence of periods (to promote dynamic efficiency). Moving toward a less distortionary tax structure has therefore become an important theme in many recent tax reforms.

Examples of distortionary taxes include excise and turnover taxes that often lead to inefficiencies in production. Some of these taxes cascade and increase production costs. This creates an incentive for the vertical integration of production that may not be organizationally efficient. Trade tariffs and export subsidies, which drive a wedge between domestic prices and border prices, can lead to the creation or preservation of inappropriate industries. As noted in World Development Report 1987 (World Bank 1987), studies of the cost of protection have resulted in
different estimates, depending on the kind of cost being examined. Studies that consider only the standard efficiency costs that come from getting the prices wrong may come up with estimates on the order of 1 to 2 percent of GDP per year. But the costs of restricting imports also include encouraging domestic oligopolies and inefficient small-scale production for the local market. Consideration of these costs of industrial misorganization could raise the cost estimate considerably to perhaps 5 to 7 percent of GDP. Costs would be even higher if the dynamic effects of tariffs (through investment and growth) were considered.

Where market failures are an important concern, tax policy can be actively used to simulate markets and guide private behavior. This can be done by taxing inappropriate activities or subsidizing appropriate activities. In practice, tax concessions are used more frequently. For example, promotional provisions in the company income tax, such as tax holidays, investment tax credits, and accelerated depreciation allowances, are introduced on the grounds that credit markets as well as other infrastructure and institutional features in developing countries are inadequately developed and that the amount of private investment needed to sustain a reasonable economic growth rate is not forthcoming. Public finance professionals are skeptical of the practical utility of such methods. Tax concessions intended to make resource allocation more efficient need to be analyzed carefully before being introduced, and they need to be evaluated regularly to ensure that they are justified in the face of such changed circumstances as the increased efficiency of competitive markets. Where many existing promotional programs have been set up in response to pressure from powerful interest groups or have outlived the rationale for their original introduction, tax systems can create unintended biases in investment by sector and by project. They can also discriminate among investments in different assets—equipment as opposed to structures—or among different sources of finance—debt, equity, and retained earnings. Often these biases are not desirable.

Although inefficiencies in production and investment are well known, tax systems also generate inefficiencies in consumption decisions by altering not only the relative price of current goods and services but also the benefits of saving. For example, taxes on all types of income can lead to biases against saving because current consumption is favored at the expense of future consumption. Tax deductibility of interest on consumer debt reduces the cost of borrowing for consumption. These deductions create further incentives to consume rather than save. However, taxes on interest and dividend earnings in developing countries may have a greater effect on the composition of savings than on their level (see box 2).
Inadequate Provisions for Equity

In practice, tax systems in developing countries are not progressive, and the poor often bear significant tax burdens. For example, goods that are nominally tax free on grounds of poverty can unintentionally be subject to tax when the inputs used in their production are taxed (Ahmad and Stern 1987). In other cases, the threshold income level in the personal income tax may not be set high enough to ensure that the poorest groups are not subject to tax. In Jamaica, before its recent tax reform, taxpayers with income as low as twice per capita GDP were subject to the maximum marginal tax rate of 57.5 percent. Furthermore, in developing countries, even those who should pay tax are not taxed equitably. For example, statutory income tax rates are often quite progressive, but in practice the design of the base and the extent of coverage that is enforced exclude a

Box 2. Income or Consumption as a Tax Base?

The ongoing debate over whether to use income or consumption as a tax base illustrates one tradeoff that is often addressed in reforming a tax system. In the 1960s, the income base was preferred on the grounds that personal income taxes can more easily be tailored to taxpayers' individual circumstances and thus can, in principle, be levied in a more progressive fashion. The use of income as a tax base, however, tends to favor current consumption at the expense of future consumption or saving.

If the priority of the tax reform is to avoid disincentives to saving and if the income tax is already comprehensive in its coverage of income sources, then the base of income can be redefined to exclude capital income (such as interest, dividends, capital gains, and other returns on assets) from the base. This was the strategy adopted in the 1973 Korean tax reform. Countering the bias against saving by excluding capital income from the tax base, however, can impair the equity of the tax system because income from different sources is treated differently. Excluding capital income can also complicate the administration of the personal income tax if wage income can be classified as capital income, as in the case of the self-employed.

This tradeoff between equity and efficiency could be resolved in principle even for a consumption-based tax if the personal income tax could be replaced by a personal expenditure tax, which does not discourage saving but has the potential to be tailored to individual circumstances. No country, however, has yet successfully implemented a personal expenditure tax because it is difficult to administer. (A variant known as the Kaldor tax was introduced in India and Sri Lanka in the mid-1950s but was discon-
large part of nonwage income, such as capital income, income from self-employment, and income in-kind. A study of income tax evasion (Herschel 1978) found that, in Argentina, 80 percent of gross income was not reported and only 30 percent of 1.6 million people eligible to pay taxes on nonwage income did so. Another study, on Bolivia (Musgrave 1981), estimated that 75 percent of the revenue due from labor income was collected primarily because of withholding taxes on wages, whereas the equivalent figure for capital income was 20 percent. As a result of these problems, tax systems are precluded from achieving any meaningful degree of vertical equity—distributing the tax burden among the nonpoor according to their ability to pay—or horizontal equity—treat-

continued after a couple of years because of administrative difficulties and low revenue yield.) To be consistent with a consumption tax base, the company income tax would also have to be reformed. This involves shifting the base of the company tax from accrued income to cash flow. Taxes based on cash flow allow 100 percent of investment to be deducted immediately but do not allow the deduction of interest on investment debt. Such taxes are being experimented with in Mexico, and less desirable versions (which do not discontinue interest deductions on investment debt) are already used as an optional alternative to the regular company tax in Bangladesh and Zimbabwe. There is not enough experience to support generalizations, but the method warrants further research.

In practice, taxes on the consumption base tend to be taxes on transactions (such as sales tax and the VAT); such taxes cannot be easily tailored to individual circumstances, so that equity is harder to achieve.

Although the literature on the determinants of aggregate savings behavior is not conclusive, there is more evidence that taxation affects the choice of instruments for saving (by altering the rates of return for instruments) rather than the level of saving in developing countries. Savings data in developing countries are inadequate, and very little evidence is available on the interest elasticity of saving. Using indirect evidence, such as the available estimates of the consumption function in developing countries, Ebrill (1987) found that although aggregate saving is not very interest-sensitive, the allocation of that aggregate between financial and nonfinancial assets as well as among different kinds of financial assets is responsive to variations in return. Considering these findings and the difficulties of influencing equity with taxes on transactions, it is prudent to avoid tax-induced biases between savings instruments but not to be too concerned about excluding capital income from taxation. Tax reforms in the 1980s, such as in Indonesia and Jamaica, have therefore favored including capital income in the personal income tax base.
ing taxpayers with the same amount of income equally, irrespective of the source of income.

Tax structures can be designed to avoid taxing the poor; they cannot, however, directly increase the incomes of the poor. Only rapid economic growth and the appropriate use of public expenditure policies, including income transfers and targeted poverty alleviation measures, can raise incomes. If new revenue-raising measures are ad hoc and are not carefully designed, existing inequities in the tax structure can be compounded. Tax reform in the context of adjustment, by contrast, can improve conditions in three ways. First, if it generates more revenue, tax reform can reduce the amount by which expenditure must be cut or inflation increased; both cuts in spending and increases in inflation often affect the poor disproportionately. Second, if exclusions are appropriately targeted, the tax burden on the poor can be minimized. Third, if tax bases are properly redesigned, both horizontal and vertical equity can be improved. Thus a third goal of tax reform is to lift the tax burden off the poorest households and to ensure that actual tax structures become more equitable both horizontally and vertically.

Poor Administration of Taxes

In practice, the application of conventional fiscal analysis to developing countries is heavily constrained by the inadequacy of the data and information base, by administrative weaknesses, and by insufficient political will. The resulting opportunities for tax evasion and corruption shape and constrain virtually all proposals to reform taxes.

Since taxes are an involuntary payment for government services, taxpayers have a strong incentive to minimize their tax liabilities either through avoidance (legal) or through evasion (illegal). Tax administration has to secure compliance with the tax laws by applying an array of registration, assessment, and collection procedures. The ability of taxpayers to thwart these procedures, and thus successfully avoid or evade taxation, determines the size and nature of the economy's actual effective tax base. Both evasion and avoidance seriously compromise the administration of the tax system, producing a system that departs significantly in its operation from the one that is described in the tax legislation. An important contributing factor to weak tax administration is the excessive complexity of tax laws and procedures to accommodate exclusions, preferences, and special interests. Complex tax codes make it both more difficult for taxpayers to comply with the law if they wish to comply and easier for them to evade it if they wish to evade. Given the limited enforcement capabilities of most developing countries, com-
plex laws and procedures make it difficult to assess and collect taxes as well as to follow up on compliance through audits. Difficulties in enforcing tax codes in turn breed corruption. Poorly designed and implemented administrative procedures and methods, inadequate management procedures (which lead to poor use of staff resources), inadequate facilities, and a lack of political support can also undermine the fair enforcement of the tax code, thereby facilitating rent seeking (lobbying, corruption, and so forth) and other directly unproductive activities.

Tax administration and tax structure are interdependent and need to be dealt with simultaneously in tax reform. Poor tax administration undermines the effectiveness of the desired tax structure and raises distortions. A poorly designed tax structure makes administration more difficult. Simplifying tax determination and strengthening tax administration to enforce the intent of a reformed tax code is a fourth objective of tax reforms.

Tradeoffs and Interactions in Redesigning Tax Systems

Not all of the objectives of tax reform can be satisfied simultaneously. Tradeoffs are unavoidable. Initial conditions also matter because no tax reform is implemented in a vacuum. Setting priorities requires an understanding of what instruments have been used in the past and what problems have been encountered. It is possible to address multiple objectives by altering specific features of each tax instrument. For example, if trade taxes were the only instrument that could be reformed, the need for revenue could be satisfied with the proper basic rate, the requirements of equity could be met with exclusions for the poor and higher rates on luxury imports, and the goal of industrial growth could be fulfilled with a set of protective rates. Such a strategy is in fact reflected in the current structure of import tariffs in many developing countries. However, trade taxes are not the only instruments that are actually used. An alternative and potentially more useful method is to use a different instrument for each objective, for example, a general consumption tax for revenue, appropriate exclusions for the poor and selected luxury taxes for the rich for equity, and a tariff structure with very few rates for protection. Even though it is not possible to match objectives with instruments perfectly, the use of a variety of instruments can foster a simpler tax structure while still addressing the principal objectives.

Even when specific instruments are matched with specific objectives, attainment of the objectives of tax reform must be evaluated in the light of the interaction between instruments. It is often insufficient to propose changes in individual instruments. For example, if, in the pursuit of
more uniform tariffs, low rates on capital goods were to be increased, those promotional investment incentives in the tax code which are thought to be justified would also have to be increased to offset the disincentive created by the first measure. Similarly, if the tax rate on capital imports were to be increased in the pursuit of greater revenue, the net effect on the treasury would have to be evaluated in the light of the reduction in revenue from the company income tax instrument, because the increased cost of imported capital goods would result in higher income tax deductions.

In addition, the objectives of tax reform must be evaluated in the light of the interaction between bases and rates within instruments. In many debates on tax reform, the emphasis falls on the choice and structure of tax rates. This fixation with tax rate structures can be misguided. For each instrument, the design of the tax base is equally, if not more, important. For example, the steep nominal progressivity of personal income tax rate schedules in developing countries is often negated by narrowing the tax base to exclude different categories of capital income and income from preferred activities, such as agriculture.

In practice, the name of a tax is often a poor guide to its overall characteristics, even though the name highlights a salient feature. Each type of tax has many variants that can be selected, depending on which policy needs emerge as critical and which constraints are unavoidable. Thus tax reform requires that the range of available instruments and their principal characteristics be reviewed carefully.

The method used by fiscal professionals to separate the efficiency issues of the tax structure from the level of taxation is to evaluate revenue-neutral tax alternatives. In theory, revenue neutrality is assessed using the net present value of future revenue streams. Given the difficulties of long-term forecasting, however, revenue-neutral tax reforms in practice have concentrated on ensuring that the revenue yield of the tax system does not fall during the transition (one to five years) from an existing system to a new one.
Strategic issues that apply to the reform of most tax instruments include how to broaden the tax base, how to rationalize tax rates, how to coordinate reform across different taxes, and how to improve the administration of taxes. Many tax reforms in developing countries in the 1980s attempted to address these issues. Other relevant issues, such as the reform of specific characteristics of the different tax instruments, are discussed in *World Development Report 1988* (World Bank 1988, pp. 79–104; see also Shalizi 1989). These discussions are not repeated here, but a useful reference set of instruments is summarized at the end of this section.

### Broadening the Base of the Tax System

The base of the tax system can be broadened in two ways. One is to identify new bases to tax, and the other is to expand the bases of existing tax instruments. The following discussion mainly concerns expanding the base of existing instruments. Some potential new bases include environmental damage, which can be taxed through environmental taxes, and activities in the informal sector, which can be taxed through the use of presumptive indicators. Generally, expanding the tax system to incorporate new bases is administratively difficult. Even in the case of existing instruments, the actual boundary of a tax instrument’s base usually differs from the boundary of the underlying economic base because of administrative problems. Defining the administrable base often requires excluding from taxation the income or output of hard-to-tax groups and activities (such as those in the informal and agricultural sectors) because of the high cost of collection. Broadening the base, therefore, requires that administrative reforms be undertaken to sim-
plify the determination of the tax base and tax liability and to strengthen the ability to collect. There are also political dimensions to base broadening. For example, greater coverage of income requires that the political will exist to ensure that the wealthy and powerful are brought into the tax net.

Defining the base of a tax is critical. The narrower the base, the higher the rate that is required to generate a given amount of revenue. The higher the tax rate, the greater the benefits of avoiding or evading the tax. Tax evasion erodes the tax base and hence the amount of public revenue that is generated. In addition, the resources used in evading taxes are not socially productive. By contrast, if the tax cannot be evaded, then the tax-induced change in relative prices can generate incentives to reallocate resources away from the taxed subset of activities to the untaxed subset (or from the more heavily taxed subset to the more lightly taxed subset). This is so because no matter how broadly a base is defined, there will always be some incomes and transactions that are not taxed. The reallocation of resources results in a socially inefficient use of resources where markets function reasonably. It follows that to generate revenue by reducing undesirable tax-induced reallocation of resources, it is better to have a lower rate on a broader base.

