# **Public Finance in Developing**

## **Countries**

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### **Abstract**

A "good" tax system for developing countries was once considered one based on progressive income taxes. More recently, emphasis has been placed securing revenues from broader bases at lower rates from consumption as well as income taxes. A framework for evaluating public finance structures and institutions in terms of revenue and spending as well as the fiscal balance is set out, and some key areas such as VAT, earmarking, tax evasion and administration, and non-tax revenues are discussed. Increased globalization challenges national tax bases and make it even more important to improve local fiscal expertise and institutions in developing countries. Finally, if local governments are sufficiently reliant on own revenue to promote fiscal discipline, decentralization may produce gains in both

efficiency and local accountability that may outweigh any costs that might arise from the loss of some macroeconomic control and altered investment priorities.

**Keywords:** public finance, fiscal advice, fiscal decentralization, taxation, globalization, non-tax revenue

## Introduction

Public finance is not just about money. Its subject matter includes not only all aspects of public sector finances but also the structure of the public sector and fiscal institutions as well as the broad objectives and rationale for government activity. We focus here on how governments raise resources to finance spending, without regard to what spending is financed. Even so, our scope is still substantial, not least because some analysis of the nature and efficiency of public spending is needed for a proper understanding of financing sources.

Public finance policy results from a complex interaction between ideas, interests, and institutions. The best public finance system for any country is one that reflects its economic structure, its capacity to administer its public finances, its public service needs, and its access to different sources of finance such as taxation, debt, or aid. The public finance system of any country is both path-dependent and context-specific, reflecting the outcome of complex social and political interactions between different groups in a specific institutional context established by history and state administrative capacity. Influence does not flow only in one direction, however, so how the public finance system operates may influence not only the context but the nature and the outcomes of such interactions. Though long dominated by economists, the study of public finance has important political and administrative dimensions

that have recently received increasingly close attention from historians and those concerned with improving policy outcomes in developing countries.<sup>1</sup>

## Development taxation: advice and practice

Developing countries have heard many changing messages about development taxation. Fifty years ago the academic ideal was a broad-based progressive personal income tax that included capital gains and was integrated with the corporate income tax to minimize the economic distortions induced by taxation (Auerbach 2010). Unsurprisingly, the advice offered to developing countries by foreign experts was to adopt such a tax. Indirect taxes were seen as at best a necessary evil. Taxes on international trade (exports and imports), like local and regional (subnational) taxes, were generally neglected. Most advisers thought higher tax-GDP ratios were needed to finance development expenditure. In some instances, higher marginal tax rates were also suggested in order to further income redistribution.<sup>2</sup>

By the 1990s, however, a new development tax model had emerged (World Bank 1991). The central element of this "broad base low rate" model was not a comprehensive progressive personal income tax but a VAT imposed at a single rate on a broad base. VAT took center stage partly because the widespread move toward lower and more uniform import tariffs

made it the tax most likely to fill the resulting revenue vacuum in developing countries.

Income taxes continued to play an important role, but more emphasis was put on lower rates as having fewer negative effects on economic efficiency and reducing incentives to evade or avoid taxes. As in the earlier approach—though with equally little success—expert advisers usually discouraged incentives and other concessions that reduced the tax base. Such traditional "sin" excises as those on cigarettes, liquor, and petroleum products continued to be important, and more emphasis was given to improving the use of the property tax by local governments and to imposing user charges on such excludible public services as irrigation and power. As before, little or no attention was paid to payroll taxes or to non-tax revenue sources. Developing countries continued to be urged not only to "tax better" but to "tax more."

In reality, however, few developing countries increased their tax-GDP ratios during the post-war decades. Moreover, although developments in theoretical and empirical public finance during this period generally supported greater reliance on consumption taxes, the relative importance of "direct" (income) taxes and "indirect" (consumption) taxes also hardly changed in developing countries, despite the rise of the VAT (Martinez-Vazquez, Vulovic, and Liu 2011).<sup>3</sup>

Although the tax-to-GDP ratio in developing countries moved from around 11 percent in the 1950s to 16–17 percent by the 1970s, Table 1 shows that it has since hardly changed despite the adoption of much more ambitious goals in the UN Millennium Project (2005). Developed countries collect roughly twice as much in taxes as a percentage of GDP, and the imbalance is even greater with respect to non-tax revenues if oil producers are omitted. Strikingly, however, if oil producers are included in the developing country group, the share of non-tax revenues actually exceeds that of tax revenue mainly because of oil revenues. Other important "supply-side" determinants of revenue levels are per capita GDP and the non-agricultural share of GDP. Tax levels also reflect such "demand-side" variables as the quality of governance, inequality, the extent of informality, and tax morale (Bird, Martinez-Vazquez, and Torgler 2008).

