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FISCAL RESOURCES FOR INCLUSIVE GROWTH

Arindam Das-Gupta

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Fiscal Resources for Inclusive Growth

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ABSTRACT

This paper develops a framework to assess the growth and distribution effects of fiscal resources. Resources are classified as debt, other capital receipts, foreign aid and other unilateral grants, non-tax revenue, including resource rents, seigniorage, and taxes. The framework is used to assess the fiscal resource bases of economies in developing Asia to the extent permitted by available data. Although there is great diversity in the amount of resources raised in terms of the importance of different revenue sources and in the sophistication of revenue administrations, the analysis suggests that in order to expand their relatively low fiscal resource bases, developing Asian economies need to pay greater attention to non-tax revenue and to taxes other than broad-based taxes on income and consumption, such as property taxes and corrective taxes.

Keywords: fiscal policy, fiscal resources, taxes, non-tax revenue, growth effects, distribution effects, developing Asia

JEL Classification: H2, O4, O53

I. CONCEPTUAL FRAMEWORK

A. Inclusive Growth

This paper looks at the economic growth and income distribution effects of fiscal policy instruments for raising resources. Very broadly, inclusive economic growth can be taken to encompass income growth in which no socioeconomic group is deprived of growth benefits. Economically weak groups can include the poor, the handicapped, the illiterate, children, indigenous peoples, and some women. Also included are unemployed workers, and victims of war and natural disasters. Fiscal policy is inclusive if it deploys instruments promoting inclusion in addition to promoting its traditional goals of growth and macroeconomic stability. Here, non-income dimensions of inclusion are ignored, so inclusive economic growth is growth with static or falling poverty and inequality. Furthermore, this paper looks only at instruments used to raise fiscal resources.

B. Fiscal Resource Categories

Resources can be classified into six categories: debt; non-debt capital receipts; foreign aid and other unilateral grants; non-tax revenue, including resource rents; seigniorage; and taxes. (See the following box for a potential seventh category.) Of these, a government's own fiscal revenue sources include taxes, non-tax revenue, and seigniorage. In most economies, the most widely used taxes are domestic and international taxes on goods and services followed by individual and corporate income taxes. In addition to these, many diverse taxes are levies.¹ A few resource-rich economies where the resources are publicly owned, however, do not levy taxes and rely mainly on income from the sale of resources or their use rights. Non-tax revenues arise mainly from the sale of government goods or resources and income from publicly owned assets. Seigniorage is the increase in the government's command over goods and services due to its issuing money.² Unfortunately, statistics on the flow of seigniorage income to the government are not easily available.³ In addition to own sources, other revenue sources are foreign aid and other unilateral grants. The other fiscal resource category is capital receipts, including domestic and foreign borrowing, and proceeds from the sale of public assets.

Since non-tax revenues are not widely discussed, a brief overview of their composition may be useful. In the United Nations System of National Accounts, taxes are defined as: "...compulsory, unrequited payments, in cash or kind made by institutional units to government units." From this it follows that non-tax revenues are payments made to the government that are (i) voluntary and requited, (ii) compulsory and requited, or (iii) voluntary and unrequited. "Revenue" implies that both tax and non-tax revenue excludes "capital receipts," such as government borrowings, money creation, receipts from asset sales, and foreign aid or other grants. The most important sources of non-tax revenue are voluntary, requited payments, including revenue from asset exploitation (fees, charges, royalty, dividends, tolls, interest, auction proceeds); sale of goods and services (fees, user charges); and sale of licenses for regulated activities (license fees, permits, registration fees). Fines and penalties are

¹ A useful overview of taxes and their classification is the classic textbook presentation in Musgrave and Musgrave (1984).

² For an introduction and analysis see Buiter (2007). For some empirical evidence see Click (1998). When money supply is issued by a central bank or monetary authority that is not legally part of the government, resource transfers to fiscal authorities from the central bank or monetary authority rather than seigniorage itself are part of fiscal resources. This was pointed out by Joseph E. Zveglic, Jr.

³ For relatively recent cross-country data and analysis see Aisen and Veiga (2005).

among other widely used non-tax revenue sources. Most non-tax revenue instruments, including those listed here, are typically underutilized.⁴

The Seventh Fiscal Resource Category: Curbing Fiscal Waste

While it is obvious that reducing wasteful fiscal expenditure can free up resources for useful public services (or tax reductions), what is surprising is that measurements of fiscal waste, and policies to systematically identify and tackle fiscal waste are not part of the fiscal policy armory of any country.^a What is fiscal waste? What are policies to reduce it?

Fiscal waste has four dimensions:

- **The public sector is too large.** Private resources pre-empted for fiscal spending exceed the value of public services financed by pre-empted resources.
- **Public sector resource allocation is unbalanced.** Benefits (marginal) from some public services are much greater than others. Fiscal budgets should be reallocated to the more beneficial public services.
- **Some outputs cannot help achieve intended outcomes.** For example, tertiary health-care spending has a limited impact if the targeted outcome is reduced infant mortality. This calls for redesigning public expenditure programs.
- **The economic cost per unit of output is too high.** For this dimension of fiscal waste, possibly the most important, monitoring bodies (such as audit institutions) exist in many countries.

The first step in tackling fiscal waste is for the term to become part of the fiscal policy lexicon. Waste consciousness itself should lead to fiscal gains. Except in the most blatant cases, to identify and reduce fiscal waste systematically, institutional reform is needed (i) to identify the actual government goods and services (or public outputs) and (ii) to measure the unit economic cost of each public output. For accurate measurement of economic resource costs, government accounts should be kept on an accrual basis with full recognition of capital costs. These institutional reforms will permit costs of public outputs to be measured. By comparing measured costs across time and different government divisions, fiscal waste can be identified and then reduced and measured.

^a Some countries, for example Australia and Singapore, impose spending cuts but require the level of public services to remain unchanged. These cuts create an incentive to identify and reduce waste, and are sometimes termed “efficiency dividends.”

Source: This box is based on unpublished work by the author.

C. Growth and Distribution Effects of Resource Categories

There are four possible types of growth and distribution effects of resources. First and most importantly, resources are a source of finance for growth- and distribution-promoting expenditure. In this role, resources do not directly promote growth or inclusion. The main issue here is, therefore, the economic cost of raising resources. Slemrod and Yitzhaki (1996) identify five components of the economic cost of taxation: (i) deadweight or efficiency costs due to induced resource misallocation, (ii) compliance costs, (iii) administrative costs, (iv) the excess burden of tax evasion, and (v) avoidance costs. Conceptually, these costs can be understood by comparing situations with and without taxation. Taxes themselves merely transfer purchasing power from the non-government sector to the government. The Slemrod and Yitzhaki (1996) classification seeks to capture the economic costs of making this transfer. An important example of efficiency cost is when economic activity is driven to the informal or underground sector to escape taxes.⁵ Slemrod and Yitzhaki (1996) focused on the costs of taxation; however, similar costs can also be identified for sources of fiscal funds. Clearly, less costly sources are to be preferred and should be used first.