**Taxes on Goods and Services**

Taxes on goods and services are much more important in developing countries than in industrial countries (table 1), and every attempt should be made to ensure that these taxes are appropriately designed. In most developing countries, import taxes and excises on domestic production are jointly more important than the general broadly based tax. In a study on the Philippines, Clarette and Whalley (1987) found that the marginal cost of an additional peso raised through import tariffs was higher than that of an additional peso raised through domestic taxes on comparable goods set at the same rate. They also found that the costs of trade taxes rose much more rapidly than those of domestic taxes as the rates were increased. The welfare cost of tariff rates in the neighborhood of 30 percent was close to six pesos per peso of additional revenue raised. This cost was at least an order of magnitude greater than the distortion created by domestic taxes on the same goods. Analyzing the distortionary cost of taxation, Ahmad and Stern (1987) in a study on India (based on data for 1979–80) found that, purely on grounds of efficiency, the welfare loss per marginal rupee of additional revenue was higher for import duties than for excise duties and that the excise duties, in turn, caused more welfare loss than an extra rupee generated through sales
taxes, because sales taxes excluded inputs used in production. Reforming taxes on goods and services in developing countries involves shifting the base from a narrow one of international trade plus limited domestic production to a broader one of domestic consumption. This shift implies that the broadest possible range of domestically consumed goods will be taxed, whether they are imported or domestically produced, and that taxation should be as close to the retail stage as administrative constraints permit.

GENERAL TAXES. For taxes on goods and services, broadening the base involves subjecting to taxation more goods and services that are final rather than intermediate. In recent years the VAT has come into favor as an instrument for broadening the goods and services tax base in developing countries (see box 3). As a desirable broadly based tax instrument, the VAT—particularly simplified versions of it—is suggested for most countries that do not already have one. Where a VAT already exists but extends only to the manufacturing stage or covers only a subset of sectors, it is generally recommended that it be extended to the retail stage and that it cover additional sectors.

The basic argument in favor of the VAT is that, in light of its built-in self-enforcing mechanisms, it is a reliable generator of revenue and incurs relatively small efficiency losses. However, since lower-income taxpayers tend to consume a higher proportion of their income than do middle- and upper-income taxpayers, the VAT can be regressive. In an attempt partially to correct this, the VAT is generally implemented with selected exemptions for commodity groups, such as unprocessed food, that are important items in the expenditures of the poor, and it is often supplemented by a set of luxury taxes on income-elastic consumption goods. The evidence on how well these measures succeed in their objective is mixed. According to one study, even though the VAT has become the single most important source of revenue in Korea, the special excise taxes that supplemented it failed to correct its regressive nature. Yet in Indonesia and Malawi preliminary analysis suggests that the exemptions and supplementary excises are resulting in a more progressive indirect tax structure than that which prevailed before the reform. To address the regressiveness of the VAT properly, it is important that exclusions be judiciously chosen and that the supplementary luxury tax rates be carefully designed.

To broaden the base of an existing VAT, it is often necessary to reconsider exclusions. Excluding distributors (wholesalers and retailers) from coverage, as was done initially in Indonesia and in Senegal because of administrative constraints, can result in inadequate revenue collections,
Box 3. Broadening the Base of Taxes on Goods and Services: The Case of Indonesia’s Value Added Tax

The government of Indonesia enacted a major tax reform in 1983. The ambitious targets for increasing revenue set by the country’s development plan have been achieved, primarily through the effects of the VAT package that was implemented in April 1985. This package replaced the old distortionary system of indirect taxation. The VAT was imposed at the manufacturer-importer level at a relatively low single rate of 10 percent. It eliminated the differential tax treatment of domestically produced and imported goods, and it circumvented the cascading effects of the sales tax system by introducing crediting arrangements that ensured that most business inputs were not taxed. Exports were excluded from taxation through zero rating. As a result, domestic taxes interfered less with trade or production than they did before. To correct for the regressive nature of the VAT, additional taxes at rates of 10 and 20 percent on certain luxury goods were levied separately from the VAT.

In contrast to the old indirect tax system, the base of the VAT was expanded to include previously uncovered petroleum, tobacco, and alcoholic products. Subsequently, in 1989, the number of items subject to the complementary luxury tax rates was also increased. In addition, the coverage of the VAT has expanded significantly. The number of registered taxpayers for the VAT increased from nearly 25,000 in April 1985 to more than 65,000 in June 1986 and to nearly 84,500 in October 1988. In 1989, the tax base was extended further to cover wholesale and service activities. This expansion is proving more difficult because the number of wholesalers and service establishments to be covered could be as high as 100,000 and 500,000, respectively. In practice, exempting small operations is necessary for administrative reasons. The revenue-generating feature of the Indonesian VAT is exemplified by the VAT-GDP ratio. In 1984–85, the year before the VAT was implemented, the taxes it replaced collected revenue equivalent to 1.0 percent of GDP. After the VAT (plus supplementary excises) was introduced, this ratio increased to 2.4 percent in 1985–86 and to nearly 3.5 percent in 1988–89.

VATs extending to the retail level have been successfully introduced in middle-income countries in Latin America in the 1960s (Brazil and Colombia), in East Asia in the 1970s (Korea), and in the Middle East in the 1980s (Turkey). Less ambitious variants that do not extend to the retail stage have also been successfully introduced in low-income countries, such as Côte d’Ivoire (1980) and Malawi (1987), and are about to be implemented in Bangladesh and Jamaica.
particularly if producers can bypass the tax by selling to related distributors. As a result, Senegal extended its VAT to the retail stage in 1987, and Indonesia extended its VAT to the wholesale stage in 1989. In general, extension to the wholesale stage has not worked well. Best practice suggests that it might be better to exclude firms from coverage on the basis of their size (as in Malawi) rather than on the basis of their place in the production and distribution chain. Few VAT systems cover small producers, who, as a result, pay taxes on their purchased supplies but receive no credit since they are not required to pay output taxes. This provision limits the government’s loss of revenue to the value added component of the small producer but results in some economic inefficiency to the extent that productive inputs are taxed. In Indonesia and Malawi, small firms have been given the option of registering for the VAT, thus being treated as taxable firms at their discretion, whereas Turkey introduced a presumptive VAT for this group of producers (see box 7).

Another important set of exemptions from the existing VAT system is public institutions. Two kinds of measures are usually suggested to address this problem, but neither is more than a partial solution. One is to convert the basis of exemption from institutions to products, as was recently recommended in Ghana and Tanzania. Where institutions remain exempt for political or contractual reasons, the exemptions can be made time-bound (rather than open-ended) or limited to specified products. For instance, charitable organizations should not be able to get exemptions for a large number of vehicles. Another partial solution is to require state-owned enterprises and government agencies to pay the same taxes as private firms. This change does not increase net revenue, but it forces public enterprises to face the same prices as private competitors and limits the scope for abuses in government procurement.

Select the strategic TPX taxes. The general rule that the tax structure should interfere as little as possible with economic behavior is a good one. Selective taxes on goods and services, however, can sometimes be used to advance the goals of efficiency and equity. Selective taxes are generally of the excise variety and are limited to a few goods that are considered discretionary (such as vehicles, jewelry, and television sets) or socially undesirable (tobacco and alcohol). These taxes can play a helpful role when outcomes produced by market forces need to be corrected, for example, to discourage activities that cause damage to others. This strategy can improve efficiency, as in the case of environmental taxes levied according to damage caused (see box 4). Sector-specific selective taxes can also be
Box 4. The Case for Environmental Taxes

Many activities and products cause damage to the environment. Some of these, such as the discharge of effluents, are rarely taxed, whereas others, such as fuels, are taxed insufficiently. Corrective taxes on activities or substances with negative externalities (effluents, pollution, noise, congestion, and so on) can expand the tax base and at the same time encourage efforts to restrict such activities. If the tax succeeds in inducing more benign practices among producers and consumers, it will not generate much revenue but will be efficient in protecting the environment. If, however, producers and consumers continue to follow environmentally damaging practices, the tax will generate revenue that can be used either to lower other distortionary taxes or to fund cleanup programs.

The efficiency of environmental taxes depends partly on the cost of monitoring emissions and of enforcing regulations to limit them. Inputs, such as fuels and equipment, can be used to approximate the rate of harmful emissions and can thus serve as a suitable base for corrective, easily implemented, revenue-generating taxes. In many oil-importing countries, fuel is already taxed as a proxy for user charges for road damage. Additional charges may be justified when other damages, such as pollution and congestion, are taken into account. In oil-importing developing countries a hypothetical average domestic price increase of 20 percent could increase government revenue by as much as four percentage points if 20 percent of their import bill is for fuels (assuming that price elasticity is 1 and that revenue is one-fifth of GDP). Whether such an increase is appropriate needs to be determined with reference to a country’s options and objectives. Although it is argued that low fuel prices can stimulate market integration and industrial development, there is no known negative relationship between domestic fuel prices and growth. There is, however, documented evidence of a strong positive relationship between energy prices and energy efficiency. It is questionable, therefore, whether keeping fuel prices low is an efficient way of stimulating growth, particularly when negative externalities and the costs of raising public revenue by other means are taken into account. Developing criteria for setting environmental taxes in developing countries requires additional research (see “The Research Agenda,” section 4).

used to capture rent (as in mining and petroleum) without creating economic inefficiencies. Another reason to use selective taxes is to change tax burdens to reflect ability to pay. To improve the distributive effect of a general tax on goods and services with fairly flat and uniform rates,
Excises or luxury taxes can be levied on items consumed predominantly by the rich (see also "Rationalizing the Rate Structures of Taxes," below).

In practice, the choice of bases and rates for selective taxes is frequently capricious, dominated by considerations of the ease of collection, and is often not integrated with the design of broadly based taxes. Many excise taxes apply only to domestic goods, with the matching import subject to tariffs at a higher rate. This provides protection and rent to domestic producers. Differentiating commodity tax rates by source of supply—in other words, distinguishing between imports and domestic products—affects the efficiency of the production structure. Many excises are also levied per unit of output because such rates are easier to administer (they avoid disputes over valuation, particularly for goods and services whose prices fluctuate often). However, rates per unit of output have to be adjusted frequently in inflationary circumstances in order to maintain their ability to generate revenue. In general, broadening the base of excises to include imported goods and shifting the base from quantities to values is desirable.

**Taxes on Income and Wealth**

For income taxes, broadening the base involves (a) subjecting more types of income and in-kind fringe benefits to taxation and (b) reducing, if not eliminating, many special-purpose allowances, deductions, exemptions, and tax expenditure provisions.

**Company Income Taxes.** Company income taxes are designed to collect revenue from a firm's economic income. In practice, the tax base equals the net accounting profits—gross revenue less operating costs and capital adjustments. To approximate economic income, tax codes usually include provisions to allow the recouping of invested capital through depreciation coupled with arrangements for carrying losses forward, for deducting interest incurred on investment debt, and for correcting for inflation. Incorrectly designed provisions can result in nominal tax bases that deviate significantly from economic tax bases, giving rise to unintended economic incentives, for example, favoring highly leveraged financing of investments. Reforming company income taxation frequently involves introducing measures to do a better job of accounting for the cost of earning income, as through better-designed depreciation schedules and indexing provisions.Broadening the base involves expanding coverage to include more firms and reducing the role of tax preferences.
Unlike the poorly designed provisions to approximate economic income just noted, tax preferences in the form of promotional incentives in industry and trade result in intended biases. The most commonly used fiscal incentives, such as profit-linked exemptions and tax holidays and investment-linked deductions, can reduce the tax base substantially. The tax reforms of the 1960s and 1970s favored tax preferences ostensibly to offset market failures. These tax preferences need to be carefully re-examined. Do the preferences correct market failures? Are there better, nonfiscal ways of addressing the problems? Or do the preferences represent policy-created distortions that reduce revenue and have dubious effects on efficiency, growth, and equity?

Although tax concessions and subsidies continue to play a role in the case of market failure (see "Taxes on Goods and Services," above), in recent years fiscal experts have become more skeptical about using fiscal incentives in the form of tax expenditures to promote activities for the following reasons:

- Tax concessions erode the revenue base. The more tax concessions are granted, the higher the rates have to be on the remaining tax bases to raise the requisite revenue. Higher rates or additional bases generate distortions in other parts of the economy. Where rates cannot be raised to sufficient levels, shortfalls in revenue exacerbate existing fiscal imbalances and thus contribute to macroeconomic problems.

- Many incentive schemes are a response to pressure groups rather than to needs that can be analytically justified. The resulting biases in favor of some sectors and projects can lead to inefficiency by altering the relative profitability of projects in the eyes of investors. Thus the economic case for promoting overall investment is weakened by a loss of efficiency in the selection of investments.

- Some incentive measures are ineffective, either because they are insufficient to override underlying economic forces, as with the incentives for decentralizing the locations of industries, or because they are offset by other domestic or foreign tax provisions. In other cases, it is difficult to determine the extent to which fiscal incentives succeed in promoting certain activities (in other words, to assess what would have happened in their absence) because fiscal incentives are often accompanied by regulations.

- If tax incentives become a source of inequity, they make the tax burden uneven across taxpayers.

- Incentive schemes facilitate rent-seeking and arbitrage activities (legal ways of manipulating income so that it accrues to a low-tax entity), thereby making it difficult to administer taxes. For example,
it becomes more difficult to detect evasion when taxable firms transfer profits to firms under tax holidays.

As views on using tax concessions to correct for market failure have changed, designers of tax reform have emphasized the revenue-raising potential of taxes and have increasingly questioned the use of taxes to promote certain activities. This new attitude favors (a) limiting the use of fiscal incentives that can lead to distortions in resource allocation across sectors and (b) generating revenue by widening the tax base rather than by raising rates (see box 5).