Although taxes on international trade as a percentage of total taxes in developing countries declined from about 32 percent in the 1970s to recent levels of only about 20 percent, the share of domestic indirect taxes, mainly the value added tax (VAT), rose from 25 percent to 40 percent (Table 2). Taxes on personal income (including social security taxes) remain unimportant compared to the corporation tax. In contrast, in developed countries personal income and social security taxes, which contribute about 50 percent of total tax revenue, are much more important than taxes on corporate profits. The mix of taxes employed varies across regions as well as countries, with VAT being particularly important not only in the

(usually poorer) sub-Saharan African countries but in the considerably better-off (though unequal) Latin American countries.

The "sea change" in tax thought and tax advice from the 1970s to the 1990s appears to have had some effect. Not only did the VAT become important in many developing countries but income tax rates declined almost everywhere (Peter, Buttrick, and Duncan 2010). If the advice was sound, developing countries might now perhaps be considered to be taxing "better" in some respects. However, they are definitely not taxing more since the average tax-GDP ratio hardly moved during the past thirty years. Arguably, as Kaldor (1963) noted long ago, this striking inertia in tax levels may reflect not so much the inherent difficulty of raising the effective level of taxation as the equally persistent reality that it is hardly ever in the interest of the political elite to do so.

## Public finance principles and institutions

Public finance encompasses much more than taxes, and the array of goods and services that are publicly provided varies even more widely than taxes across countries, depending on such things as preferences and the level of development. Nonetheless, a century of thought and

practice around the world has produced three commonly accepted principles of good public finance.<sup>4</sup>

First, using resources to finance public services should not result in a sacrifice of private value higher than the value of the public service produced. In other words, the last unit of resources transferred to the public sector—the Marginal Cost of Funds (MCF) for public services (in terms of the private goods forgone)<sup>5</sup>—should just equal the marginal social benefit from expenditure on public services. Over time, this rule is closely related to the practical budgetary principle of maintaining aggregate fiscal discipline to ensure that government spending does not exceed the resources that citizens (who presumably benefit from the expenditures) are willing to allocate to it through the political process. If fiscal discipline is not maintained, countries may run large and persistent budget deficits—deficits that both reflect serious underlying problems and make those problems worse the longer necessary corrective action is delayed. One of the most important changes in recent decades is that an increasing number of countries that have undergone such experiences have tried to reduce the likelihood of future indiscipline by establishing such fiscal institutions as more comprehensive and transparent budgets as well as specific fiscal rules like fiscal responsibility laws (Liu and Webb 2011) that restrain the level and nature of government borrowing.

Second, to maximize national economic welfare the benefits received from the last dollar spent on each public service should be equal. While it is impossible to allocate budgetary resources this precisely—both because we cannot actually measure well-being with such precision and because it is not clear how meaningfully one can compare the benefits from the last dollar spent on the army to those from the last dollar spent on health—the idea is both clear and correct. Resources are scarce in developing countries, so wasting those resources by spending them on something worth less than the opportunities forgone is a dead loss. In practice, the best way we know to improve the allocation of public resources is to measure and assess both public-sector performance and the economic cost of public services as well and as transparently as possible. To reflect the economic values of resources used and outputs produced, governments need to use accrual accounting (with due recognition given to the use of capital goods), just as private-sector firms must do in most countries. Unfortunately, most developing countries still have only cash-based government accounts as well as very weak institutions for budgeting and financial and performance auditing. <sup>7</sup> Institutions that promote transparency and accountability are as essential as good electoral systems to strengthening the ultimate development outcomes associated with public services.

Third, such institutions are equally essential to securing an acceptable level of operational effectiveness and efficiency. In principle, services provided should promote the intended social outcomes (effectiveness) with as little leakage or waste as possible (efficiency). Again,

however, few developing countries have such institutions in place. Although agencies such as the IMF and the World Bank have devoted considerable effort to providing technical assistance in developing such institutions in some countries, not all that much success is yet evident. Moreover, developing a practical definition of public-sector waste—an issue that is as important with respect to the need for public finance as energy conservation is to the need for energy—does not as yet form part of the policy agenda anywhere.