⁴ This paragraph is based on Das-Gupta (2005).

⁵ For a discussion of the importance of the informal sector in relation to taxation see Keen (2012) and Bird and Zolt (2012). The value-added tax is claimed to be less hospitable to the informal sector than the sales taxes and excises it replaced.

The efficiency costs of raising resources arising from their negative impact on individual incentives or on governance institutions can be difficult to identify or measure. For example, there is some evidence that unilateral transfers, such as foreign aid, can reduce economic efficiency by weakening work incentives or institutions, but there is also evidence that weakened institutions are present where public resources are available without public accountability, such as in resource-rich economies where resources are legally owned by the government. Lack of accountability can lead to the "natural resource curse" of poor governance adversely impacting both growth and inclusion.⁶ Efficiency may also be negatively affected if funds from any source are volatile, thus reducing the ability of fiscal agencies to predict the level of fiscal spending.

In principle, the economic costs of funds from any source vary with the extent of the use of the source. So when multiple sources of funds are used, the appropriate rule is to equate the marginal cost of funds across sources. For some sources of funds at initially low levels of usage, there may be efficiency benefits rather than costs. A good example is seigniorage where the government is the monopoly supplier of money and when non-inflationary additions to the money supply satisfy increased money demand without any adverse impact on investment. A second example is a "green" tax on a polluting activity in which the direct economic cost of the tax may be more than offset by the efficiency gain from reduced pollution.

The second effect of resources is if the resource is itself an instrument of redistribution integral to the redistribution strategy. Progressive individual income tax rates and consumption tax thresholds are good examples. The main issue here is the trade-off between growth costs and redistribution benefits. In general, the tax systems of most developing economies make a limited contribution to the overall redistributive impact of fiscal policy (Bird and Zolt 2012). The incidence of broad-based taxes both on income and consumption is estimated to be at best mildly progressive. There is also a consensus that the value-added tax (VAT) is more progressive than taxes on international trade and some excise duties that it has recently replaced. Specific features of resource instruments, such as income tax rates and VAT thresholds may, however, be tailored to enhance their redistributive potential.

Evidence on the overall redistributive impact of taxes and fiscal transfers in Latin America (Argentina, Bolivia, Brazil, Mexico, Peru, and Uruguay) for sample periods during 2008 and 2009 is available in Lustig et al. (2012), Lustig, Pessino, and Scott (2013), and Lustig (2013). For inequality, Gini coefficients are reported for "market income" and "final income."⁷ In terms of fiscal policy, final income largely captures the impact of raising and spending fiscal resources. The market income/final income Gini coefficients that the study⁸ found were the following: Argentina 0.497/0.369, Bolivia 0.503/0.446, Brazil 0.574/0.438, Mexico 0.504/0.429, Peru 0.503/0.463, and Uruguay 0.492/0.393. Fiscal policy does appear to have a substantial net impact on income distribution taking account of both the resource and spending sides.⁹

⁶ Barma et al. (2012); Collier (2007); Collier and Hoeffler (2005); Gylfason, Herbertsson, and Zoega (1999); and Morrison (2010).

⁷ Final income is market income less personal and payroll taxes, indirect taxes, co-payments and user fees, plus direct transfers, indirect subsidies, and in-kind (free) transfers.

⁸ The figures reported are from the more recent study in Lustig (2013).

⁹ Recent information on the impact of fiscal policy in Organisation for Economic Co-operation and Development (OECD) members in 2010 is reported by McCanne (2013). The Gini coefficients for income before taxes and transfers, and income after taxes and transfers reported are Canada 0.447/0.320 and the United States 0.499/0.380. For the OECD, only the after-tax and transfer Gini is reported, which is 0.316.

Regarding poverty, the study compares the headcount ratio for market income with that for post-fiscal income. Post-fiscal income is final income plus co-payments and user fees minus in-kind transfers, so the comparison is less comprehensive than the inequality comparison. The headcount ratios reported were Argentina 13.0/5.5, Bolivia 9.6/9.4, Brazil 15.4/14.3, Mexico 12.6/10.2, Peru 15.2/14.3, and Uruguay 5.1/2.3.¹⁰ So although fiscal policy did reduce poverty, except in Argentina and Uruguay, the impact is not as significant as the inequality impact.¹¹

Third, some resource instruments are deployed to curb undesirable activities that harm growth such as the tax on a polluting activity; the fiscal funds raised are an incidental "double dividend." Examples range from "sin" taxes on demerit goods, environmental levies, information-oriented transaction taxes, and selective tariffs on imports to prevent excessive balance of payments deterioration.

The fourth effect covers the diverse ways in which the process or administration of resource raising affects inclusive growth. The effects included here are not intrinsic to the resource instrument unlike the other three effects but depend on rules for deployment in practice. Some important examples are the following:

- Weak tax administrations that impose heavy bookkeeping and return filing obligations on taxpayers burden small businesses relatively more than big businesses. This adds to tax regressivity.¹²
- Complex or frequently changed tax laws add to taxpayer costs and may lead to excessive tax disputes and litigation. This affects business costs and therefore growth.¹³
- Greater use of information technology, web-based portals, and banking channels tends to reduce taxpayer and tax administration costs, and also the scope for tax evasion. This promotes growth and efficiency, and also reduces the compliance cost burden, especially of small taxpayers.
- Revenue leakage through capital flight and international tax avoidance is of importance where weak administrations are unable to cope with unfamiliar tax avoidance and evasion strategies associated with globalization.¹⁴ This can be mitigated by international tax coordination and information sharing between national tax administrations.
- To the extent that inflation tends to have a greater impact on the poor, inflationary finance (or overuse of seigniorage) can be regressive.
- Printing currency notes, the basis of seigniorage, requires technology to prevent forgery and counterfeiting. Otherwise, seigniorage benefits can be diluted, while excessive money creation can be inflationary.
- The auctioning of public resource-use rights, such as spectrum bandwidth, increases their revenue potential while reducing opportunities for corruption and nepotism. Given the fixed

¹⁰ For Argentina, inequality and poverty figures are not strictly comparable with the other sample countries.