**PERSONAL INCOME TAXES.** In developing countries, personal income taxes tend to have high rates on narrow bases and to generate little revenue. The low yield reflects limited coverage and poor design. Vari-

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**Box 5. Broadening the Base of the Company Income Tax by Limiting Promotional Incentives: The Case of Mexico**

Mexico is one of many countries that in recent years have responded to falling revenue and a shrinking company income tax base by limiting the use of fiscal incentives. In the early 1980s, a fiscal incentive scheme was implemented by the Mexican government to promote investment. This program had several objectives: to increase employment, to promote high-priority sectors of the economy (especially the domestic production of capital equipment), to develop small industries, and to promote balanced regional growth. The incentive was given in the form of a tax credit based on a special certificate (CEPROFIS) that was used to pay the beneficiary's tax liabilities. During the three-year period 1979–82, when the CEPROFIS scheme was the most important promotional incentive, the revenue allocated to tax incentives grew from 0.60 percent of GDP to 0.83 percent. The CEPROFIS scheme was largely ineffective because the multiplicity of objectives weakened the signals that the government intended to send through tax incentives. In the light of the revenue cost and the ineffectiveness of the tax incentives, the scheme was among the measures pruned to reduce the public sector deficit. As a result, the ratio of tax incentives to GDP declined to 0.2 percent in 1983.

Indonesia also successfully abolished income tax-based incentives, including investment allowances, tax holidays, and accelerated depreciation, as part of its 1984 income tax reform. Elimination of investment credits and retrenchment in differential treatment of investments have also been part of tax reforms in Colombia and Jamaica. Similar reforms are being proposed in Argentina and Brazil.
ous forms of capital income (interest, dividends, capital gains), income from self-employment, and in-kind income are often de facto outside the tax net. Broadening the base generally involves eliminating or reducing

**Box 6. Broadening the Base of Personal Income Taxes: The Case of Jamaica**

In 1985, before the Jamaican tax system was reformed, the personal income tax had a very narrow base. Even though there was no standard deduction, the tax base was restricted by a system of sixteen separate tax credits for personal allowances, savings, home ownership, and perquisites to employees. Because of the narrowness of the base, the average and marginal rates had to be very high to generate adequate revenue. As a result of inflation-induced bracket creep and the lack of an adequate exclusion threshold, even low-income earners, such as schoolteachers, were subject to the highest marginal rates. The top marginal personal income tax rate of 57.5 percent was reached at the relatively low income level of less than three times per capita GDP. Although in theory the base included all sources of income except bank deposit interest, in reality capital gains and most self-employment income fell outside the tax net. The system of nontaxable perquisites had also become a large loophole. Together, these features contributed to horizontal inequities. In addition, evasion and avoidance had all but negated the progressivity of the statutory rate structure.

The 1986 tax reform removed many taxpayers from the tax net by setting a high threshold rate, yet the tax base was also broadened by including capital income and by closing loopholes. A standard deduction was set equal to two times per capita GDP, the system of tax credits was repealed, and, with few exceptions, all nontaxable allowances and interest income were included in the tax base. The broader base has made it possible to lower the rate to a flat 33.5 percent. Even though the reform began as a revenue-neutral exercise, revenue from income and profits as a percentage of GDP has increased from 9.3 in 1985–86 to 10.7 in 1986–87 and to nearly 11.5 in 1988–89. The simpler income tax system has improved enforcement, and there is evidence of more effective audits and examinations. Vigorously pursued audits have led to a tripling of additional taxes and penalties from 1986 to the present. This base-broadening strategy has also distributed the tax burden more widely and evenly across the society while insulating the poor.

Similar (but multirate) reforms have been introduced in Brazil (1989), Indonesia (1983), and Malawi (1988) and have been proposed in Bangladesh.
these exemptions, plus related deductions, allowances, and loopholes (see box 6). Eliminating exemptions can also simplify administration by making it harder for taxpayers to evade their payments. Managers can then more effectively deploy administrative personnel to increase overall tax collection.

Even when income from different sources is included in the tax net, it is often taxed through separate schedules (for example, for interest, dividends, and capital gains) and at different rates, which adversely affects revenue and equity. Eliminating differentials across sources of income involves moving from schedular to global income taxes.

The coverage of income taxes is also limited by the presence of hard-to-tax informal and small-scale formal activities, which account for a much larger portion of economic activity in developing countries than in industrial countries. A large range of incomes and transactions cannot be taxed through regular instruments, and it is easier for certain groups, such as self-employed professionals and those employed in agriculture and trade, to evade taxes. To broaden the tax base at reasonable administrative costs, presumptive indicators of income can be introduced to assess tax liabilities (see box 7). Although all taxes in practice are based on presumptive rather than exact definitions of the economic base, some indicators are cruder than others. By replacing lengthy and costly audits, particularly in countries where accounting illiteracy is widespread, presumptive taxation can, to some extent, check tax evasion at a relatively modest cost. A supplementary presumptive tax system can also serve as a nursery for eventually promoting small taxpayers into the regular income tax system and into self-assessment. In Colombia, a presumptive tax on personal income was in effect throughout the 1970s and 1980s and was considered to be a success.

Although they are most commonly applied in the context of income tax, presumptive indicators can also be used for taxes on goods and services. However, a presumptive tax on goods and services can be very similar to a presumptive tax on income when the tax due is not directly linked to the declared volume of sales but is calculated by ranking taxpayers into potential turnover categories. Presumptive indicators are used to implement the VAT on small producers in Korea, Morocco, Tunisia, and Turkey.

A considerable administrative effort is still required to implement any presumptive tax to ensure that it is based on realistic criteria and is applied fairly. Without appropriate safeguards, presumptive taxation can be as much a problem as a solution in the quest to mobilize resources. It can lead to harassment and extortion by unscrupulous tax officers, resulting in legal and judicial problems. To prevent excesses, the discre-
Box 7. Broadening the Base of Taxation through the Use of Presumptive Indicators: The Case of Turkey

In the early 1980s, Turkey's tax authorities noted that 85 percent of taxpayers who filed an income declaration claimed to be in the lowest tax bracket and that audits of cases of suspected evasion found that approximately 50 percent of income went undeclared. To check this widespread evasion without resorting to costly audit methods, the government introduced a new presumptive tax methodology in 1983. Indicators of standard of living are now used to assess taxpayers filing regular tax declarations. Ownership of certain assets, foreign travel, and employment of personal servants cause specific amounts to be added to the tax. Average profit margins and average gross revenue are used to assess trade income, and minimum agricultural income is used in taxing farmers. To prevent corrupt practices involving the designation of income classes for small traders, low presumptive income levels have been established, and the task of assigning classes to individual taxpayers has been given to regional commissions. To safeguard the interests of traders, these presumptive tax commissions include taxpayers' representatives, and if taxpayers are still not satisfied with their classifications, they can resort to court action. This system has been successful in broadening the base and curbing tax evasion.

Presumptive taxation has also been used in indirect taxes. For example, the VAT system that was implemented in Turkey in 1985 had a special provision for small taxpayers. Producers and wholesalers were ranked into potential turnover categories, and retailers were exempted from the ordinary VAT but were subject to a compensatory markup on a presumptive basis. Under the original compensatory system, retailers whose sales in 1984 did not exceed 80 million Turkish liras simply paid a 13 percent VAT on purchases to the wholesaler and did not file a return. This special provision was shelved in 1986. Currently, retailers who are exempt from income taxes are also exempt from the ordinary VAT. Instead, a compensatory VAT rate markup on a presumptive basis is applied to their purchases of merchandise. Small retailers are charged an extra 20 percent over the tax rate that applied to the inputs used in goods they purchase (in other words, if the tax rate on inputs is 10 percent, the supplier charges a retailer subject to presumptive tax the rate of 12 percent) and pay that amount less any input tax credit as their VAT obligation.

tionary powers of the administration should be restrained by allowing taxpayers to be represented on presumptive tax commissions, as happens in Turkey. This is also a way to ensure that equity is not ignored.
Wealth and Inheritance Taxes. In theory, taxes on wealth, on capital gains, and on inheritance could be designed as progressive tax instruments that would cause relatively few distortions. They must be designed carefully, however, to be administrable and to limit disincentives to saving. In practice, neither wealth taxes (other than urban property) nor inheritance taxes are major sources of revenue. The reason is the difficulty of enforcing these taxes. Wealth taxes and capital gains taxes can be evaded or contested in court relatively easily, given the problems of valuing assets, particularly those that are not transacted frequently. Inheritance taxes are more feasible, but to be equitable it is critical that they be complemented by gift taxes—otherwise gifts become a means for reducing the base of the inheritance tax. Gifts, however, are more difficult to identify and tax, particularly when the transfer is in kind. For these reasons, wealth and inheritance taxes in developing countries are likely to remain relatively minor components of the system of direct taxation in the near future.

Rationalizing the Rate Structures of Taxes

Once the tax bases have been defined as broadly as is administratively feasible, it is necessary to evaluate the rate structure carefully. There is no theoretical reason to expect optimal tax structures to have uniform rates. The choice and number of rates should be justified by assessing the costs and benefits. Varying rates amount to the differential treatment of different sub-bases. Too many rates increase the complexity of the tax system and increase tax evasion and the costs of administration. Rationalization, therefore, often involves reducing the differentiation in the rate structure. Experience indicates that, for most taxes, rate rationalization becomes a pressing concern when the number of rates for a tax instrument exceeds ten. The need to reduce differentiation within an instrument becomes less compelling when the number of rates is less than five. An essential requirement for rate differentiation is to have enough data and information to allow an economic distinction to be made between sub-bases. In developing countries, information constraints preclude too fine a disaggregation of the tax base into sub-bases and consequently too fine a structure of tax rates.

In the case of commodity taxes, the broadly based tax should be the principal revenue generator. If it is a consumption-based tax, such as a VAT, it should be given a moderate flat rate of 10 to 20 percent. For VATs, rates below 10 percent (approximating typical rates used in retail sales taxes) will usually generate levels of revenue that are low relative to the cost of collection and administration. For the less desirable turnover-
type taxes, lower rates of 3 to 5 percent can be implemented because the base of the turnover tax is gross output (that is, it covers all transactions including intermediate ones) rather than net output (final goods only), as in VATs and retail sales taxes. In a revenue-neutral tax reform, a turnover tax rate of 3 to 5 percent would have to be replaced by a 10 to 15 percent VAT rate because cascading and the taxation of inputs would have been eliminated (cascading is the process by which “tax liabilities accumulate as each succeeding transaction adds tax to that already paid at previous stages of production and distribution” [World Development Report 1988 (World Bank 1988), p. 86]).

Rate differentiation in taxes on goods and services can be introduced for two separate purposes: equity and efficiency. The goal of equity can be addressed in two ways. First, to exclude the poor from taxes, as noted earlier, certain transactions that are important expenditures for the poor (necessities) must be exempted from the tax base. Second, income-elastic commodities, that is, luxury goods and services consumed primarily by the rich, can be grouped into three or four categories and subjected to progressive luxury rates. These higher rates can be implemented either through separate instruments such as excises or luxury taxes, or as part of the broadly based general tax. In developing countries, administering a VAT in which taxes on inputs are credited would be complicated unnecessarily by the use of multiple rates (unless the nonbasic rates are imposed only on the final use of a good or service). In general, therefore, it is better in developing countries to impose the luxury tax separately from the broadly based general tax. Whatever instruments are chosen, the effect of the rate structure on consumption behavior has to be evaluated in the light of the combined effect of broadly based and selective taxes.

Another reason for differentiating taxes on commodities is efficiency. The principles of optimal taxation suggest that for a given level of efficiency cost, more revenue can be collected when demand is inelastic than when it is elastic. It makes sense in theory, therefore, to tax inelastically demanded goods at a higher rate. The main problem, however, is the measurement of own- and cross-demand elasticities. Although own-demand elasticities (measures of how demand for a good varies with changes in its own price) can be calculated, the cross-demand elasticities (measures of how demand for other goods varies with changes in the price of the good under study) are generally unknown; therefore, even for selective excise taxes on specific goods, the application of Ramsey-type optimal tax rules may be difficult. In practice, higher rates have been successfully implemented for certain goods, such as fuels, as a means of collecting user charges. Tobacco and alcohol have also been
subjected to higher rates as socially undesirable goods. These higher
rates can also be justified on grounds of efficiency, because the demand
for these goods is relatively inelastic and there are not many ways of
substituting for these goods. The higher rates on goods such as alcohol,
tobacco, and fuel can generate as much as a third to a half of all the
revenue collected from taxes on goods and services. Thus the system of
commodity taxation as a whole can accommodate up to five or six
different rates for reasons of equity and efficiency. A finer differentiation
than this is difficult to justify either analytically or administratively.

High statutory tax rates on both personal and company income have
been declining worldwide. Where constraints on public revenue are
serious, this strategy can be justified only if the revenue lost in lowering
the rate can be offset by an expansion in the tax base. In the case of
company income taxes, a single statutory tax rate (in the range of 30 to
50 percent) is often preferable to multiple statutory rates (see “Interac-
tions among Direct Taxes,” below).

Very high marginal tax rates on personal income are counterproduc-
tive. It is important to set the top marginal tax rate at a level that will not
result in widespread tax evasion or reduction in work effort. Thirty to
fifty percent is a reasonable range that will avert tax arbitrage (reclassi-
fying income to result in lower tax obligations) and limit disincentives
to work. The second rate that is important is the threshold rate, that is,
the rate on taxable income after a portion of income has been excluded
to avoid taxing the poor. This rate can be set between 10 and 20 percent.
Between the highest and lowest rates, there may be justification for
setting a few intermediate rates. It is much simpler administratively to
implement multiple rates for personal income taxes than for commodity
taxes.

Coordinating Tax Instruments: A Systems View

Besides the themes of base broadening and rate rationalization, a third
theme that emerged from the tax reforms of the 1980s is the need to look
at the tax system as a whole. Analyzing the tax system as a whole does
not require that all taxes be reformed nor that all reforms be introduced
simultaneously (see box 8). However, because reforming a single tax
may advance one objective at the expense of another, compensatory
actions in other taxes may be necessary to ensure a satisfactory overall
effect. For example, preferential treatment in the tax system often comes
about as a result of pressure from vocal groups who do not want to be
subject to unpleasant tax hikes. As a result, the brunt of these rises tends
to be borne by unrepresented groups because they have less political
Box 8. Tax Reform Takes Time

Many major tax reforms have been enacted in developing countries over the past three decades. During the 1980s, significant reforms have been introduced in Bolivia, Colombia, Indonesia, Jamaica, Malawi, and Mexico, among other countries. Successful reforms often involve analyzing the whole tax system, that is, the tax administration as well as the tax structure, even though implementation is phased. Measures that facilitate the implementation of a tax reform run the gamut from providing expert legal advice for drafting legislation to designing tax forms and procedures, training tax administrators, and improving the management of tax departments and ancillary facilities, such as tax courts. Such measures take time to introduce. The Indonesia tax reform proposals, for example, were announced in 1983, after two or three years of preparation. Their initial implementation took another couple of years, and revisions are still under way. "No tax reform program can anticipate all possible problems. Once enacted, obvious gaps in legislation and administrative resources tend to emerge in short order. Effective follow up has often required the appointment of a watchdog group committed to the success of the reform" (Gillis 1989, p. 505). The Jamaica tax reform was initiated in 1983, and, although the bulk of the recommendations were implemented by 1988, some recommendations are still being introduced. This has also been the case with the 1985 Malawi tax reform, of which the first phase was completed in 1990.