## Some issues in development finance

Although to some extent the second wave of development tax thinking mentioned earlier led many countries to adopt tax regimes that were economically more sensible in important ways, one consequence of the shift of attention to consumption taxes was that less attention was paid to the issue of equity. This neglect was justified partly because of the evidence that few countries did much redistribution through taxation (Chu, Davoodi, and Gupta 2000) and partly because many believed it was more efficient and effective to deal with redistribution on the spending side of the budget. As always, however, both expert advice and practice varied widely in both time and space, so the few issues discussed here do not tell the whole story.<sup>8</sup>

#### The VAT

Although value added tax (VAT) was widely adopted, not all the VAT design principles advocated (Ebrill et al. 2001) were widely followed. Most VATs do have a broad base encompassing sales of both goods and services (with some exclusions) between businesses as well as retail sales. However, few are levied at a single rate above a threshold that excludes small business, and not all fall only on consumption (that is, provide full tax credits for capital goods purchases and, for cross-border transactions, zero rating of exports). The tendency to impose low thresholds is surprising, since not only is the administrative cost of securing revenue from small taxpayers much higher per dollar but there is also strong evidence that tax compliance costs are highly regressively distributed and have the strongest impact on small businesses. There is still much to be learned about the design and effects of VAT in developing countries (Bird and Gendron 2007).

#### Income taxes

Most countries lowered income tax rates. However, personal income taxes, though limited in scope, continue to provide the most progressive element in most tax systems. Most countries provide exemptions for saving and other presumably good things, and tax different income

sources, especially types of capital income, at different rates. Such "schedular" taxation, as it is called, results in horizontally inequitable treatment of taxpayers, but it can be administratively more effective and may have a sound economic rationale (Bird and Zolt 2011). A more difficult question remains the appropriate treatment of corporate profits, especially in countries with significant informal sectors and growing cross-border income flows.

### **Earmarking**

Earmarking taxes to finance particular activities, though almost universally condemned by tax experts, is widespread. Properly designed and implemented earmarked taxes may sometimes be justified as benefit taxes that act as a kind of collective user charge—gasoline taxes, for instance—gathering revenue from those who use a public service in order to fund its development. In this case, the benefits from the spending may perhaps be considered by the beneficiaries to be worth at least the taxes they have to pay. However, most earmarking serves no such allocative function (Bird and Jun 2007). Non-benefit-related earmarking is sometimes justified as establishing a link between taxes and public service spending, thus presumably improving tax morale (for example, an education tax was added to central taxes in India to fund education). Although increasing morale is a good idea, such false connections

may end up increasing rather than reducing the distortionary effect of public finance policy. Much the same can be said even when a "good" tax—one intended to ensure that buyers of particular products take their full social costs into consideration— is earmarked to a related "good" expenditure. An example is a "green" tax, like one on carbon-based fuel, linked, say, to incentives to use wind instead of coal for power generation. It is difficult to calculate the "right" level of either such taxes or such expenditures. Tying together two complex decisions by funding one from the other is unlikely to make either budgetary decisions or policy outcomes better.

#### Tax evasion

Tax evasion looms large in developing countries, with negative consequences for economic efficiency and equity. Evasion causes effective tax rates to differ on different activities, resulting in resource misallocation and equity violations. Business risks increase.

Administrative responses to evasion, such as requiring detailed record keeping or enhanced tax investigation activity, raise taxpayer compliance costs and efficiency losses. Agriculture, small business, and the informal sector are always hard to tax properly and constitute a much larger share of the potential tax base in developing countries (Alm, Martinez-Vazquez, and Wallace 2004). One approach to this problem is simply to exclude very small activities from

taxes by imposing a high threshold. In the case of the VAT, since those below the threshold (or unregistered) do not receive input credits, those outside the system are in effect indirectly taxed. A more explicit approach is to impose a simplified, usually presumptive, tax regime linking tax liability to some business characteristic more readily observed than income, sales, or work hours (such as location, assets, or profession). However, there is little evidence either that most such systems are well designed in terms of relevant factors (such as business margins and administrative and compliance costs) or that their effects on revenue, efficiency, and distributional goals are desirable.

It is not always easy to distinguish tax evasion (illegal activity) from tax avoidance (legal ways to reduce taxes, for example by splitting income or structuring transactions to produce more favorable tax results). Tax avoidance is more important with respect to wealthy families and formal sector firms, particularly those with cross-border transactions. The battle to close tax loopholes and the continuous need to patrol the borderline of legality means that even the poorest countries often need at least some of their "best and brightest" public officials in the tax department. Nonetheless, the key elements in countering tax evasion are simple: good tax design, a capable tax administration, a supportive legal system, and at least a modicum of trust between the state and its citizens. Good tax design includes collecting necessary information through withholding and in other ways, as well as the appropriate design of thresholds, penalty systems, and, where appropriate, presumptive features. A capable tax

administration is needed to utilize information effectively and to take appropriate action. If taxpayers fail to comply, administrative controls and penalties come into play. If taxes are simply not paid, actions need to be taken to intercept income streams or confiscate assets as necessary. Especially critical though often lacking is audit capacity, which requires skilled (and scarce) staff resources. Finally, for even the best administration to be effective, it needs to be supported by a sound legal system and to operate in an environment that does not require it to face outright opposition from all its actual and potential "clients."