¹¹ McCanne (2013) also reports headcounts (income poverty rates) for income before taxes and transfers, and income after taxes and transfers. These are for Canada 26.0%/11.9% and for the United States 28.4%/17.4%. For the OECD as a whole, the after-tax and transfers poverty rate is reported to be 11.1%. See also Whiteford (2008) and OECD (2013).

¹² A review of tax compliance cost studies of both individuals and business entities is in Evans (2003).

¹³ A particular case of this is tax legislation that applies retrospectively, increasing the uncertainty of tax dues. India has had several instances of retrospective tax legislation.

¹⁴ See, for example, Asher and Rajan (2001).

supply of bandwidth, properly designed auctions permit governments to extract a significant portion of the rents associated with bandwidth usage without any negative efficiency impact.¹⁵

- User charges for publicly provided private goods targeted at the poor can have positive or negative distributional consequences depending on the size of the implicit subsidy reflected in these charges.¹⁶
- The use of “large taxpayer units” for collecting taxes from, for example, the top 1% of taxpayers, enhances the revenue potential of broad-based taxes in many developing economies.
- Tax withholding is another method that is thought to be effective for reducing revenue leakage from broad-based taxes.

This review suggests that the resources that should first be used to raise fiscal funds are those with either little or no economic costs, or with benefits that outweigh costs.¹⁷ Of the sources considered, non-inflationary seigniorage appears, therefore, to be the most attractive source of funds followed by corrective taxes and non-tax revenue from the sale of government provided goods, services, and asset-use rights.¹⁸ Broad-based taxes like income and commodity taxes should be resorted to only if and only to the extent that other sources fail to yield adequate fiscal revenue.¹⁹ Among broad-based taxes, evidence of their ranking according to their growth impact finds property taxes the least harmful, followed by consumption taxes and personal income taxes, with corporate income taxes the most harmful.²⁰ Since property taxes are also likely to be progressive and the corporate tax possibly regressive, this also suggests that among taxes to promote inclusive growth, property taxes should be looked at first and corporate taxes last.

Regarding capital receipts, the equal marginal-cost-of-funds rule suggests that some use of debt finance may be helpful; however, no quantitative guidance is available, so the standard advice against deficit finance is also appropriate here.²¹

Table 1 lists various resource instruments according to their growth and distribution effects.²² Major resource categories for which comparative data are likely to be available are in capital letters. The important point made by the table is that non-tax sources of revenue can be the least costly in terms of growth without adversely impacting inclusion. On the other hand, for major taxes, there is a growth-inclusion trade-off. This may also be true of capital receipts if they are overused or are available without adequate safeguards.

¹⁵ For auction design principles see, for example, Klemperer (2004).

¹⁶ See Balestrino (1999), Besley (1991), and Sepehri and Chernomas (2001).

¹⁷ Unless there are drawbacks not discussed here. Examples are the citizens’ opposition to the poll tax imposed by Margaret Thatcher and the collection of a land tax from poor farmers with small holdings where the collection cost has been found to exceed the revenue collected.

¹⁸ These sources can lose their sheen if effective accountability mechanisms preventing their misuse by governments are not available.

¹⁹ On the other hand, taxes, since they are salient, are held to generally be more accountable to citizens than other revenue sources.

²⁰ See McBride (2012) for a review. He cites studies of OECD members by Arnold et al. (2011).

²¹ For a brief analysis of this and other resource issues, see Bird and Das-Gupta (2014) and references cited therein.

²² Recent reviews of taxation in developing countries are in Besley and Persson (2013), Bird (2012), Keen (2012), Fjeldstad (2013), Fuest and Zodrow (2013), Mogni (2012), and International Monetary Fund and World Bank (2013).

Table 1: Properties of Major Fiscal Resources^a

No.	Fiscal Resource	Growth Impact	Distribution Impact	Advantages and Disadvantages	Key Risk Areas	Other Observations
1	TAXES	Negative; For corrective taxes negative impact may be outweighed by corrective benefits (below)	No uniform impact	Taxation promotes accountable government; Economic cost tends to be higher than other revenue sources	Tax evasion, corruption, informal, and underground activity	Hard-to-tax groups pay proportionately less taxes than other groups
1.1	TAXES ON INCOME	Negative	No uniform impact	Regressive compliance costs for business	Evasion prone especially for cross-border income flows; Corruption prone; Can lead to relatively high informal sector growth and limit formal sector	Revenue importance is next to taxes on goods and services in most developing countries
1.1.1	Individual income tax	Negative, especially if economic activity is driven into the informal sector that has limited-scale economies	Generally progressive, but not uniformly so	Usually also impose high and possibly regressive compliance costs on business and self-employment income	Most prone to tax evasion and official corruption, except possibly where subject to tax withholding	Evidence suggests it has a lower growth impact than corporation taxes but more than commodity taxes (McBride 2012)
1.1.2	Social security taxes	Negative	Generally regressive, especially if tax deductible for individuals paying these taxes; Regressivity limited to taxpayers who do not include informal sector workers	Reduces private saving and investment in pay-as-you-go systems if workers covered by social security save less		

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Table 1 continued

No.	Fiscal Resource	Growth Impact	Distribution Impact	Advantages and Disadvantages	Key Risk Areas	Other Observations
1.1.3	Corporation tax	Negative	Possibly progressive since poor will not have corporate shares; however, international tax competition and shifting on to immobile factors including labor may reverse this	Few taxpayers so low cost of collection and compliance per unit of revenue collected; Lowered further if administration is through efficient large taxpayer units	Can cause greater informality; Subject to competitive pressure in countries seeking foreign investment	Tax shifting impact and incidence on domestic and foreign labor is not a settled issue (Clausing, 2011); Evidence suggests it has a larger growth impact than income, property, or commodity taxes (McBride 2012)
1.1.4	Capital gains tax	Limited if taxed on realization, but negative	Similar to the corporation tax, except for capital gains on immobile capital, such as real estate, where progressivity is more likely	Relatively easily avoided or evaded but can adversely impact investment	Subject to competitive pressure in countries seeking foreign investment	
1.2	TAXES ON GOODS AND SERVICES	Negative	No uniform impact			Usually the most important revenue source in developing countries
1.2.1	Value-added tax (VAT)	Possibly negative	Depends on VAT threshold. Possibly distributionally neutral (Keen 2012, and Bird and Zolt 2012)	Costly to administer and comply with; Compliance costs tend to be regressive depending on how high the tax threshold is; If properly administered can reduce tax evasion avenues and the informal sector	Tax administration in developing countries tends to be weak leading to revenue leakage, but less leakage than taxes it usually replaces	VAT usually has a lower growth impact than commodity taxes and international trade taxes that it has replaced; Evidence suggests it has a lower growth impact than income or corporation taxes (McBride 2012)
1.2.3	Selective excises	Negative	Regressive if shifted forward to final consumers	Can control economically and socially undesirable activity yielding a double dividend		Fuel taxes can have large growth costs in the short run; In the long run, if they reduce overuse of non-renewable resources growth impact may be positive; Their distribution impact is not clear