None of these reforms has delivered everything it promised, but most of them over time have resulted in tax systems that are in many ways superior to those they replaced. Relatively successful tax reforms, such as those in Indonesia, Jamaica, and Malawi, have involved substantial preparation and transition arrangements, including extensive consultation with all parties affected by the tax reform. Successful reforms have also involved continuity in key decisionmakers responsible for national economic management and the use of educational campaigns to introduce the tax reform proposals and familiarize taxpayers with the new requirements.

clout. Taking a systems view of tax reform can help to overcome political pressures and to counter vested interests.

In designing tax reforms, the importance of coordination across tax instruments needs to be emphasized. For example, the greater the weakness of the income tax and income transfer systems, the greater the need for rate differentiation in the indirect tax system to address objectives of
equity. Similarly, lack of coordination between changes in import tariffs and those in domestic indirect taxes may have adverse implications for revenue and efficiency. By the same token, the danger of analyzing company income taxation without taking into account how it interacts with personal income taxation lies in inaccurately assessing the incentives built into the company tax code. If recommended tax reforms are to be persuasive, they must be designed with regard for the interaction among the various instruments as they hinder or further the objectives of revenue, efficiency, and equity.

**Interactions among Indirect Taxes**

When reforming taxes on goods and services in developing countries, one of the most significant interactions that has to be taken into account is that between trade taxes and domestic taxes. Taxes on imports and exports are designed to generate revenue or to interfere with international trade, or both. As much as possible, the first function should be transferred to domestic taxes on consumption that do not differentiate by source of production (foreign or domestic). When limited administrative capabilities preclude implementing such a tax at the wholesale or retail stage, or both, it can be collected at the factory gate and point of import for convenience. This tax on imports will not result in discrimination as long as the same rate is imposed on the equivalent domestically produced commodity, even though different rates may be imposed across commodities. Thus not all taxes on imports are discriminatory or protective. Tariffs are only protective when they set up a price differential between imports and comparable domestic goods.

Tariffs are not the only taxes that drive a wedge between domestic prices and border prices. In some countries, the specifications of domestic taxes add an element of protection when a higher rate of the sales tax is applied to imports, as happened in Ghana (1986), Malawi (1985), and the Philippines (1983). Sometimes the discrimination is more subtle, as in the case of the excise tax in Thailand, which covered both imports and domestic goods at the same rate but added a markup to the cost, insurance, and freight (c.i.f.) import value that effectively raised the rate applicable to imports. In other circumstances, domestic indirect taxes can work against local producers, as in the case of selective excise taxes that cover only domestic goods or of a turnover tax that imposes a graduated rate on domestic goods depending on the degree of processing involved. Taxes such as these either reduce the level of protection provided by the tariff structure or, when the tax rate exceeds the corresponding tariff rate, result in tax discrimination against local producers.
Joint reform of tariffs and domestic taxes is often desirable. In general, simplifying the import tariff structure by reducing the variance in rates can improve efficiency and simplify the administration of tariffs. In addition, lowering tariffs and export taxes is a necessary component of outward-oriented development strategies. It is important to realize, however, that although liberalization can promote exports and growth, it can also reduce revenue. Increasing low import tariff rates on intermediate goods may sometimes be justified to lower effective rates of protection or to generate revenue to compensate for reducing high tariff rates, or both. However, such increases can discriminate against exports or necessitate the introduction of duty drawback or import rebate schemes that are administratively difficult to implement. In such cases, designers of reforms should strongly consider an increase in the VAT or in sales taxes on final goods that do not discriminate between imports and domestic production and that do not adversely affect exports. In other cases, new, less distortionary sources of revenue may have to be explored before increasing tariffs on intermediate goods to compensate for lost revenue.

There is also a need to look at the interaction between broadly based taxes and selective taxes, as well as between taxes imposed by different entities. The coverage of the selective excise taxes may expand beyond traditional excisable goods, such as alcohol, tobacco products, vehicles, and gasoline, and create a substantial overlap with the broadly based tax. Problems of coordination between overlapping taxes become serious if their rates are raised independently so that the combined tax burden is prohibitive. For example, in Zaire some agricultural products were subject to as many as eighteen different parafiscal measures imposed by a half dozen or more taxing jurisdictions.

**Interactions among Direct Taxes**

Coordination is often needed between personal income taxes and company income taxes to avoid tax arbitrage and the consequent loss in revenue. Tax arbitrage occurs when taxpayers arrange their affairs so that income accrues to a low-tax entity. If the maximum personal income tax is lower than the company tax rates, companies can lower their tax liabilities by treating profits as wages or by transferring ownership of assets to individuals. Although it is difficult to avoid tax arbitrage completely, equating the top marginal personal rate and the company tax rate can limit it. Tax arbitrage can also occur within the corporate sector as companies redistribute profits among loss-making subsidiaries. To circumvent this problem, the consolidation of company accounts is often disallowed.
Coordinating recommended reforms across personal income taxes and company income taxes is necessary to limit tax biases in a firm’s financing decisions. If the company income tax allows interest payments to be deducted as a cost of business but does not allow dividend distributions as a cost deduction, firms may favor debt financing over equity financing. A solution to this problem is to provide a tax credit for dividends received and taxed at the owners’ stage. This method has been implemented in Colombia, in Korea, and, for private companies, in Thailand. A variant of this method is to refrain from taxing dividends at all, as in Ghana, in Turkey, and, for publicly owned companies, in Thailand. Some countries, such as Colombia, deal with this issue by removing interest deductions at the company stage.

Under equity financing, it is necessary to tax dividends and capital gains so that new shares and retained earnings are treated symmetrically. In general, a classical company tax system favors debt financing but contains little or no bias in the choice between new shares and retained earnings, provided that capital gains are subject to tax. Although tax credit for dividends alleviates the bias against equity financing, it introduces a bias in favor of dividend redistribution and against retained earnings if capital gains on company shares are taxed. The practice of dividend relief augmented by zero taxation of capital gains on shares avoids the two distortions as in Turkey and, for publicly traded companies, in Thailand.

In a system of well-functioning and broadly based personal income taxes, a wealth tax on income-yielding assets (such as business assets and company shares) that are already subject to tax would impose a double tax on savings and, hence, would be inefficient. In developing countries, however, the actual personal income tax base is often narrowly defined by law or is limited by the ability to enforce. In these circumstances, a wealth tax or property tax can in principle be used to expand the base of the system. As noted earlier, however, wealth taxes are difficult to implement nationwide even in industrial countries, let alone in developing countries. Property taxes on urban real estate are best left to local governments so that they may recoup the cost of urban infrastructure. Property taxes in rural areas, including agricultural land taxes, are in practice difficult to implement both administratively and politically.

The Relationship between Domestic and Foreign Tax Bases and Rates

International taxation issues must be considered in designing domestic tax bases and rates. A country is better able to attract foreign capital and to retain domestic capital if it provides investors with transparent and
stable tax rules. To attract capital, a country can also limit its domestic tax concessions, and thereby avoid giving away revenue, in two ways: first, by taking into account the foreign tax crediting rules of capital-exporting countries and second, by recognizing its own advantages compared with its regional competitors when designing tax policies.

The design of nonresident or border withholding taxes and deduction rules in the host country’s tax system is also important because multinational firms engage in international tax planning. Capital-importing countries must take account of the tax regimes of capital-exporting countries when planning their own tax policy. For example, when the capital-exporting country credits foreign income tax payments made on overseas investment, a capital-importing country may needlessly be giving away revenue through promotional investment incentives. In other cases, the characteristics of the foreign income tax credit regime can restrict the extent to which a developing country can shift from an accrual system to a cash flow system for its company income taxes. For example, Mexico’s attempt to shift its company income tax from an accrual to a cash flow basis in 1988 was constrained by the foreign tax crediting rules of the United States, which would have given credit for taxes paid on accrued income but not for taxes paid on cash flow.

The mobility of financial capital (and, to a lesser extent, of human capital in the form of educated and skilled labor) imposes constraints on the extent to which capital income can be taxed in a particular country. Because the rate of return that can be earned in international capital markets is given to most developing countries, attempts to tax capital heavily can result in capital flight. To cope with this problem, some countries have resorted to regulatory controls on capital outflows. This is a partial solution only if companies can successfully engage in transfer pricing. Other countries have entered into tax competition either by attempting to lower their legal tax rates below the level of their principal competitors or by increasing their promotional incentives. This competition can be justified if foreign companies are in a surplus tax credit position in their home countries and can easily relocate their investments. However, many countries with ample natural resources or low wages are attractive to foreign investments in their own right. Stable institutions and functioning infrastructure are likely to be more important than tax revenue concessions that treasuries in developing countries can ill afford to give up.

*The Interaction of Inflation with Explicit Tax Bases and Rates*

The purchasing power of a unit of currency can drop when governments finance their deficit by printing money to pay for the goods and services
they buy. The public is then forced to add to its holdings of nominal money balances if it wishes to offset the drop in its real money balance. Inflation acts like a tax because the public has less to spend. Although in normal times revenue generated from printing money is relatively small—on the order of 0.5 to 1.0 percent of gross national product (GNP)—during periods of high inflation the revenue generated can be as much as 5 to 6 percent of GNP (Barro 1990). In Argentina between 1960 and 1975, money creation accounted for nearly 6 percent of GNP and represented nearly half of government revenue. Some other countries where the revenue from printing money has been important are Brazil (3 percent of GNP in the period 1960–78) and Chile (5 percent of GNP in the period 1960–77).

Where explicit taxes are not properly designed or are poorly enforced, the tax system will not generate adequate revenue and this can force reliance on the inflation tax. This is not a desirable way of conducting fiscal policy. As people shift their asset holdings into nonmonetary forms, the base of the inflation tax shrinks and the rate of inflation has to increase in order to maintain a constant revenue yield. The acceleration set in motion can rapidly get out of hand and lead to hyperinflation. High rates of inflation are pernicious because they overwhelm the functioning of economic signals in the form of relative prices. High rates of inflation also erode the revenue collected from explicit taxes because of lags in collection, and they distort the efficiency and equity features of the explicit tax system.

For these reasons, even though some revenue generation through the inflation tax may in practice be unavoidable, it is generally far more preferable to generate an equivalent amount of revenue through explicit taxes by expanding the base and improving the mechanism for collection. Until revenue from explicit taxes can replace that generated by the inflation tax, however, the government may have to insulate explicit taxes from the consequences of high inflation rates. Indexing the tax system is often suggested as a partial solution.

In the case of personal income taxes, inflation can lead to bracket creep and to the erosion of threshold allowances and deductions. This situation can seriously undermine the progressivity and fairness of the personal income tax because low-income groups will be subject to unduly high marginal tax rates. The remedy is to shift from taxing the nominal base to taxing the real base by linking the former to some inflation index, such as the consumer price index. Despite budgetary problems, Mexico has been able since 1976 to insulate the personal income tax from inflation. In 1987, the tax schedule was automatically indexed as brackets were redefined in terms of multiples of the minimum wage, which was periodically adjusted for inflation. Similarly, despite a significant reve-
nue loss, Turkey was successful in indexing tax brackets and personal exemptions throughout the 1980s.

In the case of corporate income taxes, inflation erodes the real value of nominally fixed deductions (for example, depreciation) so that taxable income is overstated and the tax burden on a company rises. The taxation of nominal book profits also leads to an overstatement of taxable income. On the liability side, firms that are allowed full deductions for nominal interest expenses are compensated by the tax system. The inflation tax thus exacerbates the wedge between the marginal effective tax rate on debt-financed investments and that on equity-financed investments (because dividends can rarely be deducted as a business cost). Companies are thus even more likely to choose debt-financed investments. The corporate tax base needs to be adjusted for inflation in order to ensure that inflation does not distort incentives, the overall tax burden, or the structure of corporate finance any further. In Mexico one financial strategy used by companies to reduce their liabilities was known as back-to-back loans. The owners of the firm would make a bank deposit on the condition that the money be lent back to the firm. The tax saving from this ruse was substantial because inflation was high. The owners would pay only a fixed 2.5 percent tax on the interest earned on their bank deposit but would benefit from the full deductibility of interest paid on borrowings at the firm level. Back-to-back loans were rife with inequity because large businesses with better banking connections faced lower effective tax rates. The tax reform of 1986 introduced indexation, which eliminated the ability to deduct the inflationary component on the repayment of principal as if it were interest. In Chile a comprehensive system of inflation indexation has been developed with a view to reducing tax distortions, maintaining compliance, and preserving tax elasticity. Variants of this system are used in Argentina, Brazil, and Israel.

The impact of inflation on revenue can be devastating at times, especially when inflation rates are very high and there is a lag in revenue collection. In Mexico the base of the corporate income tax was eroded considerably by persistently high inflation in the 1980s. Corporate tax revenue fell from 2.6 percent of GDP in 1981 to an average of 1.6 percent during 1983-87. The decline was partly due to the deductibility of nominal interest expenditures and partly to the fact that the tax was collected in three payments a year. To prevent the erosion of the base and the subsequent fall in revenue, full indexation (while allowing all current purchases, including investments, to be fully deducted) was introduced in mid-1986. In addition, firms were required to make monthly payments of the tax. Despite the administrative complexities involved in full indexation and the increased accounting costs of the new
payment plan, the inflationary eroding of taxes has been checked. Similar reforms were undertaken in Chile to correct the ravages of inflation on tax revenue. Previously, only taxes withheld on wages and salaries were remitted each month to the treasury. Now business firms are also required to pay estimated income tax each month.