#### Tax administration

In the end, controlling tax evasion depends on sound tax administration. As economic reality changes with development, so must tax administration. <sup>10</sup> In recent years, the most dramatic changes have been in the use of information technology (IT), not only in automating most tax records and procedures but in becoming the main interface between taxpayers and the tax administration. Increasingly, countries are moving to web-based systems of filing and payment, and making more use of IT's capacity to develop and apply risk-based audit systems that enable them to concentrate scarce administrative resources on those taxpayers and activities most likely to cause difficulties, and to strengthen internal control systems to ensure that tax officials behave properly in their relations with taxpayers. <sup>11</sup> Other elements of

"smart" tax administration include emphasis on establishing good working relations with both the immediate "clients"—that is, the businesses that actually collect and remit most taxes—and with the ultimate client, the public in general, as well as with others engaged in similar activities both within the country—for example, separate customs departments or state pension funds or subnational tax authorities that deal with many of the same clients—and tax departments at the other end of cross-border transactions. Some countries have unified all their revenue collecting departments; some have converted their tax departments into independent revenue authorities (generally to permit greater managerial flexibility and to delink salaries from those of the general civil service); yet others have, without going so far as to revert to the "tax farming" of early modern Europe, outsourced some functions to the private sector to various degrees. When examined closely, tax administration at the beginning of the twenty-first century is a surprisingly dynamic and innovative industry and remains a challenging and important task for developing countries.

#### Non-tax revenues

Every country collects revenue from sources other than taxation: indeed, in some, notably oil-producing countries, non-tax revenues may exceed tax revenues. However, surprisingly little effort has been made to think most non-tax revenue issues through systematically. Some

points are obvious. For example, when government is a monopolistic provider (of assets, use rights, or services) and consumption is voluntary, in principle prices should be set to cause as little efficiency loss as possible, with each revenue source being exploited to the point at which its MCF equals that of every other source (given overall revenue requirements).

Examples include the sale or lease of mining rights, forest exploitation, and airwave spectrum as well as seignorage. Since government is the sole supplier of the monetary base in most countries, it reaps revenue—seignorage—from doing so (Buiter 2007) and may, in principle, even impose an inflation tax (a tax on holders of money) up to the point at which the MCF of doing so is equal to that of other revenue sources. Although one may not wish to emphasize this particular point to governments that are already, in most cases, finding it all too difficult to maintain aggregate fiscal (and monetary) discipline, the general rule about exploiting monopoly pricing powers as a revenue source through auctioning off "rights" to resources in as competitive a market framework as possible needs more attention than it has usually received in developing countries.

Countries rich in natural resources whose governments need not rely on taxation are sometimes said to suffer from a "natural resource curse," in the sense that ownership of revenue sources makes governments less accountable to citizens, leading to poor governance institutions (Collier 2007). In principle, however, resources can be a blessing rather than a curse, if use rights to resources are properly priced both in terms of their initial allocation—as

by auctioning use rights rather than allocating them to friends (or those who pay the largest bribes)—and proper public-sector pricing rules are applied as resources are exploited. Of course, even if the MCF of natural resource earnings (taking into account their effect on weakening governance institutions) could be properly calculated, it is difficult to imagine that rational politicians would ever prefer to tax citizens directly rather than tax resource revenues.

In practice, often the most immediate public finance issue facing resource-rich countries is not how much to exploit their advantages—they tend to figure this out fairly well—but rather how to use the revenue once they have it: for example, whether to use it all for current expenditure—sometimes for current subsidies (to fuel, for instance), sometimes, more sensibly, for asset (including human capital) creation—or to put some of it aside (that is, invest it abroad) for the "rainy days" that reliance on volatile resource prices often entail.<sup>12</sup>

Whether commercial exploitation of natural resources, both renewable (such as from forests) and non-renewable (oil), is undertaken by the public or private sector, it is important to capture economic rents from resource exploitation for public purposes. Reliance on corporation taxes and royalties may not do this, with royalties in particular being economically inefficient. Developing countries have in recent decades adopted a variety of methods to capture resource rents such as special "windfall" taxes linked to excess profits or

production, equity participation by the host government, improved assessment of multinational profits (by curbing transfer pricing abuses), and attempting to encourage local value added by imposing export taxes on unprocessed natural resources. Of the different methods of capturing resource rents, auctioning of exploitation rights, cash flow taxes with full loss offsets, and government equity participation are, in the absence of environmental externalities, least inefficient in economic terms, and the first two can, in principle, ensure that all economic rents are captured by the government (Boadway and Flatters 1993). In practice, however, since it is hard to achieve theoretically ideal auctions and cash flow taxes, and equity participation at best permits partial capture of economic rents, production royalties, export taxes, and leases for exploitation rights are widely used, with efficiency and fuller rent capture being traded for more certain revenue.