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Table 1 continued

No.	Fiscal Resource	Growth Impact	Distribution Impact	Advantages and Disadvantages	Key Risk Areas	Other Observations
1.2.3	Domestic commodity taxes other than VAT and selective excises (including sales taxes)	Negative	Regressive	Distort relative prices via tax cascading	Evasion prone compared to the VAT	
1.3	TAXES ON INTERNATIONAL TRADE	Negative	No uniform impact	Negative impact on international trade; Easy to administer revenue source for countries with easily controlled boundaries, e.g., islands (Keen 2012)		Subject to World Trade Organization (WTO) agreements; Of limited revenue importance, except among poorer countries with controllable boundaries
1.3.1	Import duties	Negative	No uniform impact	Lead to excessive import substitution if protective	Evasion prone and can give rise to smuggling	Subject to WTO agreements. May help growth by improving the current account and preventing an adverse macroeconomic impact due to currency depreciation
1.3.2	Export duties	Negative	No uniform impact	Allow countries to exploit international monopoly power		Subject to WTO agreements
1.4	ASSET TAXES					
1.4.1	Individual wealth taxes	Limited but negative	Generally progressive	Limited source of revenue	Can cause hardship for income poor but asset-rich individuals	
1.4.2	Land taxes	As with wealth taxes				
	Asset taxes other than land and property taxes (including resource taxes)	Negative, unless it is a tax on pure rents	Generally progressive		Resource taxes may lead to illegal resource extraction and environmental costs	
1.4.2	Stamp duties and transaction taxes	Negative	No uniform impact	Distort prices, reducing market efficiency and may reduce transaction volume (e.g. for financial transactions)	May lead to under-declaration of property sales prices	

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Table 1 continued

No.	Fiscal Resource	Growth Impact	Distribution Impact	Advantages and Disadvantages	Key Risk Areas	Other Observations
1.5	OTHER TAXES					
1.5.1	Property taxes (further discussion is after the table)	Negative	Progressive if rates are proportional to property values		Can be evasion prone unless levied using presumptive valuation norms	Evidence suggests it has a lower growth impact than income, corporation, or commodity taxes
1.5.2	Betting and gambling taxes	Not clear	No uniform impact			
1.5.3	Corrective taxes	Gross effect negative, may be positive with corrective impact	No uniform impact	May yield a double dividend		
2	NON-TAX REVENUE	Positive or neutral if rates are not excessive	No uniform impact		Generally more volatile than tax revenue	Possibly underexploited by most countries
2.1	Resource rents	Positive if not overexploited; Can be negative if overexploited.	No direct impact	Permits allocation of resources in line with development objectives leading to faster growth and inclusion	Natural resource curse if governance is poor, as funds may be misused	
2.2	User charges	Positive if set at the economically (marginal cost) efficient level	Can be positive (Balestrino 1999)	Can help reduce externality causing consumption or production and give rise to a double dividend	May be costly to administer and so impractical for goods and services targeted at the poor	Generally underexploited in most countries
2.3	Fines and penalties	Positive if they reduce economically undesirable activity	No uniform impact	If well designed, can help reduce external harmful activity and give rise to a double dividend; Proper penalty design is not very common; Revenue importance will be limited if very effective in deterring harmful activity	May be costly to administer	Generally underexploited in most countries

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Table 1 continued

No.	Fiscal Resource	Growth Impact	Distribution Impact	Advantages and Disadvantages	Key Risk Areas	Other Observations
2.4	Non-tax revenue other than resource rents, user charges, and penalties	No direct impact	No direct impact	Using prices to ration availability of goods can improve resource allocation; Some sources can be tailored to have a positive distribution impact via price discrimination	Corruption in supply of priced goods or in allocation of resources; Revenue leakage due to large decentralized administration of some goods (e.g., public school fees and hospital charges)	Sources such as spectrum auction fees can exploit public monopoly power
2.5	Seigniorage ^b	Positive if non-inflationary	Negative if overexploited causing inflation	Efficiency benefits if non-inflationary	Moral hazard due to temptation to resort to inflationary finance	Data not generally included in fiscal budgets; May be accounted for as income of money-issuing authority and not the fiscal budget
3	OTHER REVENUE SOURCES					
3.1	Domestic gifts	No uniform impact	No uniform impact	No efficiency costs; Not a significant revenue source	Lower accountability	Can generate additional resources during wars and natural disasters
3.2	Foreign aid and other unilateral foreign transfers	Can be negative or positive	No uniform impact	Can give rise to domestic policy irresponsibility; Donor priorities may distort domestic policy goals	Corruption and lack of adequate donor accountability	
4	SALE OF PUBLIC ASSETS	No uniform impact	No uniform impact	Since public assets are limited, not a sustainable source of fiscal resources		
5	DEFICIT FINANCE	Positive if not overexploited else, possibly negative	Regressive if inflationary or unsustainable	Useful if not overused; Otherwise can adversely impact financial market development	Relative lack of accountability leads to risk of overuse leading to debt crises.	For external debt crises, multilateral institutions have been important lenders who also impose fiscal rules on debtors
5.1	External debt	Negative, especially if unsustainable (e.g., Eurozone crisis)	No direct impact; Negative if unsustainable	Can make additional market-based resources available for development	Financial market instability; vulnerability to currency movements	Multilateral institutions have been important lenders during crises and natural disasters

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Table 1 continued

No.	Fiscal Resource	Growth Impact	Distribution Impact	Advantages and Disadvantages	Key Risk Areas	Other Observations
5.2	Internal debt	Positive if debt servicing cost is low or else, possibly negative	No uniform impact	Can help domestic financial development. Inflationary if excessive	Growing pre-emption of public resources to pay interest on debt	War and natural disasters

^a This table has benefited from detailed comments by Iris Claus, though any errors are still the responsibility of the author.

^b Money creation is normally reckoned as part of government debt; however, since it does not require repayment, it is included here as a source of revenue.

Source: Author.