**Improving the Administration and Implementation of Taxes**

Another significant theme that has emerged from practical attempts at tax reform is the need to ensure that changes in tax policy are compatible with administrative capacity. In the short run, taking the existing administrative capacity as given and designing tax options within those constraints might well be the most feasible approach. Experience shows, however, that, in the long run, tax administration can be upgraded and streamlined as part of the adjustment process. Strengthening tax administration is thus critical to the successful implementation of tax reform.

The taxation process can be broken down chronologically into the enactment of the tax law, the identification of taxpayers, the assessment of the tax, the control and verification of assessments, tax litigation (if any), and finally the collection of taxes. (The sequence is slightly different for advance payment of taxes and taxes relying on withholding mechanisms.) At each of these stages, weaknesses in the tax administration are likely to prevent the intent of the tax legislation from being fulfilled.

Tax administration reform should aim to improve (a) compliance on the part of the taxpayer and (b) the efficiency with which taxes are assessed, processed, and collected. One reason for noncompliance on the part of taxpayers is the complexity of tax laws. Complex laws make it easier for corrupt tax auditors to engage in side deals with the tax evaders they have detected. In addition, complex laws increase the burden of tax administration by increasing the cost of auditing and litigation. Simplifying tax laws can make the job of tax administration simpler and more efficient.

In countries where tax officials have the prerogative of assessment, opportunities arise for collusion between the parties and for harassment of taxpayers. Tax collection can be facilitated by shifting to a system of self-assessment, in which taxpayers are required to calculate their own liability. This technique can increase the number of persons who identify themselves as taxpayers, it allows tax officials to focus on improving compliance (through audits), and it reduces the opportunity for collusion. But for this system to be effective, it is essential to ensure that the rules relating to both bases and rates are simplified in the case of all instruments and that there are effective systems for sample auditing and
following through in suspected cases of evasion. The tax reform in Indonesia replaced the system of official assessment with self-assessment and thereby transferred to the taxpayer the primary responsibility for filing, for determining tax liability, and for paying taxes. Tax laws were simplified and tax administration was depersonalized, so there was less contact between tax administrators and taxpayers and less opportunity for collusion.

Self-assessment systems can result in taxes being underassessed. Therefore, selective checking and internal auditing should be used for enforcement, and penalties should be levied for underassessment of taxes. Conflicts between taxpayers and tax administrators over the value of the tax base or the interpretation of tax obligation should be resolved by assessment committees, and taxpayers should have the right to court action if an accord cannot be reached. Procedures for audits and appeals should be clarified and streamlined, and tax courts and supporting legal facilities should be introduced where they do not exist or strengthened and expanded where they are already in operation.

An effective method for collecting taxes based on salaries and capital income is to move as much as possible to a system in which tax is withheld at the source, such as pay-as-you-earn (PAYE) or interest withholding schemes. In some countries (Thailand, for example) this method generates about one-half of normal personal income tax revenue. Withholding is also an attractive feature of the VAT system. Even with such self-policing measures, however, tax evasion is still a possibility. One attempt to deal with this problem was made in Turkey in 1984. To improve compliance with VAT, authorities introduced an expenditure rebate system, which, in its initial form, paid rebates to wage earners in proportion to their expenditure on certain categories of goods and services. Subsequently, the coverage of the system was extended to more items as well as to more beneficiaries. Although the system has helped to improve VAT compliance, the revenue cost of enforcement has been extremely high. In 1986 the total cost of the expenditure rebate system was 39 percent of net VAT revenue—roughly 1.5 percent of GNP. Clearly such a costly enforcement mechanism is not desirable and cannot be a permanent feature of the tax system.

Evasion is not the only reason that governments fail to collect taxes. Most problems with existing administration systems tend to arise because of faulty techniques and procedures. Tax administration can be reformed in several practical ways to make it more effective and efficient. Mechanization of manual procedures and eventual computerization will enable authorities to create a master tax file to increase the ease with which data can be stored and retrieved. If the master file is introduced
in conjunction with a system of numbers that uniquely identify each taxpayer, the ability to cross-reference will be greatly enhanced and the likelihood of error will be substantially reduced. The master file will also help in identifying evaders or potential taxpayers who had not been reached previously. Computerization, however, requires a commitment at the outset to retrain staff to administer the new system effectively. Tax reform planners in Indonesia, Jamaica, and Malawi recognized that to improve the efficiency of resource transfer from the private sector to the public sector and to make tax policy more effective, administrative reforms were needed. Consequently, computerization, the training of key personnel, the modernization of auditing procedures, and the development of a new management reporting system were emphasized.

International experience shows that the lack of managerial capacity is not a fixed and unalterable constraint. The major administrative reforms undertaken by Ghana (1986–87), Indonesia (1984–85), and Thailand (1983–84) provide encouraging examples. In each case, a new management was instituted with a new organizational structure and more competent professional staff. These improvements resulted in the successful implementation of the tax reform program and in dramatic improvements in tax collection.

In some countries, the capacity to implement policy changes is further eroded by poor morale and corruption among tax officials. The issue of corruption cannot be examined in isolation from the broader question of how well public sector employees are compensated. One option for dealing with this issue is to raise the pay scale of tax officials above that of the general civil service, as was done in Ghana, but this move may have to be accompanied by a reduction in staff if the government’s wage bill is to be kept within limits. Attractive salaries alone may not be sufficient to curb corruption. An effective deterrent, such as the capability of detecting and punishing offenders, is also needed. Sometimes drastic changes in the administrative arrangements may reduce the scope of corruption, as in Indonesia when the government, in 1985, successfully turned its customs assessments over to a foreign commercial firm specializing in trade inspection and valuation.

A further obstacle to efficient tax administration can arise from political interference. Problems caused by political interference cannot be resolved without a credible commitment from the highest level of the government to curb such interference. The possibility of obtaining such a commitment may seem remote, but it can happen, as in the Chilean administrative reform.

Tax reform is a sensitive issue and, like other programs, requires ownership—commitment—by the government as a necessary condition.
for successful implementation. Tax reforms lacking popular support cannot be imposed on countries. Therefore, the government should in all cases try to identify, to an appropriate degree of detail, the gainers and losers from a proposed reform. Governments should do this not only to persuade policymakers that the reform itself is worthwhile but also as background for discussions on the political economy of the reform. If political problems are not properly identified and addressed, they can undermine the tax reform, as happened in Argentina (see box 9).

Summary of Lessons of Tax Reform

Major tax reforms are generally required when there is a need for either or both of the following: (a) improvements in the incentive structure and a reduction in distortions imposed by the existing tax system on the private sector and (b) increased revenue mobilization to correct macro-

Box 9. Tax Reform Needs Political Support: The Case of the Argentina Land Tax

Between 1980 and 1984, Argentina was collecting nearly 5 percent of total tax revenue in the form of agricultural export taxes. Although export taxes can generate revenue at relatively low administrative cost, they can discourage production for export. One potential solution to the problem was a land tax, which can generate revenue from economic rent without distorting decisions about production. In the 1986 sectoral adjustment loan, the Bank recommended that export taxes be replaced by a federal land tax. Technical assistance was to be provided to establish cadastres and to tackle administrative problems.

The government of Argentina did present draft legislation for the introduction of a federal land tax to Congress. However, the farm lobby feared that the land tax would be added to the existing export tax and, therefore, farmers strongly opposed its imposition. The government feared that substituting a proven revenue generator with a new, untested, and potentially less administrable tax could seriously jeopardize the success of the adjustment program. The political opponents of the tax were able to block successfully the 1986 land tax bill from becoming law.

An important lesson of the land tax episode in Argentina is that tax reforms that lack political support cannot be imposed on countries. It is essential to identify in advance any political factors that might affect the implementation of proposed tax reforms.
economic imbalances in a nondistorting, equitable, and sustainable manner. Of course, when entire economic systems are being reformed, as is currently happening in the formerly socialist economies of Eastern Europe, fundamental reform of taxes will also usually be required (see box 10). Ad hoc increases in tax revenue to achieve macroeconomic balance through administratively convenient measures are only short-run solutions to the revenue problem. The basic structure of the tax system needs to be adjusted if the revenue yield has to be increased on a sustained basis to keep pace with reasonable expenditure requirements. Before recommending measures to increase tax revenue, however, it is important to answer some critical questions. What is the economic cost of additional taxation? Is it less costly to curb public spending? Will an increase in revenue lead to higher public savings or be absorbed by low-priority current public expenditure? Do additional public savings add to or substitute for private savings? Only after assessing a country’s fiscal policy should measures to increase tax revenue be recommended. Similarly, frequent ad hoc restructuring to reduce economic distortions and to minimize the tax burden on the poor may in time become internally inconsistent.

Box 10. Tax Policy for Centrally Planned Economies in Transition

In a centrally planned economy, the state owns the means of production and has many different instruments to appropriate the surplus generated. To the extent that an enterprise or activity generates more or less surplus than originally anticipated, the amount transferred to the state is negotiated. In this context, the sole function of the tax structure is to transfer adequate revenue to the state budget. Taxes have virtually no role in allocating resources or, for that matter, in determining the distribution of individual tax burdens.

Many centrally planned economies are in the process of moving toward market-determined allocation of activities. These countries, especially those in Eastern Europe, will have to adopt tax systems that are compatible with decentralized market allocations within their economies and that are consistent with those of their principal trading partners if trade and investment are to expand. As such, the ideal tax system is not much different from that discussed in this paper for developing countries. Centrally planned economies, however, start from a very different point. Their legal, institutional, and administrative structures are not currently capable

.Box continues on the following page.)
of supporting a market-style tax system. Even though the outlines of a
desirable framework are reasonably clear, the design of transitional ar-
rangements remains a critical problem. Poorly thought-out interim
schemes may cause the reform to be aborted in the transition period or
may necessitate large and costly zigzags.

During the transition, a number of issues may arise. First, as central
directives are eliminated and before competitive markets are fully estab-
lished, there will be a stage in which taxes may have to be used as an
indirect lever to guide decentralized decisionmaking. The tax systems in
Hungary and Poland, for example, have been given features to mimic
market forces, particularly for factor markets. New taxes have been im-
posed on capital to mimic a market-determined interest rate, on labor to
compensate for the lack of a market-determined wage rate, and so on.
Because these taxes generally do not have counterparts in a market system,
they should be treated as temporary measures with well-designed sunset
features intended to take effect as markets begin to function. It is also
necessary to ensure that the fiscal substitutes do not deter the establish-
ment of functioning markets.

Second, setting discretionary tax rates by negotiation must rapidly be
replaced by stable and binding predetermined tax rates on clearly defined
tax bases; decentralized decisionmaking otherwise cannot take taxes into
account.

Third, as the state’s role in public spending decreases (as, for example,
many activities are privatized), such spending can be financed at a much
lower level. The amount of resources transferred to the state can be
decreased, so that tax rates might be lowered or tax bases redefined, or
both. As other control and transfer mechanisms decline, however, it must
be ensured that adequate tax revenue is generated to avoid large deficits
that can undermine the transition to a market economy. As experience in
Eastern Europe has shown, inflation can get out of hand and overwhelm
the emergence of market-determined prices as signals to decentralized
producers and consumers.

Fourth, there is a tendency for countries to use fiscal incentives to
stimulate entrepreneurship or to give exemptions from taxes to offset
increases in consumer prices or declines in wage rates. This can result in
the loss of a substantial portion of the eventual tax base. This in turn creates
a constituency with a vested interest in preserving these giveaways, and
it becomes more difficult to restructure other taxes. This has been a
problem in Hungary.

Fifth, it will be necessary to develop a set of legal rules and a cadre of
administrators with appropriate skills to implement taxes because access
to company books will be more restricted and small and medium-size
enterprises will be more numerous than they were when state ownership
dominated the economy.
Despite the tough and unpopular choices involved, a number of developing countries have successfully undertaken extensive tax reforms. Some lessons can be drawn from their experiences that will provide guidelines for other developing countries that are contemplating or making significant changes in the structures of their tax systems.

**Lessons of Tax System Design**

- **There is no optimal tax structure, but a useful reference set of taxes has emerged.** There is no unique prescription for the design of a

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**Box 11. A Useful Reference Set of Tax Instruments**

The existing array of taxes on goods and services could be consolidated into a small set of instruments with the following characteristics:

1. Revenue would be generated primarily by a broadly based domestic tax on consumption that would not tax interindustry transactions or exports and would not differentiate by source of production (foreign or domestic). The best instrument to achieve this objective would be a VAT at a single rate (between 10 and 20 percent) with crediting provisions and zero rating of exports.

2. Equity would be fostered by introducing luxury taxes and excises with only three or four rates on income-elastic goods that were not distinguished by source of production (foreign or domestic) and by exempting items from the VAT that are a significant component of expenditures by the poor.

3. Efficiency would be encouraged by traditional excises and taxes on demonstrable negative externalities.

4. Protection would be provided by tariffs only (note that the broadly based and selective taxes can be collected at the point of import for administrative convenience without being confused with distortionary taxes on the import base such as tariffs). Quantitative restrictions would be replaced by tariffs, the level and variation of nominal (not statutory) tariff rates would be reduced, and a distinction might be made in tariffs between consumption goods and inputs used in production. Export rebate or duty drawback schemes would be strengthened.

5. Export taxes would be eliminated or redesigned in the light of their principal objective, for example, as a proxy for income taxes or as royalties to collect rent (in the case of publicly owned natural resources).

*(Box continues on the following page.)*
single tax or a system of taxes, nor is there a single country in which all taxes are optimally designed. To the extent that a preferred pattern for direct and indirect taxes can be inferred from current best practice, the system of taxation described in box 11 can be used as a benchmark to evaluate existing tax structures and to determine the desirability of reform. This system is, in effect, what would typically arise if a government applied the lessons of tax reform summarized in the preceding pages. Although the broad principles for reforming the tax structure that are summarized in this paper can be applied across the board, the details of tax design and implementation are a very complex matter and require detailed assessment and careful tailoring to country-specific conditions.

Existing taxes on firms and individuals could be restructured to include the following characteristics:

1. Revenue would be generated from company income taxes with a single statutory rate comparable to the maximum personal income tax rate, and tax preferences linked to investments and profits would be reduced.

2. Efficiency would be addressed in two ways. To avoid intersectoral distortions, deductions, allowances, and credits would be distributed more evenly across sectors and assets; to avoid distortions across periods, depreciation, inflation-adjusted interest deductions, and related indexing provisions would be improved.

3. Tax preferences would be limited in coverage and duration to cases in which market imperfections cannot be addressed more directly.