### Debt finance

Most governments finance some spending by borrowing, which may make good sense when the funds are used for investments that generate returns sufficient to cover the costs of borrowing. The main costs of debt finance are "crowding out" private investment and the fact that the interest burden of debt pre-empts resources for public services. Excessive debt finance can all too quickly become unsustainable and lead to excessive inflation when

borrowing is domestic (ultimately financed by central bank monetary emission) and, when the resources have been borrowed from foreign lenders, even to the equivalent of government bankruptcy. Defaults in such cases often need bailout support from international institutions that require the imposition of austerity programs in exchange. The consequent adverse impact on a country's income and consumption standards is often attributed proximately to the foreign demands but ultimately results from the original excessive recourse to debt finance.

International bailouts of heavily indebted countries are always difficult not only to arrange but to assess, owing to the need to balance the costs of imposed austerity on citizens of affected countries against the costs to the world as a whole arising from the increased moral hazard of future bailouts if the consequences of fiscally irresponsible behavior are unduly softened. There are far too many unknowns in this area for anyone to be able to assess with any confidence the appropriate MCF of debt finance, which is one reason why countries should have recourse to such finance only with care and within strict limits.

### Fiscal decentralization

Fiscal decentralization has in recent years become a concern in many developing countries. In economic terms, the most important benefit from decentralization is the increased efficiency

(and consequent welfare gain) that comes from moving governance closer to the people.

Some have gone further and argued that fiscal decentralization may improve welfare not only directly but also by contributing to economic development, revenue mobilization, innovation in public service delivery, accountability of elected officials, local government capacity development, and grassroots participation in governance.

To attain such benefits from decentralization, subnational governments ideally must have the power to control their employees and local residents must have the power to control their governments (normally through elections). Moreover, there must be sufficiently accurate information to enable voters to evaluate the fiscal decisions of their local governments as well as sufficient incentive and interest for them to exercise their power responsibly.

Unfortunately, in many developing countries few if any of these conditions are satisfied. In fact the subnational tax share in total taxes in developing countries is less than half the share in industrialized countries and has hardly changed in the last thirty years (Bahl and Bird 2008a). Most subnational spending in developing countries is financed through transfers, and the few taxes that subnational governments have are often costly and difficult to administer.

This is consistent with the traditional theory of fiscal federalism, which prescribes a very limited tax base for subnational governments. The only good local taxes are said to be those that are easy to administer locally, are imposed solely (or mainly) on local residents, and do

not raise problems of harmonization or competition between subnational—local or regional—governments or between subnational and national governments. The only major revenue source that passes these stringent tests is usually the property tax, with perhaps a secondary role for taxes on vehicles and user charges and fees.

There are good reasons why central governments are often reluctant to give much tax discretion to local governments. They may fear losing macroeconomic control. Fiscal decentralization may shift resources from central governments that have higher rates of capital spending to regional and local governments that spend relatively more on consumption goods and services, thus harming national growth. Decentralization may shift the composition of public capital investments away from national priorities. Moreover, if fiscal decentralization takes the path of increasing reliance on own source revenues, then local governments with greater fiscal capacity—such as large cities in which there is both a larger tax base that is easier to reach and a better chance of developing the administrative capacity to collect taxes—gain most, and regional inequality is likely to increase. Revenue decentralization may also increase administrative and compliance costs.

Nonetheless, recent reappraisals of fiscal decentralization make a strong case for increasing local tax autonomy (Weingast 2009). Local residents are likely to hold officials more accountable if local public services are financed to a significant extent not from central

government transfers but from locally imposed taxes and charges that they (local residents) must pay. Local taxes should both be visible to local voters and large enough to impose a noticeable burden (one that cannot be easily exported to non-residents). Reliance on own-source taxes also has the important advantage of imposing fiscal discipline on subnational governments. Requiring local governments to finance a greater share of financing from own revenue sources drives up the tax price of public services and hence tends to reduce upward pressure on subnational government expenditures. In contrast, heavy reliance on intergovernmental transfers—the common situation in most developing countries—has the opposite effect of expanding local demand for increased public services (financed largely by others) unless care is devoted to ensuring that transfers have no effects at the spending margin. Unless local governments have sufficient freedom to alter the level and composition of their revenues, neither local autonomy nor local accountability is likely to be achieved.<sup>14</sup>

## Some open questions

### The choice of revenue instruments

Tax experts now understand fairly well the efficiency aspects of taxation even in the far from optimal—second-best and third-best—worlds in which real policy operates. However, though sometimes technically brilliant, little of this work has had much impact on practical policy design, in part because as yet only preliminary efforts have been made to incorporate limitations on administrative capacity into the analysis. Applied tax policy practitioners, such as those from the IMF and the World Bank, necessarily continue to rely to a considerable extent on more pragmatic "expert practice" rules to guide policy. Unfortunately, some such practices are based more on authority than on evidence for support. Moreover, even when both theory and empirical evidence support recommendations—as, for example, for relatively high VAT thresholds (Keen and Mintz 2004) and very limited use of tax incentives (Klemm and Van Parys 2012)—such advice is often ignored.