D. Notes on Some Major Revenue Instruments

Value-added tax (VAT). In the past 50 years, the VAT has been extensively adopted replacing cascading domestic taxes and taxes on imports. While widely welcomed, many best practice VAT design principles have not been followed in implementation.²³ While most VATs do have a broad base covering sales of goods and all but a few services (education, health, and financial services) by firms to other firms and to final consumers, few are levied at a single rate above a threshold that excludes small businesses. Furthermore, the base is seldom limited only to consumption since tax credits for capital goods purchases and the zero rating of exports with prompt payment to firms of resulting input tax credits are often implemented only partially. Since the administrative cost of taxing small taxpayers is high per dollar of revenue, low VAT thresholds reduce VAT efficiency. There is also evidence that tax compliance costs are regressively distributed and are particularly burdensome for small businesses (Barbone, Bird, and Vázquez-Caro 2012). A major advantage of the VAT is that it indirectly taxes the informal sector, thus reducing the incentive for informalization in an economy (Keen 2012).

Individual income taxes. Though expert advice to have low and few individual income tax rates is mostly heeded, most governments provide a variety of exemptions or deductions, for example, for savings; allowances, such as child allowances; and medical and education expenses. They also tax some income sources—especially capital income—at different rates. Although such “schedular” taxation results in the horizontally inequitable treatment of taxpayers, it may be administratively more effective (Bird and Zolt 2011). A common design feature is presumptive taxation of hard-to-observe business expenses and unincorporated businesses. There is little evidence that such tax provisions are positively related to real business margins or that they reduce administrative and compliance costs. Their impact on revenue, efficiency, and distribution is unknown (Bird and Das-Gupta 2014).

Corporate taxes. Overall, these taxes are the second highest source of revenue in developing economies after taxes on goods and services.²⁴ This is partly because of the low administrative costs given relatively few corporate taxpayers and the widespread recent use of large taxpayer units. The ability of corporations to shift taxes on to labor continues to be debated with globalization adding a further dimension to the ability of firms to insulate themselves from international tax differences.²⁵

²³ See Ebrill et al. (2001) and Keen (2012).

²⁴ Data are presented in Section II.

²⁵ See Clausing (2011).

Auctioning of spectrum and other licenses. This non-tax revenue source has helped several governments to raise fiscal revenue. These auctions have been carefully designed following several lapses in the early days of auctioning in the 1980s.²⁶

Property taxes. Since property taxes have been identified as important for inclusive fiscal policy, the discussion here is more elaborate than for other revenue sources.²⁷ Taxes levied on immovable property are widely advocated as a source of fiscal funds, especially for local governments; however, they are generally underused, offering scope for strengthening fiscal resources, particularly for local governments.²⁸

Taxes on property include annual taxes on land and property (LPT) but also stamp duties on property transfer taxes, development fees, betterment levies, estate duties or inheritance taxes, and capital gains taxes on property transfers.²⁹ The most widely levied tax is the LPT. UN-Habitat (2011) provided a convenient formula for property tax revenue to facilitate the discussion of property tax issues:

$$\text{Revenue} = \text{Base} \times \text{Rate} \times \text{Coverage} \times \text{Valuation} \times \text{Collection}$$

The base of the LPT varies depending on the nature of property rights or ownership; the types of properties included in the base (rural or urban, vacant or built-up lot); the area of the property; and the per-unit area value. Where property rights are based on traditional systems or are informal, legally identifying taxable properties is often a challenge.³⁰ The LPT rate can be *ad valorem* or more typically specific but tied to property characteristics. Coverage refers to the proportion of taxable properties actually taxed, varying between 30% in some developing economies to as high as 98% (Norregaard 2013). In rapidly expanding cities, identifying new properties to keep the fiscal cadaster up to date is a challenge but one that can increasingly rely on technology, such as satellite imagery. The valuation of a property is ideally at its market value but may be difficult if there are few property sales or if market values are not easily observed. Instead, many property tax systems base property values on a combination of area and property characteristics often via a prescribed and periodically updated

²⁶ Auction design theory is discussed in Klemperer (2004).

²⁷ The discussion here mainly draws on Norregaard (2013) and UN-Habitat (2011). Information on Latin America's underutilization of property taxes and their suggestions for strengthening collection are in Corbacho, Cibils, and Lora (2013).

²⁸ Information on property tax revenue for the year 2010 for a sample of countries, including eight in developing Asia, is in Norregaard (2013). He reports property tax contributions to revenue at less than 1% of GDP in all eight: Afghanistan, 0.23; Armenia, 0.24; Azerbaijan, 0.36; the People's Republic of China (PRC), 0.51; Georgia, 0.92; Kazakhstan, 0.56; Mongolia, 0.16; and Singapore, 0.90. In these countries, property taxes are recurrent (typically annual) levies on immovable property.

²⁹ Development fees are typically one-time charges on new constructions tied to public services that the new construction will have access to. Betterment levies are one-time or recurrent charges on existing properties to recover the cost of additional public services or infrastructure (UN-Habitat 2011).

³⁰ Identifying ownership is also a challenge, for example, in the PRC, where property purchases are used to conceal illegal wealth, where real estate markets are booming, and speculative trades are widespread. For recent attempts to strengthen or introduce property taxes and their impact on real estate see, for example, Century (2013). By levying property taxes, the government hopes to curb speculation and keep housing affordable in addition to reducing land grabbing from collectives by local governments. This tax can strengthen local government revenues since current local government land grabbing practices contribute to the real estate fever (Fung 2013, *The Economist* 2012, and Norregaard 2013).

valuation formula.³¹ Actual tax collection requires that a tax administration be in place. To mention only one example of what this implies, the administration could be centralized and be part of an existing tax administration or decentralized to the local government.

II. FISCAL RESOURCE SYSTEMS IN DEVELOPING ASIA

A. Data Sources and Limitations

Data sources with information on most of the resources identified in Table 1 are not available for many economies, including those in developing Asia. For the broad resource position of developing Asia, data from 2005 to 2011 (or available years within this period) from the Asian Development Bank (ADB) Statistical Database were used. Despite gaps in coverage, this enabled documentation of the resource pictures for 41 developing Asian economies (Tables 2 and 4, and Figure 1). The most serious limitation is that the level of government—central or consolidated—is not the same for all. For example, for India, information is for the central government though different states collect substantial additional revenues.

Supplementary data from the World Bank's World Development Indicators (WDI) were used to look at shares of major tax groups for 26 economies in developing Asia for the same period, again with some gaps (Table 5). WDI data on per capita income, inequality, poverty, and governance were also used (Figures 2 to 5). These data are also the source of a comparison of revenue sources in developing Asia with those in Latin America and in the world as a whole (Table 6). Finally, data from the International Finance Corporation (IFC) and World Bank's *Doing Business Survey 2012* on the burden of tax administration and the tax payment process were used (Figures 6 and 7). Significant data gaps include disaggregated non-tax data and data on seigniorage.