4. Revenue would be generated by personal income taxes with wide bases and maximum marginal rates of between 30 and 50 percent.

5. Equity would be improved by setting household income exemption levels high enough (for example, at the minimum wage or up to two times per capita GDP for low-income countries with limited administrative capacity) to exclude very small taxpayers and by introducing a structure of gradually increasing marginal tax rates.

6. The tax would improve both equity and administration by extending the use of withholding taxes on wage and interest incomes and by introducing fair, presumptive taxation of hard-to-tax groups.

7. A 10 to 15 percent border withholding tax on profits, dividends, and other repatriations should be introduced where it is not already in use.
• Broadening the base of the tax system should be a high priority.

Base broadening can effectively address the objectives of revenue, efficiency, and equity in a tax system if designed carefully. When additional revenue is a major objective, broadening the base is often preferable to increasing rates because economic distortions tend to increase sharply with higher rates. When reducing distortions is important and revenue cannot be allowed to fall, base broadening is necessary to reduce distortionary rates and variations in the treatment of different sectors and assets. Base broadening can also make a tax system more equitable because both horizontal equity and vertical equity are undermined when sizable sources of income and items of expenditure of the nonpoor are excluded from tax and when tax expenditures offer disproportionate levels of benefits to the rich. Base broadening, through the elimination of exemptions and preferences, can help simplify tax administration. In addition, base broadening can be facilitated by developing presumptive indicators for hard-to-tax sectors and activities. To avoid abuse, however, such taxes must be accompanied by reasonable provisions. Three important issues have emerged in relation to broadening the tax base:

1. In developing countries, successful reform of taxation of goods and services involves shifting from a reliance on a narrow trade base and a limited production base to a broader consumption base.

2. The value added tax should be the instrument of choice for most developing countries considering reform of their general tax on goods and services. If cascading turnover and manufacturers' sales taxes are replaced by a VAT, revenue can be increased and economic distortions reduced. In the experience of developing countries so far, the VAT, and simplified versions of it, have been an unqualified success in raising additional revenue and reducing the efficiency costs of taxation. A VAT is not necessarily superior to a well-functioning retail sales tax, but only a handful of developing countries have had success with retail sales taxes. One weakness associated with the VAT is its limited ability to address the goal of equity. Base broadening must be qualified to ensure that items that account for a large part of spending by the poor are excluded from the base. Selective commodity taxes can also be used to supplement the VAT with luxury excises. Although the role of selective taxes on goods and services is likely to be secondary to the VAT in generating revenue, such taxes can be used to broaden the base with limited distortion if they apply.
to socially undesirable goods, such as alcohol and tobacco, or are used to correct for damages and negative externalities.

3. The use of so-called tax expenditures (tax preferences and exemptions to promote specific economic and social objectives) should, in general, be deemphasized. The already narrow tax bases in developing countries are further eroded by the provision of fiscal incentives. Promotional programs, as well as those that provide rents to selected subgroups in the form of tax preferences and exemptions (within income taxes or taxes on goods and services), usually are a major drain on the national treasury. They are politically more convenient than explicit subsidies because they are less visible. If they are not carefully designed, however, they can confer windfall gains on existing and inframarginal activities or they can continue to induce a shift of resources to tax-preferred activities even after any economic rationale for their presence has disappeared. In devising tax expenditures to meet economic and social objectives, the potential gains must be weighed explicitly against the potential losses in efficiency and revenue that might be associated with these measures.

- Rates need to be rationalized. This involves lowering top marginal tax rates in the case of personal income taxes (to between 30 and 50 percent) and unifying the company tax structure to a single statutory rate equivalent to the top personal tax rate. Such a reduction in tax rates will reduce economic distortions and facilitate both compliance and administration. Average tax rates in the case of general taxes on goods and services need to be set in the range of 10 to 20 percent. Three or four selective tax rates on luxuries and nonessentials can be levied (at rates higher than 20 percent) to foster equity and increase revenue. Furthermore, the number and dispersion of customs tariff rates need to be reduced. Over time, the average rate should be lowered to reduce distortions in trade policy.

- Tax reform can lower the burden of the poor. Goods such as unprocessed food, which account for a larger proportion of the budget of the poor, should be exempted from the tax base. Excluding a portion of household income approximately equivalent to per capita GDP (and up to twice per capita GDP where administrative capacity is limited) from the income tax base would also lighten the burden of taxation for the poorest groups. Selective excise taxes on luxuries and nonessentials can at the same time enhance the reve-
nue take and the progressivity of the tax system without significant efficiency losses.

Lessons on the Process of Tax Reform

- **Tax reform benefits from a systemic view.** It is important to look at the tax system as a whole. Because tax reform typically involves the balancing of multiple objectives (revenue, economic efficiency, equity, and administrative effectiveness) and the assessment of interactions among tax instruments and bases, a systemic approach can yield significant gains. For example, reducing customs tariffs without correspondingly increasing other taxes, generally of a value added type, can increase the fiscal deficit and exacerbate macroeconomic difficulties. Even in the many cases in which there are significant gains to be reaped from piecemeal reforms of particular taxes or improvements in tax administration and enforcement, it is necessary that the partial reforms be designed in the light of interactions with the overall tax system. Furthermore, to improve economic performance, tax reform should be closely integrated with other structural adjustment measures.

- **Reform of tax structures is generally more effective when accompanied by improvements in tax administration.** A strong tax administration is necessary to carry out the intent of any new tax legislation effectively. Simplified tax laws and procedures will facilitate compliance and increase the efficiency of tax administration (for example, more audits can be done at lower cost). Simplified tax laws facilitate self-assessment, which in turn allows administrators to enforce laws more effectively. In most developing countries, the auditing of taxpayers is constrained by resource limitations. In this situation, withholding taxes at the source of income is an extremely efficient way of checking tax evasion. Administrative reforms must also emphasize improved organizational and managerial procedures to increase staff productivity and minimize corruption.

- **Tax reform must take into account initial conditions, both domestic and foreign.** The experiences of developing countries suggest that tax reform proposals must carefully assess the institutional features and tax cultures of the country in question. For example, in a federal country, the way powers of taxation are constitutionally assigned among levels of government can limit tax reform choices. In India, for instance, the reform of the federal excise tax system along the lines of a VAT could not be extended to encompass sales
taxes because the constitution allocated the responsibility for levying sales taxes to the states. In low- and middle-income countries, such as Colombia, Indonesia, Malawi, and Turkey, large revenue gains cannot be expected from the broadening of income taxes and, therefore, VATs should be the mainstay of the revenue-raising effort. In such situations, supplementing a single-rate VAT with luxury excises is likely to be necessary to ensure some progressivity in the overall tax structure. By contrast, in upper-middle-income countries, which are more able to administer income taxes and targeted expenditure programs and can incorporate larger segments of the economy under the VAT, there will be less need to resort to supplementary excises.

In reforming their tax systems, capital-importing developing countries are also severely constrained by the tax structures of capital-exporting countries. For example, some foreign tax credit regimes (as in the United States) can inhibit developing countries (such as Mexico) from adopting a cash flow system for their company income taxes. Developing countries also often engage in wasteful tax competition when they do not pay adequate attention to the tax regime that a potential marginal investor faces in its home country. A marginal investor from a country with a worldwide system of taxation can be taxed by the host country at a rate up to the home country tax rate without creating a disincentive. The host country, however, needs to adopt appropriate rules for income attribution to circumvent the shifting of income to low-tax countries or to tax havens through transfer pricing.

• **Domestic ownership of the reform proposals is critical to their ultimate success.** Tax reforms cannot be imposed on countries. Politicians and civil servants in the country must assume ownership of the proposals if the reforms are to succeed. Furthermore, if local experts participate in designing the reform, it is more likely to succeed because they are better judges of the political pulse of the country than are outsiders. The success of tax reform in Colombia and Malawi can be attributed at least in part to the core of local experts that worked closely with foreign advisers. Such cooperation also appears to hasten implementation of the reform. In some countries, as in Indonesia and Jamaica, foreign advisers were employed to sit on a steering committee that was run by local officials and leading citizens. In others, as in Bangladesh, senior tax officials and industrialists went on a fact-finding tour to a few countries that had introduced the VAT to obtain first-hand knowledge of its work-
ings, which was enormously helpful in ensuring domestic ownership of the reform proposal.

- **The credibility of the tax reform is very important for its success.** A stable tax policy environment encourages businesses to take a longer-term perspective in their decisions about investment and its financing. Making tax changes without giving adequate consideration to transitional arrangements can undermine the credibility of a tax regime. Transitional arrangements require much more careful analysis than they have hitherto been given in developing countries. Also, tax changes must be presented as part of a long-term strategy to improve the public sector environment for the private sector. To win businesses' confidence in the credibility of the tax regime, greater attention should be given to preparing and analyzing the reforms, to consulting interested parties in advance, to devising grandfathering provisions, and to providing a reasonable period of transition before implementation.
World Bank Advice and Adjustment Lending

In practice, comprehensive tax reform is rare and opportunities for the World Bank to be involved are even rarer. The Bank has, therefore, more often been involved in incremental tax reform programs. With the lessons of experience summarized above, it is possible to review the nature of Bank advice in these cases.

Evolution of the Bank’s Role

In the 1970s, the Bank’s tax advice largely concentrated on tax measures in specific sectors of the economy. In line with the prevailing professional thinking of that time, sectoral studies favored tax expenditure programs that would promote private investment and exports in their sectors, whereas trade-related studies recommended reducing import tariffs as well as export taxes. During this period, the most frequent fiscal prescription for the overall tax system was to increase taxation. The Bank paid much less attention to the general structure of taxes. This strategy was heavily influenced by the Bank’s emphasis on financing public investment projects. When revenue increases were recommended, the Bank’s reports rarely specified preferred tax bases or rates. Revenue levels were either forecast on the basis of the existing tax structure or targeted. When targets were used, tax measures were usually identified on an ad hoc basis. In both forecasting projections and targeting exercises, the estimates were most frequently based either on recent averages of key ratios (for example, the ratio of taxes to GDP) or on the historical elasticity of tax revenues to GDP (or more specific tax bases such as imports or nonagricultural output). As with the public economics profession at large, the dominant concern of Bank specialists was whether the revenue measure could be put into effect in the face of weak admin-
istration. Few were concerned that continuous reliance on this criterion might result in the evolution of a tax structure with undesirable economic consequences. As a result, there was little analysis linking project- and sector-specific advice to the general tax structure and there were few prescriptions for strengthening tax administration to support a reformed tax structure.

In short, in the period when the development community saw the public sector as the engine of growth, the Bank favored tax increases as a form of forced saving to help finance development, especially where internal financial markets were inadequately developed. External aid and, in particular, public external borrowing were encouraged where the internal capacity to tax was insufficient to support the level of public expenditure required at early stages of development. However, external public borrowing (or, equivalently, public guarantees of external borrowing by private and state-owned enterprises) critically required that the public sector generate adequate revenue to repay loans, either by charging the private sector for benefits received or by taxing them. In many countries, where the grace period provided by external borrowing was not used effectively to strengthen revenue mobilization capacity, repayment obligations eventually could not be met, contributing to the debt crisis.

With growing debt service obligations and declining net external transfers, the large fiscal deficits in these countries became unsustainable. Fiscal reforms were needed to rectify macroeconomic imbalances. Expenditure cuts alone were generally judged to be insufficient, and thus the need for more revenue was seen as unavoidable even though the magnitude of the shortfall and the urgency of the situation varied from country to country. In this context, adjustment programs provided an opportunity to put the revenue-generating capacity of the public sector on track in order to support the necessary public expenditures and a credible public borrowing strategy. In fact, given that revenue and tax reforms often require administrative reforms, an adjustment program with a longer time horizon than one or two years provides an appropriate umbrella for a sequence of adjustment loans, each financing a time slice of the program.

With the onset of adjustment lending in 1979, the Bank began to discuss general taxes with the governments of developing countries. Initially, it relied on the analysis and recommendations made by other institutions, particularly the IMF, the Inter-American Development Bank, the U.S. Agency for International Development, and the Harvard Institute for International Development. In the early to mid-1980s, the Bank began to participate in some of the tax missions led by the IMF and took
part in reviewing initial conditions and formulating policy for selected countries.

In the mid-1980s, requests from member countries for technical assistance and policy advice on taxation increased significantly. The Bank started producing its own detailed reports and recommendations, incorporating its findings in its dialogue with the government and, in many cases, making them components of adjustment lending.

The advice the Bank gives on the direction of tax policy is usually determined in the context of a broader macroeconomic framework involving expenditures, borrowing, and monetary policies. This framework is usually arrived at in consultation with the IMF and is reflected in country strategy papers and policy framework papers. As is to be expected in a period of rapid expansion and change, there has been an evolution in the nature of the advice over time.

In the early 1980s, the strategy for generating revenue was to increase the rates on existing taxes. Relatively little attention was given to the structure of the tax system and how that structure affected economic efficiency and equity. Tax administration was also rarely taken into account, being regarded implicitly as a constraint that was unalterable. Over time, the Bank's dialogue with and advice to countries have gradually expanded in scope. The Bank's advice is now more balanced, with the objectives of revenue, efficiency, and equity better integrated than before, and more practical, because administrative constraints are increasingly recognized and attempts made to alter them. Although advisers still recognize the need to generate revenue to stabilize the economy, they also advocate a policy framework that encourages more efficient allocation in private production and investment and pays greater attention to equity and administration.

Patterns in the Bank's Tax Advice

Specific measures recommended by the Bank vary considerably across countries and regions. First, there is variation according to needs. In Latin America, where fiscal deficits are the prime concern, the Bank emphasizes revenue mobilization. Also, because of the region's high and persistent inflation, the interaction of inflation and the tax system receives greater attention. In Sub-Saharan Africa, where the scope for significant additional revenue is more limited in the near future, revenue-neutral reforms are favored, and the main aim of tax reform is to remove the relative price distortions built into the existing system. Second, there is variation according to administrative capacity. For example, in Sub-Saharan Africa, where the administrative capacity is
limited, the Bank has avoided recommending full-scale VATs or indexation (even when the inflationary situation warrants it).