Other examples are not hard to find. For instance, the use of selective consumption taxes on presumed "luxury" goods as a means of indirectly taxing the rich in an effort to increase progressivity has long been suggested (Musgrave 1969). However, not all such goods are

consumed by the rich, and even to the extent they are, the final incidence of such taxes need not fall entirely on the rich, so whether such taxes do much to increase progressivity is open to question. <sup>15</sup> Much the same can be said about such other common features of indirect taxes as exempting or subjecting to lower rates such basics as food and fuel: studies have shown that concessions to fuel are generally highly regressive, while most of the benefit from concessions to food also accrues to the non-poor. Sometimes it may still seem sensible to provide relief in this distortionary (inefficient) and relatively ineffective way rather than not at all, but such delicate trade-offs between equity and economic and administrative efficiency are almost invariably necessarily made more on the basis of judgment than hard evidence. Although user charges and taxes on negative externalities (like carbon taxes) may be both more attractive in efficiency terms and even have distributionally attractive effects to some extent, little careful country-specific research has been done either on the economics of such sources or on why countries at all levels of development have been so reluctant to utilize them.

#### Globalization and national tax bases

With countries increasingly engaging in cross-border economic relations, the expansion of what may be called the global fiscal commons—potentially taxable entities or transactions

with some characteristics involving more than one jurisdiction—gives rise to both risks and opportunities. The global fiscal commons in this sense includes multinational business, "footloose" industries, cross-border portfolio investors, FDI investors, and mobile skilled workers or professionals as well as those engaged in illicit activities such as the drug trade. There are no universally accepted norms for sharing property rights in the fiscal commons between countries (Bird and Mintz 2003). In practice, the main ways in which tax access to property rights are currently shared are through a network of bilateral income tax treaties, most of which are patterned on OECD or UN model treaties (Das-Gupta 2012). National tax base erosion in the commons occurs when the combination of tax treaties and particular tax policies in countries other than "legitimate" source or residence countries—tax havens—allows cross-border flows to move out of the legitimate tax base. Led by the OECD (1998), coordinated international action against tax havens and international administrative coordination against cross-border tax evasion have become important features of international taxation. However, economic assessment of the impact of these developments on, for example, international economic efficiency or developing country tax bases is still limited.<sup>16</sup>

A persistent feature of international taxation is the continuing taxation of cross border income and trade flows by origin countries—on "entitlement" or simple "possession" grounds—even though widely accepted tax principles advocate destination taxes. Origin-based taxation (for example, through source withholding taxes) is not only administratively simpler for countries

facing capacity limitations, but may be one way to limit international tax base erosion. An important question is therefore whether, and under what circumstances, it may make sense for countries, individually and jointly, to tax more on an origin (source) than on a destination (residence) basis. Although tax experts have long argued that the destination basis is economically superior from the perspective of the world as a whole, there are no conclusive arguments or evidence demonstrating that this is the best possible outcome for all, let alone for developing countries either individually or as a group. Further exploration of this fundamental question about how best to deal with the fiscal reality of the global fiscal commons in the absence of any encompassing international governance structure remains a high priority issue. Immediate resolution seems unlikely, however, since it is far from clear that it is possible (let alone fruitful) to discuss the "global" efficiency or equity of the international fiscal system when there is no international fiscal system.

#### Global taxes

Nonetheless, the recent financial crisis has led to a revival of interest in the possible desirability of taxes on financial activity (particularly international financial activity) or on financial institutions, with major reports from organizations, national governments, and NGOs playing a prominent role in this debate. <sup>17</sup> As yet, however, little is really known about

how such taxes might work in situations where both national and international financial regulatory systems are in flux and where countries have been unable to work out how to tax financial sector activities even within their domestic VAT systems (Boadway and Keen 2003).

Such global tax proposals include, besides taxes on currency transactions or financial institutions, taxes on carbon emissions, multinational profits, and even airline tickets. With improvements in information technology and more sophisticated global financial institutions, such taxes may now be feasible (Schmidt and Bhushan 2011), but little is known about their effectiveness and economic impact. Tobin (1978) originally proposed setting an internationally coordinated (low) rate with collection and use of tax revenue by the levying country; his focus was on the policy impact of the tax itself and not on the revenue from the tax. Other proposals see such taxes as a means of enhancing financial resources for global public goods, including environmental protection, poverty alleviation, and health programs, through new or existing multilateral institutions. The more extreme proposals even suggest tax collection by a (nonexistent) global taxing authority. The prospect that a sufficient number of countries will agree to such a global tax seems limited, particularly if collection is to be by a global tax authority.