B. Resource Systems

Relative to gross domestic product. In Table 2, resources as a percentage of gross domestic product (GDP) are divided into current revenue and capital receipts with grants, including foreign aid, and the budgetary deficit or surplus. Current revenue consists of taxes and non-tax revenues. Columns 11 and 12 of the table provide information, respectively, on the share of current revenue in total resources, including fiscal deficits if any, and the share of non-tax revenues in current revenue.

Total available resources reflected in total revenue and grants vary between 10% of GDP in India (central government only) to over 100% in Kiribati, which depends heavily on external grants. On average, fiscal resources in developing Asia are less than expected. Data in Bahl and Bird (2008) show that revenue for the past 2 decades exceeded 24% of GDP in developing economies, which is greater than the 21% of GDP (excluding grants) presented here. On average, therefore, for adequate spending, greater revenue effort appears to be needed in developing Asia.

³¹ See, for example, the computer-assisted mass appraisal (CAMA) system described by Norregaard (2013). A classification of property valuation systems is also in Norregaard (2013). Actual valuation in some countries is self-assessed with sample checks by tax officials to ensure that self-assessments are accurate. This is done, for example, in several Indian cities (UN-Habitat 2011).

Table 2 also shows that capital receipts are a minor source of revenue, except in some Pacific island economies, while deficit (debt) finance is most important in South Asia. Instead, the bulk of receipts in developing Asia consist prudently of current revenue. It is, however, least important in some South Asian countries (Afghanistan) and the Pacific (the Federated States of Micronesia) where grants contribute substantial resources. Since grants, deficits, and other capital receipts cannot provide sustainable resources for inclusive growth, the finances of governments from South Asia and the Pacific appear to be most in need of strengthening.

In Table 2 the importance of non-tax revenue in current revenue is also discernable. The picture here is mixed with substantial non-tax revenue present in all Asian regions but for different reasons. Resource dependence, for example, is clearly the reason for the high non-tax revenue share in Brunei Darussalam—a low tax economy—and also in some Pacific island economies. On the other hand, conscious policy is likely the cause of the relatively high non-tax revenue share in Singapore compared, for example, to Indonesia.³²

Table 2: Average Resource Positions in Developing Asia, 2005–2011
(% of gross domestic product)

	Government Level	Total Revenue and Grants	Total Revenue Current and Capital	Current Revenue	Taxes ^a	Non-taxes	Capital Receipts	Grants	Overall Budgetary Surplus/Deficit	(5) as a % of (3)+Deficit	(7) as a % of (5)
1	2	3	4	5	6	7	8	9	10	11	12
Developing Asia		29.6	21.6	22.4	15.7	6.7	1.7	6.7	-0.5	74.6	29.7
Central Asia		24.1	22.5	21.5	15.7 (73)	3.2	0.6	7.3	-1.7	83.4	14.8
Armenia	Central	20.4	19.7	19.2	17.9	1.2	0.6	0.7	-2.5	83.6	6.5
Azerbaijan	Central	24.6	24.6	24.6	15.0	9.6	0.0	0.0	-0.2	99.2	39.0
Kazakhstan	Central	22.6	19.0	18.6	17.9	0.7	0.4	3.6	-1.4	77.5	3.9
Kyrgyz Republic	Consolidated	25.0	23.0	22.7	18.1	4.6	0.2	2.0	-1.5	85.9	20.3
Georgia	Consolidated	31.2	29.6	26.5	23.9	2.6	3.1	1.6	-2.0	79.8	9.7
Tajikistan	Consolidated	20.5	20.0	19.4	17.9	1.6	0.0	0.6	-5.0	76.0	8.1
Uzbekistan	Central	22.0	22.0	22.0	20.5	1.4	0.0	0.0	0.6	100.0	6.6
East Asia		22.5	22.1	21.2	16.8 (79)	4.4	0.9	0.2	0.2	93.9	20.6
PRC	Central	19.6	19.6	19.6	17.3	2.3	0.0	0.0	-1.0	95.2	11.6
Hong Kong, China	Central	20.4	20.4	16.5	13.4	3.2	3.8	0.0	3.2	81.2	19.2
Korea, Republic of	Central	23.6	23.6	23.4	15.6	7.9	0.2	0.0	1.0	99.2	33.6
Mongolia	Central	34.4	34.1	34.1	28.9	5.2	0.1	0.2	-1.0	96.4	15.3
Taipei, China	Central	12.8	12.8	12.2	8.9	3.3	0.6	0.0	-1.3	86.4	27.0
South Asia		18.8	15.1	15.0	10.2 (68)	4.8	0.1	4.3	-4.2	64.8	32.1
Afghanistan	Central	17.3	8.1	8.1	5.4	2.6	0.0	9.2	-2.6	40.6	32.4
Bangladesh	Consolidated	11.4	11.2	11.0	8.9	2.1	0.0	0.6	-3.9	72.2	19.0
Bhutan	Central	34.3	21.0	20.7	11.2	9.5	0.4	13.2	2.4	60.3	45.8
India	Central	10.1	10.1	9.7	7.7	2.0	0.4	0.0	-4.7	65.4	20.4
Maldives	Central	31.5	28.1	27.9	13.5	14.4	0.2	3.4	-10.7	66.1	51.5
Nepal	Central	15.8	13.1	13.1	10.9	2.2	0.0	2.7	-2.0	73.7	16.7
Pakistan	Consolidated	14.5	14.2	14.2	10.2	4.0	0.0	0.3	-5.0	72.7	28.2
Sri Lanka	Central	15.8	15.1	15.1	13.4	1.7	0.0	0.7	-7.5	64.7	11.1

continued on next page

³² Singapore is known for its sovereign wealth funds and particularly for road and automobile usage license fees and charges.