By and large, the Bank's advice on taxation reflects the prevailing best practices. For example, the Bank's current emphasis on broadening the tax base by recommending the VAT is clearly consistent with the consensus of fiscal professionals. In an earlier phase, both the Bank and the profession had reservations about recommending the VAT, given the complexity of administering it and given its potential regressiveness. It was considered acceptable to recommend the VAT for middle-income countries, such as Thailand and Turkey, but not for low-income countries. Concerns have subsided somewhat as the experience of Indonesia, Malawi, and a number of French-speaking African countries has suggested that simplified forms of the VAT can be applied more broadly.

It is still important to analyze the feasibility of a VAT in a given country and to design transitional arrangements before recommending its implementation. When recommending the VAT, the Bank has followed different approaches. Sometimes, as in Ghana, the Philippines, Thailand, and Venezuela, the Bank recommended studies to identify alternative policies and to determine the feasibility of implementing a VAT. Whether a VAT was to be adopted in these countries depended on the outcome of the study and on the judgment of local authorities. In other cases, the Bank has recommended the VAT as a condition of lending, in agreement with tax authorities in the borrowing country, before feasibility and design and implementation issues had been fully resolved, as in Cameroon (1989), Hungary (1986), and Tanzania (1988). In a few cases, specific conditions were laid down as to the operation of the VAT, as in Malawi (1988) and Zaire (1987). These conditions were accompanied by extensive technical assistance to help tackle problems with design and implementation.

The variety of strategies reflects perceived differences about the merits of the VAT. Where the Bank and the borrower disagree strongly, studies and reviews are chosen as an intermediate option. This approach offers the Bank an opportunity to initiate and pursue dialogue on an important policy issue. In addition, it actively involves local officials in the assessment and design of the tax to be implemented, which is desirable to secure endorsement and to ensure the sustainability of the reform. The drawback of this method is that the reform may be implemented more slowly.

Selective taxes are also increasingly addressed in Bank reports. Country economic memoranda tend to be concerned more with the revenue aspects of selective taxes on goods and services than with their efficiency and equity. Sectoral reports, particularly in the energy and transport
sectors, have analyzed more systematically how selective commodity taxes affect incentives and equity. Still, the interaction of selective taxes with broadly based taxes is discussed only rarely. In broader studies of tax reform, the Bank has also recommended moving from specific to ad valorem rates for selective taxes where inflation is a problem and coordinating adjustments in excises with the taxation of imported goods where both are subject to review.

Since the late 1980s, coordination of trade tariff reform with domestic tax reform has been increasingly recommended in Bank reports. Development economists have recognized that it is insufficient to assume that liberalizing trade will broaden the tariff and tax base sufficiently to offset revenue lost when tariffs are reduced. For example, a number of studies (such as for Kenya in 1986 and the Philippines in 1980) projected that revenue losses due to tariff reform would be negligible because items formerly subject to quantitative restrictions would move to the tariff list, imports through legal channels would increase, and gains in productivity would increase output. But these projections did not fully materialize. In Zaire (1982–85) the increase in the minimum duty was expected to offset the revenue impact of lowering the higher tariffs, but the reform was not effectively implemented. In Morocco (1988) and Thailand (1984) domestic tax measures performed poorly and tariff reductions were subsequently reversed. Advisers, aware of past disappointments and of the importance of reducing fiscal imbalances in adjustment programs, increasingly consider how tariff reform will affect the revenue yield. On a few occasions, such as in the proposed reforms in Bangladesh (1987), Malawi (1987), and, recently, India (1990), the Bank has recommended explicit and additional domestic tax measures to maintain revenue neutrality and to improve revenue generation and tax elasticity in the long run.

In some areas the Bank’s advice reflects the lack of consensus among professionals. Regarding company income taxation, there is a notable ambivalence toward the use of tax incentives to promote investment. On the one hand, advice oriented to projects and sectors tends to be sympathetic to the use of incentives. It is often argued that the issue of whether companies pay taxes amounts to a question of transfers between the government and companies. As long as projects are justified on economic grounds, the transfers are not important, although to the extent that tax incentives encourage investment and improve firms’ financial positions, they are desirable. This view is reflected in the Bank’s general support for agencies that promote investment and in the fact that it has acquiesced in the introduction of promotional measures (which often include tax concessions such as tax holidays) in such studies as those on
Korea, Malaysia, and Thailand in the early to mid-1980s. Fiscal incentives are also used to promote exports. In some cases, when the Bank gives advice on industry and trade policy, it fails to comment on existing, widely used tax concessions for exports. In other cases the Bank explicitly endorses the use of tax incentives to stimulate exports, as in the advice given to Chile (1987) and Costa Rica (1988).

On the other hand, general fiscal advice (including recommendations for reforming central government taxes) is more critical of the use of tax concessions, favoring a more neutral tax treatment across firms, industries, and assets, as evidenced in the Bank's general fiscal advice in Bangladesh, Ghana, Malawi, and Morocco. In the context of structural adjustment loans and comprehensive tax reviews, the Bank has recommended the removal or tightening of incentives in Argentina (1989), Bangladesh (1989), Brazil (1989), Ghana (1989), and Turkey (1987), among others. The attitude of the Bank's fiscal studies to export promotion is also more restrained; these studies emphasize the need to free exports from the burden of tariffs and of domestic indirect taxes but not to use fiscal measures to compensate for inappropriate (generally overvalued) exchange rates. Among the recommendations are that governments institute zero rating of exports for VAT-like taxes and establish duty drawbacks for import tariffs, as in Bangladesh, Ghana, Malawi, Nigeria, and Tanzania, or, more ambitiously, that they institute export-linked rebates, as in the case of Thailand. Although export rebates have been an effective instrument in some countries in East Asia, they have seldom been successfully implemented elsewhere because many tax officials are concerned about the loss of revenue and the potential for abuse on the part of taxpayers.

As noted above, recommendations to liberalize trade, to promote specific sectors through tax expenditures, or to introduce user charges that do not distinguish between general tax elements and sector-specific charges can result in inconsistencies between the fiscal advice given at the sectoral level and that given at the national level, particularly where general revenue constraints are serious.

In many countries, the Bank's advice on income taxation focuses on domestic taxes. In a few countries, however, international tax issues, such as tax harmonization or international tax planning, are discussed, and the Bank has helped design recommendations on these issues in countries such as Malawi (1985), Mauritius (1981), Mexico (1989), and Turkey (1987).

The Bank's diverse advice on personal income taxes reflects the differing priorities in specific situations. Sometimes, as in Chile and Costa Rica, the Bank endorsed the practice of exempting capital income to
promote savings, thereby favoring a consumption-type tax base. In Bangladesh the exemption of investment allowances was endorsed in exchange for a withholding tax on capital income. In other cases, as in Indonesia and Malawi, it was recommended that existing exemptions of interest income be removed and that income from capital be taxed.

Despite the potential importance of using presumptive indicators to assess income tax as well as taxes on goods and services, the Bank has rarely analyzed or made recommendations in this area, in part because it is not well researched and documented.

Bank reports often recommend rationalizing rates. Reducing the number of rates facilitates collection. To improve the efficiency of resource allocation, reducing the dispersion of rates and lowering the top marginal rates (of income taxes) and average rates (of taxes on goods and services) are also recommended. The Bank most often counsels rationalization of trade taxes, an area of great concern because trade taxes affect production efficiency and exports. Recommendations vary on the choice of average tariff rates and the maximum and minimum rates. The general advice has been to reduce the average effective rate of protection and its variance across sectors with a view toward more uniform tariffs—as in Bangladesh (1987), Indonesia (1987), Pakistan (1988), the Philippines (1980), and Turkey (1984). In Zaire (1985) a minimum rate was to be established in conjunction with a gradual reduction of a maximum rate. Uniform nominal tariffs were recommended by the Bank for Morocco (1984) and Thailand (1983–84), with additional time-bound tariff protection for new and infant industries. Recommendations regarding tariffs on intermediate and capital goods differ. In Latin American countries, the Bank has tended to recommend increasing them. In Bangladesh, Indonesia, Malawi, and Pakistan, however, it has recommended that high tariffs on imported inputs be reduced because they negatively affect production costs and exports and because they create anomalies where tariffs on final goods (such as necessities) are lower.

The Bank's advice on indexation reflects the difficulties of implementing an appropriate reform. The Bank often suggests little beyond adjusting the levels of personal exemption and of tax brackets, as it recommended to most countries in Sub-Saharan Africa. This position may be justified if inflation is moderate (say, 5 to 10 percent annually) or if it is severe but can nonetheless be brought under control in a few years. A primary reason for doing little or nothing about compensating for inflation is the limited administrative capacity of most developing countries. In many middle-income countries, however, the Bank has advocated comprehensive indexation; this has occurred in Argentina, Morocco, Turkey, and
Uruguay, where inflation is expected to persist and administrative capacity is judged to be adequate to handle various forms of indexation. Under this method, entries on both the asset side and the liability side of the balance sheet are adjusted to reflect the effects of inflation.

In the early 1980s the Bank gave little tax advice on the subject of tax administration. In recent years, however, with a growing understanding of the importance of tax administration, administrative reform has been recommended in nearly all structural adjustment loans, in about one-half of sectoral adjustment loans, and in numerous economic and sectoral reports dealing with taxation. The Bank's advice on administrative reform generally embodies a few recurring themes. First, the Bank usually advises constructing and computerizing data bases and particularly recommends developing a master file with numbers that uniquely identify taxpayers. Cameroon (1989), Ghana (1989), Guinea (1988), Malawi (1985), and Morocco (1989) are among the countries that have received this advice. Second, the Bank often recommends changes in procedures for filing returns and assessing taxes, both to simplify the process and to reduce lags in collection under inflationary conditions, as was the case in Bangladesh (1989), Malawi (1988), and Turkey (1981, 1983), among other countries. Third, the Bank frequently expresses concern about tax evasion and has recommended a variety of enforcement measures in Bangladesh (1989), Costa Rica (1985), Turkey (1989), and Uruguay (1987). The Bank also occasionally provides financial support to train staff and to obtain the assistance of specialists, as in Malawi (1988). In a 1989 tax study on Argentina, the Bank discussed tax administration extensively and examined the deleterious effects of tax incentives on the functioning of the tax system. Most recently, the Bank has helped to develop a tax computerization project for Thailand to improve overall tax administration.

In making technical and procedural recommendations, advisers should not take for granted that the existing managerial and organizational structures in developing countries are adequate. Frequently, the internal organization of the tax administration has come about through haphazard evolution rather than through conscious design of coordinated work and allocated responsibilities. In this environment, translating a reform into action at the working level can be a difficult task and can severely strain the ability of many developing countries to implement change. Because of the sensitivity surrounding these issues, only some Bank reports have taken them up explicitly. Among them are reports on Argentina (1989), Bangladesh (1989), Nigeria (1990), and Thailand (1983). Unfortunately, downplaying these issues may limit the scope for improving tax administration and could in some cases com-
promise the ability of the tax reform to raise revenue and improve the tax structure.

In spite of the long-term strategies implicit in the Bank’s recommendations, many of its reports show considerable optimism about the speed with which large amounts of revenue can be generated. In Mexico, Morocco, and Uruguay, for example, the expected annual increase in revenue has been 2 percent of GDP or more. In Argentina and Pakistan an increase of approximately four percentage points in the tax-GDP ratio over a five-year period was projected. Such expectations might be justified if revenue has been temporarily depressed and the underlying conditions are changing rapidly, but these circumstances are not common. Furthermore, a decline in tax collection is always a distinct possibility. A cross-country analysis over the sixteen-year period covered by the Government Finance Statistics Yearbook (IMF 1990) and its background data base shows that there are about two dozen increases of more than two and as much as seven percentage points in one year. In general, however,* these increases represent spikes, that is, recoveries after one-year drops of the same magnitude or increases followed by equivalent drops the next year. The average annual growth in revenue tends to be small, about 0.1 percent, and is rarely in excess of two percentage points of GDP cumulative over a three-year period even when tax reforms have been successful. In other words, it is not unusual for a country to experience a one-year increase of two percentage points in the tax-GDP ratio, but it is unusual for that increase to be sustained for three or more years. In general, a sustainable increase of one-half to three-quarters of a percentage point of GDP per year (net of cyclical fluctuations) is more realistic over a period of five or six years but not over longer periods.

The Bank has also tried to help its borrowers mitigate the social costs of tax reform. First, consumption taxes recommended by the Bank (such as the sales tax and the VAT) generally contain an exemption for the agricultural products and unprocessed food that account for a large share of the expenditures of low-income groups. Second, in many cases, the Bank recommends raising personal exemptions to relieve the tax burden of the poor, as was done in Brazil, Ghana, the Philippines, and Turkey. Third, the Bank often suggests heavier taxation on income-elastic items, including vehicles, petroleum products, and luxury goods, which are consumed primarily by the rich, as in the reports on Bangladesh, Ghana, and Malawi. Fourth, in a few cases (such as Brazil and Mexico) the Bank has recommended that the personal income tax

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*The exceptions represented cases in which the tax regime, for all practical purposes, had collapsed, collecting less than 5 percent of GDP in revenue.
structure be made more progressive by eliminating loopholes that benefit the rich.

Tax Advice and Technical Assistance in Adjustment Lending

The Bank's increasing involvement in tax policy is reflected in part in the makeup of adjustment lending (see table 2). During the three-year period 1987-89, forty-nine adjustment loans containing tax policy components were approved, compared with forty-five such loans during the preceding seven years. In all, during the past decade, more than 90 percent of structural adjustment loans and more than a quarter of sectoral adjustment loans have contained tax policy components. Of the ninety-four adjustment loans involving tax policy, about two-thirds (sixty-six loans) were broad structural adjustment loans and the remaining one-third were narrower sectoral adjustment loans. The share of the sectoral loans in the total has been increasing in recent years.

Apart from adjustment lending operations, the Bank has also provided technical assistance on tax issues at the request of member countries. Technical assistance covers a variety of activities such as tax studies, reviews of specific problems, and support for administrative reforms.

Implementation of the Bank's tax advice varied by the type of objectives pursued. Measures to broaden the tax base appeared to cause no particular difficulty as a group, although the rate of implementation for the VAT was somewhat higher than that for removing tax concessions. Measures to improve equity showed a relatively high rate of implementation, but advice on simplifying the tax structure often was not put into practice.