A more multilateral approach has been taken with respect to the international aspects of indirect taxation. With World Trade Organization (WTO) coordination, taxes on international trade in goods and also to a limited extent on certain services have been gradually reduced worldwide, leading to greatly increased international trade. Unfortunately, since border taxes on trade were easily collected even by weak fiscal administrations, they were an especially important revenue source for poor countries and the evidence is that some countries have proved unable to replace trade tax revenues from other sources (Baunsgaard and Keen 2010). The only answer for such countries may be again to impose higher taxes on cross-border trade in one way or another. As Stiglitz (2010) suggests, in some circumstances it may even be efficient as well as effective for them to do so. In practice, however, no one has yet worked out the details of a feasible and desirable strategy to restore the lost fiscal base of poor countries without forgoing most benefits of trade liberalization.

#### Is advice useful?

One lesson has clearly been learned over the last fifty years: "no one size fits all" with respect to public finance in developing countries. Revenue analysis and prescription needs to be tailored to fit the specific circumstances of each country, taking into account such critical factors as the interaction between taxes and other public policies (including transfers and the

regulatory framework), the number of tiers of government and the institutions shaping intergovernmental relations, and the extent of globalization. Close attention also needs to be paid to the specific reform environment and process. The quality of administration and level of development are key considerations, as is the extent of political support for reform and local ownership of reform by such key stakeholders as fiscal professionals (accountants, economists, and lawyers), elites, taxpayers more generally, and, not least, such critical third parties involved in the taxing process as banks.

Despite these cautions, some broad public finance lessons have emerged from past experience:

- Fiscal indiscipline as manifested in persistent and large budget deficits (or surpluses) has large economic growth costs.
- To avoid this outcome, good institutions for both the revenue and spending sides
  of the public sector are crucial.
- Good revenue structures for developing countries tend to include a broad-based indirect tax, typically the VAT, supplemented by selective excises, income taxes on corporations and individuals, and some non-tax revenues from areas where the public sector has monopoly power. Tax concessions on the one hand and high

rates on the other are to be avoided. Recourse to debt finance should be limited to the extent possible.

- Decentralization and local governments still tend to be neglected. Enhancing local
  government revenue capacity so that a greater share of local spending is financed
  by own revenue may have efficiency and accountability benefits.
- No country can develop its public finance system without taking into account the increasingly important international dimension of public policy.

In the long term, sustained efforts focused on building institutional policy development and implementation capacity, both within and outside government, and collecting and analyzing information to assess the impact of fiscal reforms appear to be the best—perhaps the only—way countries can develop sustainable fiscal systems. History tells us that this process takes time and much effort, and that each country must find and follow its own path to success within the evolving international setting.

Table 1: Tax levels: Revenues as a percentage of GDP<sup>a</sup>

Country groups	1970s	1980s	1990s	2000s <sup>b</sup>	
Industrialized	30.1	33.7	35.5	33.4	
Developing	16.2	17.3	17	17	
Total <sup>c</sup>	19.8	21.6	22.6	21.8	

<sup>(</sup>a) Decade averages for countries for which data available.

- (b) Based on data for the early part of the decade.
- (c) Including "transitional" post-Soviet countries not included in either of the two previous groups.

Source: Bahl and Bird (2008), calculated from IMF data.

ble 2: Tax structures: Tax categories as a percentage of total taxes <sup>a</sup>						
Income tax	1970s	1980s	1990s	2000s <sup>b</sup>		
Industrialized	35.5	37.8	38.6	53.8		
Developing	29.6	28.6	27.6	28.3		
Total	30.7	30.2	29.7	28.5		
Indirect taxes						
Industrialized	27.2	29.4	30.5	19.8		
Developing	25.2	29.3	34.9	40.1		
Total <sup>c</sup>	25.3	28.9	34.2	39.0		
Taxes on internation	al trade					
Industrialized	4.6	2.8	1.0	1.0		
Developing	32.4	30.7	25.6	19.0		
Total <sup>c</sup>	25.2	23.8	18.2	14.1		

For table notes and source, see Table 1.

<sup>&</sup>lt;sup>1</sup> Tilly (1990) was particularly influential in this respect in leading scholars interested in political economy aspects to focus more on fiscal questions, as in the studies included in Brautigam, Fjeldstad, and Moore (2007) and Martin, Mehrotra and Prasad (2009).