Table 2 continued

	Government Level	Total Revenue and Grants	Total Revenue Current and Capital	Current Revenue	Taxes ^a	Non-taxes	Capital Receipts	Grants	Overall Budgetary Surplus/Deficit	(5) as a % of (3)+ Deficit	(7) as a % of (5)
1	2	3	4	5	6	7	8	9	10	11	12
Southeast Asia		21.8	21.2	20.5	13.9 (69)	6.6	0.8	0.7	1.4	94.1	32.1
Brunei Darussalam	Central	50.6	50.6	50.6	23.3	27.4	0.0	0.0	21.2	100.0	54.0
Cambodia	Central	14.9	12.1	11.8	9.8	2.0	0.4	2.8	-2.2	68.8	16.8
Indonesia	Central	17.4	17.4	17.4	12.1	5.3	0.0	0.0	-0.9	94.9	30.2
Lao PDR	Central	16.3	13.4	13.4	11.6	1.8	0.0	2.9	-3.0	69.5	13.2
Malaysia	Central	20.8	20.8	20.8	14.6	6.2	0.0	0.0	-4.3	82.7	29.6
Myanmar	Central	15.7	15.7	15.3	3.6	11.7	0.4	0.0	-3.9	78.3	76.5
Philippines	Central	14.8	14.8	14.5	12.9	1.6	0.3	0.0	-2.0	86.5	11.4
Singapore	Central	21.9	21.9	18.4	12.7	5.7	3.5	0.0	6.8	84.1	30.9
Thailand	Central	16.9	16.9	16.9	14.9	2.0	0.0	0.0	-1.4	92.1	11.6
Viet Nam	Central	28.5	28.1	25.9	23.6	2.4	2.1	0.5	-1.6	86.1	9.1
The Pacific		46.9	27.4	32.5	19.0 (59)	13.8	0.2	16.4	1.1	69.3	42.4
Cook Islands	Central	34.7	27.9	25.9	23.9	2.0	2.0	6.8	2.1	74.6	7.9
Fiji	Central	25.2	25.1	24.9	21.8	3.0	0.2	0.1	-2.3	90.2	12.2
Kiribati	Consolidated	111.0	80.3	80.3	21.5	58.7	0.0	30.8	16.4	72.3	73.2
Marshall Islands	Central	67.8	25.4	25.4	17.0	8.4	0.0	42.5	1.3	37.4	33.0
FSM	Consolidated	59.3	21.2	21.2	11.4	9.8	0.0	38.1	-1.9	34.7	46.2
Papua New Guinea	Central	33.6	28.6	28.5	26.4	2.0	0.1	5.0	0.5	84.7	7.2
Samoa	Central	34.0	26.0	26.0	22.2	3.8	0.0	8.0	-2.7	70.9	14.4
Solomon Islands	Central	38.1	32.3	32.3	28.8	3.5	0.0	5.8	1.5	84.8	10.9
Timor-Leste	Central	12.5	12.5	12.5	1.2	11.3	0.0	0.0	1.0	100.0	90.7
Tuvalu	Central	76.8	54.3	54.3	18.2	36.2	0.0	22.5	-4.1	67.1	66.6
Vanuatu	Central	23.0	18.8	18.8	16.8	1.9	0.0	4.2	0.3	81.6	10.4

^a Numbers in parentheses are data as % of current revenue.

FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Note: For economies for which data are not available for the entire period 2005–2011, the average is for available years.

Source: Author's estimates using data from ADB Statistical Database and World Bank's World Development Indicators except the gross domestic product for Malaysia (both accessed 14 August 2013).

The economies in Table 2 can be cross-classified according to whether they are above or below the median in terms of (i) their reliance on current revenue and within this, (ii) their reliance on non-tax revenue. Roughly a quarter of the sample falls into each quadrant of this cross classification with no region showing a distinct revenue pattern for all group members. Economies above the median for both current and non-tax revenue include Azerbaijan and the Kyrgyz Republic; Hong Kong, China; the Republic of Korea; and Taipei, China; Brunei Darussalam, Indonesia, Malaysia, and Singapore; and Timor-Leste. Economies that are below the median for both revenue sources and need to improve include Kazakhstan, Georgia, and Tajikistan; Nepal and Sri Lanka; the Lao People's Democratic Republic and Cambodia; and the Cook Islands and Samoa.

To measure if an economy has the minimum resources needed to achieve inclusive growth, Ravallion (2009) looks at the marginal tax the rich would have to bear for sufficient funds to become available to finance transfers to the poor to raise them to the poverty line. His sample consisted of 89 developing economies. One exercise he carried out was with a poverty line of \$1.25 a day and a "rich" line of \$13 a day, both in terms of 2005 purchasing power parity (PPP). Since \$13 was then the United States (US) poverty line, anyone there with at least this income would not have been poor.

His findings for the 21 developing Asian economies in his sample are in Table 3. The table shows that in at least 12 economies, including India and the People's Republic of China (PRC),

redistribution to achieve inclusion is not feasible as a marginal tax rate of 100% or more would be needed. To achieve inclusion, these economies cannot rely on internal resources alone until further income growth takes place. On the other hand, in the Kyrgyz Republic—a country with a relatively low per capita income—Malaysia, Mongolia, and Thailand, inclusion could be achieved.

Table 3: Capacity for Redistribution, Ravallion's Measure at \$1.25 Purchasing Power Parity

	Marginal Tax Rate on the Rich Needed to Provide \$1.25 in 2005 \$ Purchasing Power Parity per Poor Person per Day	Gross Domestic Product per Capita (2005 \$ Purchasing Power Parity)
Central Asia		
Armenia	100.0	5,083
Azerbaijan	23.9	7,469
Georgia	84.6	4,307
Kazakhstan	62.7	10,253
Kyrgyz Republic	8.8	1,943
Tajikistan	100.0	1,632
Uzbekistan	100.0	2,448
East Asia		
China, People's Republic of	100.0	5,732
Mongolia	9.0	3,485
South Asia		
Bangladesh	100.0	1,337
India	100.0	2,740
Nepal	100.0	1,125
Pakistan	100.0	2,321
Sri Lanka	69.7	4,195
Southeast Asia		
Cambodia	100.0	1,808
Indonesia	41.4	3,579
Lao People's Democratic Republic	100.0	2,015
Malaysia	2.7	13,200
Philippines	100.0	3,341
Thailand	2.9	7,474
Viet Nam	100.0	2,597