Table 2. Adjustment Loans with Tax Policy Components, 1980-89

| Period  | Number of loans | Number of conditions | Amount of loans (billions of U.S. dollars)
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1980-86</td>
<td>45</td>
<td>45</td>
<td>5.45</td>
</tr>
<tr>
<td>1987-89</td>
<td>49</td>
<td>47</td>
<td>7.18</td>
</tr>
<tr>
<td>1980-89</td>
<td>94</td>
<td>92(^b)</td>
<td>12.63</td>
</tr>
</tbody>
</table>

\(^a\) Refers to size of adjustment loan, or credit, of which tax policy is a component. No prorating is done to identify the portion that pertains exclusively to tax policy. A billion is 1,000 million.

\(^b\) Some countries received more than one loan, or credit, with tax policy components.

Source: ALCID database, Industry and Energy Department, World Bank; World Bank 1990b.
Political Risks

Governments in developing countries are often concerned that resistance to reform is insurmountable. This perception may or may not be valid, but validity in this context is less important than the perception itself, which can undermine support for the reform. To counter this problem, it is necessary to identify the likely winners and losers under reform measures. The magnitude of the gains and losses should also be estimated because interest groups must see the risks as being limited and manageable.

This undertaking may provide the governments with reassuring facts, or it may produce a warning signal if there is indeed a severe adverse effect on certain groups. If this is the case, an alteration in the design of the tax reform is warranted. Broadening the scope of the reform to ameliorate the harm or to bring about compensatory changes is one option. An example of this strategy is the Indonesia tax reform of 1984, in which lower tax rates were applied to offset the discontinuation of tax preferences. Phasing the reform in gradually is another option, as is being done in Bangladesh, where tax holidays are being removed.

Tax reform can fail for other reasons. Economic conditions may change over time and warrant a revision. The full impact of a particular measure may not be known until a few years after implementation. Administrative practices, as opposed to the reform measures themselves, may turn out to be objectionable. These factors can lead to greater resistance over time and eventually to reversals. Recent studies supported by the Bank have shown that counterreform movements are strongest when the crisis is over and fiscal balance is restored and that an incumbent administration with a weak political base is more likely to give in to pressure, thereby putting tax reforms at risk.

Technical Assistance

Inadequate local support for reform may also arise on technical rather than political grounds. The Bank's tax advice is sometimes accompanied by sophisticated and highly technical analysis that is not immediately understood by policymakers. A lack of familiarity with the issues may also give rise to skepticism about the proposed solutions. Since few of the local officials have been exposed to tax policies implemented elsewhere, even standard features of well-documented taxes may cause confusion in the design process. A sales tax reform in Tanzania in 1989, for instance, proceeded on the basis of the Bank's and the IMF's advice, but the detailed provisions were drafted locally and in haste, without
appropriate consultations with technical staff in the tax department or with external advisers. The resulting change in the sales tax structure, although superficially consistent with the Bank's recommendations, failed to take account of many important issues. Tax filing became more complicated when tax officials could not answer questions that arose, and complaints were widespread. Most of the difficulties could have been avoided with the help of specialists when the reform was being designed.

The Bank has come to grips with some of these issues. Technical assistance is provided in many cases along with policy advice. Adjustment loans normally include institutional support, such as funds to train staff, acquire equipment, and conduct relevant research. This kind of assistance often makes a difference. The fact-finding mission to Indonesia and Korea by tax officials from Bangladesh, which was funded by the Bank, played an important role in the Bangladeshi government's decision to adopt the VAT. Short-term external training for Ghanaian staff, as well as technical studies financed by the Bank, led to the conclusion that a crediting mechanism that is required for a rudimentary form of the VAT was a feasible option. More extensive technical assistance was provided in the case of Malawi, where the Bank had recommended that a policy analysis unit be created within the Ministry of Finance. This was initially staffed by a resident adviser with a team of specialists from the Harvard Institute for International Development. This assistance helped ensure that the extensive first phase of the country's policy reform was successfully implemented. However, creating an adequate internal capability to replace expatriate expertise has proven to be quite difficult.
Conclusions and Recommendations

Attention to tax reform should be incorporated into the work of the World Bank in three areas: country economic and sectoral work, lending operations, and research.

Country Economic and Sectoral Work

The importance of the World Bank's continued involvement in tax work lies in its close relationship with Bank work on trade and tariff reform, on the reform of public pricing in various sectors, on public expenditure reviews, and on issues of resource allocation and equity in structural adjustment. Tax reforms whose objective is to reduce the distortions and inequities in the existing tax system while being revenue neutral may need to be differentiated from those tax reforms whose objective is to increase revenue (while minimizing distortions and inequities) when macroeconomic imbalances are serious. In the case of the latter, a number of issues need to be addressed (see "Tax Policy Reform in Developing Countries," in section 1) before the Bank recommends increasing revenue.

Expectations about feasible revenue increases must also be realistic. Even when tax reforms are successful, a sustained cumulative increase in excess of two percentage points of GDP over a period of three to four years is rare.

Given prevailing fiscal imbalances, when the Bank attempts to identify the distortions created by the existing tax structure and to recommend less distorting alternatives, it should try to do the analysis in a revenue-neutral way—in other words, it should ensure that revenue will be forthcoming from elsewhere in the tax system to compensate for revenue lost when the most distortionary taxes are reduced (the converse should hold true if less distortionary taxes are increased).
There is a need to improve coordination between recommendations on domestic taxes and those on trade taxes as well as between recommendations on general economic taxes and those on sector-specific taxes. Some of the variation between the fiscal advice given at the sectoral level and that given at the national level reflects the lack of consensus among fiscal professionals and indicates that further research is needed (see "The Research Agenda," below).

Recommendations on tax reform need to pay particular attention to efficiency, equity, and administration. Improving tax administration is especially important.

Because the Bank’s advice applies to the long term, advisers must monitor consistency over time and follow up on past advice. When the advice is good, it is appropriate to credit any actions taken or to reiterate the advice if there has been no action. When the advice is no longer appropriate, the Bank should explain, explicitly and in writing, why it is revising or reversing its previous advice; such openness will ensure that the Bank remains credible and effective.

Adequate preparation before recommending tax reforms can avert the difficult task of undoing poorly designed reforms.

Demand for advice on and technical assistance with tax reform grew in the late 1980s, and there is no reason to assume this demand has run its course. The Bank should consider expanding its technical assistance in support of designing and implementing tax reform in particular countries. This assistance would aid in reforming tax structures and tax administrations, with the goal of integrating sectoral tax reform into overall tax system reform and complementing the technical assistance program of the IMF. Given the limited resources available to undertake such work in the Bank and the IMF, continued and stronger liaison between the two institutions will be necessary to further the agenda of tax reform in member countries.

Lending Operations

Systemic tax reform typically takes time, whereas many individual tax measures can be implemented in a single year. To date, most tax reform measures have been components of adjustment loans with primarily macroeconomic and sectoral objectives. Adjustment loans that include more tax reform measures designed to improve the mobilization and allocation of resources as well as to address concerns about equity may also be appropriate in future. However, given the longer time required to implement systemic tax reform, including the reform of tax administration, these adjustment loans should carry conditions whose schedules
match the likely pace of reform. An extension of current practice along these lines would be consistent with the recommendations of *Adjustment Lending Policies for Sustainable Growth* (World Bank 1990a). Other alternatives include technical assistance loans (technical assistance is often a prerequisite for successful implementation) or freestanding tax reform investment projects (which would principally finance the necessary improvements in tax administration, as in the case of the recent project for Thailand). Individual tax measures supported by Bank loans should emerge from a systemic perspective on tax reform that may extend beyond the scope and time horizon of the loan concerned.

When the World Bank provides advice or establishes loan conditions regarding the choice of tax instruments, the actions to be taken, the time frame, and the indicators of progress, it needs to do so based on an overall perspective of fiscal policy. For example, when the Bank recommends reducing general expenditure to restore fiscal balance, it must review the effect on tax collection and administration. Restoring fiscal balance may actually require increasing rather than decreasing expenditure on tax collection. Political risks that can undermine support for necessary tax reform must be assessed and described more explicitly.

The Bank should ensure that fiscal recommendations in project loans, as well as structural adjustment loans and sectoral adjustment loans, are consistent with the fiscal objectives of adjustment programs. For example, if publicly financed projects that are also supported by the Bank are not going to recover all financial costs, then the availability of current and projected general revenue to cover the project’s deficit should be explicitly determined and reported in project documents and provided for in the budget. If this cannot be done, other, non-project-related measures to raise public revenue must be identified and agreed on in project documents. Although full cost recovery may not be desirable for all project loans, the more the public financial outlays and obligations can be recovered through the appropriate pricing of the publicly provided goods and services the better. Similarly, procurement conditions for externally financed project material and services should not, in general, require that the government exempt project entities or suppliers from import duties and taxes. The most appropriate way to eliminate the distortions created by these duties and taxes on inputs used in production and on exports is through VAT crediting arrangements and duty drawbacks or export rebates. Only in extreme cases of administrative weakness should exemptions be used.

Technical assistance is often needed if reforms are to be successfully implemented, and it should be financed by the Bank.
Better monitoring is required, and this can be achieved by using more monitorable indicators. Many lending conditions of the tax components are difficult to monitor in practice. A change in written tax laws may not reflect the way in which the tax is actually being implemented. Enacting a duty drawback facility, for example, does not imply that exporters actually receive refunds for taxes paid. A better indicator for this purpose may be the actual amount of refund made or the number of exports receiving the refund.

With policy reforms, however, a sharp distinction must be made between policy as it is stated in the laws or administrative guidelines and as it is actually implemented. Many laws are never implemented in practice. Moreover, the method of implementation can itself be an issue. For example, in many countries a tax clearance certificate is used to deter tax evasion. Obtaining such a certificate, however, can be so burdensome that many taxpayers resort to bribery. Postoperational reviews, perhaps of a sample of loans, should be done with assistance from the Bank’s Operations Evaluation Department.

The Research Agenda

In recent years the Bank has done substantial research on taxation through its internal work program and the research support budget, which has financed research projects undertaken both within and outside the Bank. Some unresolved but important issues remain to be studied. The most significant areas for further work are:

- **Environmental and resource taxation.** There is concern in the development community that the protection of the environment and the efficient use of natural resources in developing countries are inadequate. The benefits of introducing changes are likely to substantially exceed the costs of inaction. An important question that needs to be researched is how to define the links between fiscal policies on the one hand and environmental protection and sound resource management on the other. Can taxes and other fiscal instruments be used in developing countries to impose costs on activities that damage the environment or that result in wasteful use of natural resources, including minerals, forests, soil, and water? Some of the issues relate to (a) correcting incentive problems that are implicit in policies that promote investment and growth but have adverse environmental impacts; (b) adjusting faulty price signals that result in too rapid a depletion of natural assets or that do not provide adequate opportunities for the development of
other sectors in the economy; (c) using taxes and subsidies as lower-cost instruments to replace various administrative regulations on environmental resource usage that have been difficult to enforce in countries with weak public institutions; and (d) using fiscal instruments in a cooperative effort among rich and poor countries to tackle global environmental issues such as carbon emissions and the greenhouse effect. The Bank can encourage analyses of these topics and, through its economic advice and technical assistance, can develop prudent policies for developing countries.

- **Fiscal incentives (tax expenditures).** There is increasing skepticism in the Bank and among tax experts about the use of tax incentives (as opposed to explicit subsidies) for promoting production, trade, saving, and investment in developing countries. The tendency is to give priority to the revenue-raising role of taxes by widening the tax base and to favor tax neutrality in sectoral incentives. This strategy has arisen in response to various problems encountered in administering the tax concessions cited in these pages: the creation of pressure groups, the erosion of the tax base, the presence of large fiscal deficits, the inability to enforce legislation equitably, loss of efficiency in production and investment, ineffectiveness in tax administration, and so on. While there is little disagreement that fiscal incentives are used too much and that they should be reduced, there is less agreement on the criteria to be used to identify which incentives are useful and effective. Hence it is important to do some research on whether there are better and more direct ways of addressing market failures without using tax preferences. And if not, which criteria should be used to determine and design appropriate tax preferences?

- **Tax competition and tax harmonization.** Among developing countries, there is concern about tax competition and tax harmonization. Some incentives and taxes (such as tax holidays, accelerated depreciation, tax credits, and favorable resource royalties, which are designed to attract foreign capital) have been subject to competitive responses from other countries. Given international tax arrangements and responses, how effective have these incentives been in inducing growth? Do developing countries need to worry about matching the incentives given by other countries? Do incentives granted in one country draw capital or production from other countries? Do developing countries need to harmonize taxes among themselves through multilateral or bilateral negotiation?
These are some questions that the Bank could address to clarify the debate and to establish guidelines.

- **Social security taxes.** The objective of social security in both developing and industrial countries is to provide an adequate safety net to insure against loss of earnings due to old age, sickness, disability, unemployment, and other factors. In light of the increasing emphasis in the Bank and elsewhere on protecting vulnerable groups during adjustment periods and on alleviating poverty, an important area for research is the reform of social security taxes in developing countries. The policy issues vary across developing countries, however. Some countries with long-standing social security systems are experiencing serious deficits (for example, in Latin America and the Caribbean); others, such as those in Eastern Europe, are changing the role of social security systems; still others have nascent systems (for example, in Asia) with limited coverage. Do countries tend to overestimate the amount of social security that can be provided, given levels of development and the capacity to administer large funds? What is the appropriate mix of financing mechanisms, given the economic costs of payroll taxes and budgetary transfers? What are the costs and benefits of meeting efficiency and distributional objectives by creating several funds rather than relying on one single social security fund? How do the formal social insurance schemes interact with informal private support mechanisms at the community and family levels?

- **Tax arrangements for centrally planned economies in transition.** As centrally planned economies embark on their transition to market systems, they will have to restructure their tax systems. The Bank does not at present have much knowledge of the options available to these countries. What kinds of fiscal instruments can be administered? When should they be introduced? As countries rely less on negotiated transfers of surpluses from state-owned enterprises to the central government and more on a decentralized, market-based set of instruments with predetermined bases and rates, what difficulties will be encountered (see box 10)?

- **The reform of intergovernmental fiscal relations.** Designing the allocation of taxing powers and the arrangements for intergovernmental fiscal transfers is critical because these components shape subnational expenditure priorities and capabilities. If poorly designed, they can impede efficient and equitable provision of public services and contribute to the creation of overall fiscal deficits. The reform of subnational fiscal structures and their relationship with
the central government is important both in developing countries and in centrally planned economies in transition. Identifying practical rearrangements requires additional research.


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