<sup>&</sup>lt;sup>2</sup> A more detailed appraisal of tax thought and practice in developing countries over the last fifty years may be found in Bird (2011).

<sup>&</sup>lt;sup>3</sup> Direct taxes include social security taxes, which are much more important in developed than in developing countries; indirect taxes include excises, which, like customs duties, generally declined in relative importance in all countries.

<sup>&</sup>lt;sup>4</sup> An introduction is in Das-Gupta (2010); for the basic theory, see Slemrod and Yitzhaki (2001) and for the practitioner's perspective, see Diamond (2006) and Schiavo-Campo and Tommasi (1999).

<sup>&</sup>lt;sup>5</sup> For full discussion of this concept, see Dahlby (2008).

<sup>&</sup>lt;sup>6</sup>The less common practice of running large and persistent budget surpluses—found sometimes in natural resource-rich countries—is also mistaken in the sense that the public sector is pre-empting national resources without providing any compensating value. Although channeling resources from variable sources like mining revenues into a stabilization fund to smooth public spending over time often makes sense, the discipline required to do so seems to be as hard to achieve as to maintain aggregate fiscal discipline in general.

<sup>&</sup>lt;sup>7</sup> For discussion, see Athukorala and Reid (2003). It is essential to keep a close eye on the flow of cash through the public sector to reduce peculation, but the best way to do so is not to revert to cash accounting but to establish a single treasury account to which all revenue flows and from which all expenditure comes.

<sup>&</sup>lt;sup>8</sup> For useful reviews of the relation between tax theory, tax advice, and practice from different perspectives over the years, see Goode (1993), Barbone et al. (1999), Stewart and Jogarajan (2004), and Bahl and Bird (2008b). On the whole, an early conclusion about the relationship between theory, empirical evidence, and policy advice still holds: "Since the scientific validation of reform proposals is beyond anyone's reach, all that remains is a cheerful pragmatism grounded only on a mixture of professional commitment and ethical judgment" (Toye 1989: 198–99).

<sup>&</sup>lt;sup>9</sup> Counterbalancing these arguments, the higher the threshold the greater the differentiation between those in the VAT net and those outside it: the result may be increased risk (and ease) of evasion.

<sup>&</sup>lt;sup>10</sup>For discussion, see Bird and Casanegra de Jantscher (1992), Das-Gupta (2002), and Hasseldine (2011).

<sup>&</sup>lt;sup>11</sup>Historically, controlling corruption associated with taxation has always been a central concern of governments (Webber and Wildavsky 1986). However, reliable estimates of the revenue effects or economic costs of corruption are hard to find, and other than such broad prescriptions as simplifying the tax system, reducing the administrative discretion of officials, and increasing independent monitoring, many aspects of how to reduce the corruption-proneness of revenue systems remain poorly understood.

<sup>&</sup>lt;sup>12</sup> Few countries manage such issues as well as Singapore, which (despite its lack of any natural resource base) has had fiscal surpluses in most years since its inception, and has carefully balanced its use of these surpluses between asset creation and general and conditional current transfers to citizens.

<sup>&</sup>lt;sup>13</sup> A recent trend in the provision of public services is through outsourcing debt to some form of "public-private partnerships" such as private finance initiatives (PFI). The idea is to add to resources for public services while transferring fiscal expenditure risk to a private partner which recovers its costs by charging users for the service (which means that services financed through a PFI must be excludible). Unfortunately, such arrangements have sometimes been used to hide what is really public-sector borrowing (since the public sector bears the risks) or to enrich favoured investors rather than to serve the public interest. All too often, such arrangements are as difficult to structure properly from the perspective of risk-bearing as to understand from an accountability perspective (Ménard 2011).

<sup>&</sup>lt;sup>14</sup> A potential danger in permitting local governments even limited freedom to tax is that they may not utilize fully all the revenue sources open to them for fear of fiscal competition or adverse political consequences, thus allowing the level and quality of public services to deteriorate—the infamous "race to the bottom." As Bird and Smart (2002) show, however, this problem can largely be obviated by the proper design of intergovernmental transfers. For further discussion of transfer policy, see Boadway and Shah (2009).

<sup>&</sup>lt;sup>15</sup> On the weak case for taxing luxuries, see Cnossen (2012). Indeed, cosmetics and similar "small luxuries" may even may be considered "aspirational goods" for the poor, to the point that (as in the Philippines) taxing such items may itself be regressive.

 $<sup>^{16}</sup>$  For a sample of the large literature discussing international taxation, see Lodin (2002), Muten (2002), and McLure (2006).

 $<sup>^{17}</sup>$ See Gurría (2009), International Monetary Fund (2010), European Commission (2010), and Schmidt and Bhushan (2011).

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