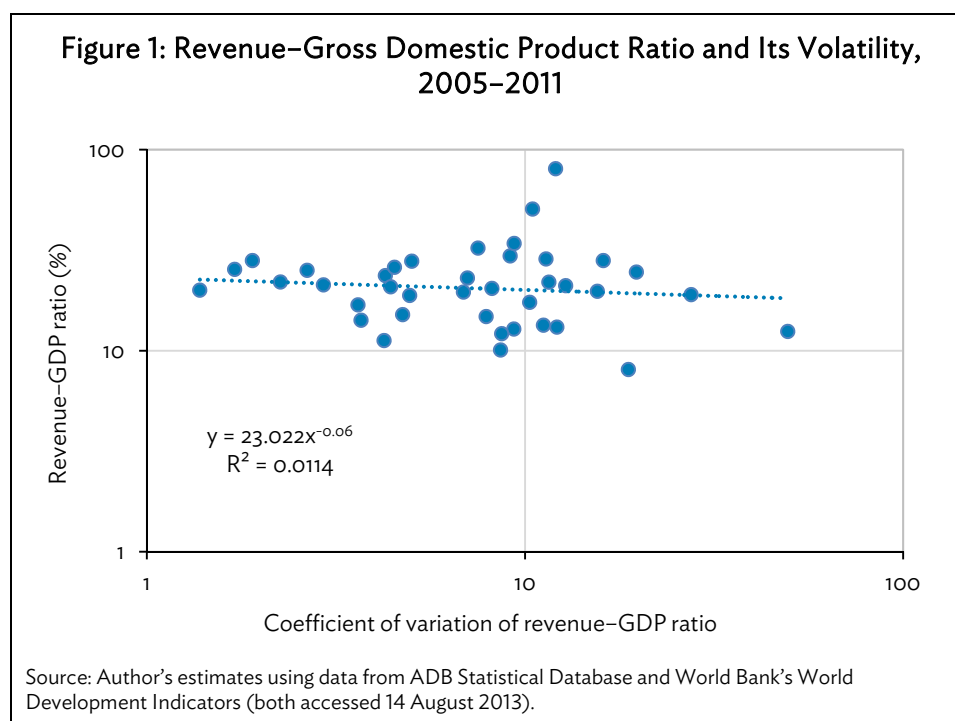
Source: Ravallion 2009.

Revenue volatility. Other things equal, a volatile revenue source is less attractive than a more predictable source. In Table 4, the coefficients of variation across years of resources relative to GDP are reported for the same data and period as in Table 2. Data are for averages across regional groupings of economies. The table shows that taxes are the least volatile source of revenue on average with non-tax revenue more than twice as volatile. Capital receipts, grants, and deficit finance are far more volatile than current revenue, a further reason they do not contribute to a reliable fiscal resource base. Looking across regions, total revenues are least volatile in East and Southeast Asia and most volatile in South Asia, though economies in the top quarter by volatility are to be found in all regions. There appears to be no link between the revenue to GDP ratio and its volatility (Figure 1).

**Table 4: Revenues as a Percentage of Gross Domestic Product: Volatility
(Coefficients of Variation), 2005–2011**

Region	Total Revenue and Grants	Total Revenue Current, and Capital	Current Revenue	Taxes	Non-taxes	Capital Receipts	Grants	Overall Budgetary Surplus/Deficit
Developing Asia	11.4	9.6	9.4	12.3	26.4	63.0	41.6	126.3
Central Asia	11.6	11.8	11.8	17.9	25.8	72.0	54.6	137.5
East Asia	9.0	7.6	6.6	6.6	15.1	34.8	58.1	174.3
South Asia	13.7	10.1	10.0	14.5	22.6	73.5	38.5	66.6
Southeast Asia	9.1	7.8	7.6	12.4	19.4	94.7	36.9	66.6
The Pacific	12.7	10.2	10.2	9.3	41.7	44.5	38.2	195.1

Source: Author's estimates using ADB Statistical Database and World Bank's World Development Indicators (both accessed August 14, 2013).



Tax shares. The composition of tax revenues from 2005 to 2011 is in Table 5 for a sample of 26 economies in developing Asia. The ranking of taxes by major groups follows the expected pattern with taxes on goods and services contributing the major share and taxes on international trade the lowest share. The latter property is relatively new following recent trade liberalization and tariff reductions in light of World Trade Organization (WTO) negotiations (Bahl and Bird 2008). Bahl and Bird document the share of personal income taxes at less than 50% of total income taxes with the share the lowest in Asian economies. In Table 5, the high shares of income taxes in India and Indonesia stand out, but this may be due to a reporting problem. For example, for India, only central taxes are covered and not the large amount of indirect taxes collected below the central level.

Overall, however, the limited share of income taxes, particularly individual income taxes, corroborates the observation by Bird and Zolt (2012) that taxes are likely to contribute little to income redistribution.³³ On the efficiency of raising resources, with corrective taxes, no disaggregated cross-section information is available on “other taxes,” so they cannot be assessed. Neither is any cross-country information available on the cost of collecting taxes or other funds. There is, therefore, no scope to apply the criterion for marginal cost of funds to judge the efficiency of raising resources from this perspective.

Table 5: Contribution of Major Tax Groups to Revenue

Region	Taxes as a Percentage of Total Revenue	Taxes on Income (% of taxes)	Tax on International Trade (% of taxes)	Taxes on Goods and Services (% of taxes)	Other Taxes (% of taxes)
Developing Asia	76.93	32.30	12.40	39.20	16.10
Central Asia	83.64	28.14	7.47	43.92	20.47
East Asia	70.65	41.04	3.98	43.17	11.81
South Asia	72.17	23.65	20.90	33.20	22.26
Southeast Asia	79.27	39.54	9.79	39.66	11.02

Note: Central Asia covers Armenia, Azerbaijan, Georgia, Kazakhstan, and the Kyrgyz Republic. East Asia includes the People's Republic of China; Hong Kong, China; the Republic of Korea; and Mongolia. South Asia consists of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. Southeast Asia has Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, and Thailand.

Source: Author's estimates using World Bank's World Development Indicators (accessed 14 August 2013).

International comparison. While the share of income taxes may be too small to make it a major tool of inclusive growth, Table 6 shows that in developing Asia, the share of income taxes is higher than in Latin America and also in the world as a whole.³⁴ This suggests that further redistributive mileage from income taxes is even more limited in developing Asia than in the rest of the world. Table 6 also corroborates the low overall share of total taxes and revenues relative to GDP in developing Asia. The table also documents the relatively low share of non-tax revenue in developing Asia and the relatively high share of foreign aid and other receipts (Column 9). Overall, however, the high average share of non-tax revenue in the world suggests that it is much too important a revenue source to be treated with the benign neglect usually accorded to it.³⁵

³³ This point is also made in the context of Latin America's taxes by Corbacho, Cibils, and Lora (2013).

³⁴ The reader should be cautioned that the simple averages and ranks reported in Table 6 could change if data for economies not in the WDI database were included.

³⁵ The revenue contribution of non-tax revenue is underestimated here since some non-tax revenues, such as fines and penalties, are included in “grants and other revenue.”

Table 6: A Comparison of Revenue in the World, Developing Asia, and Latin America and Caribbean
(Average Percentage of Revenue for Available Years, 2005–2011)

	Revenue Excluding Grants (% of gross domestic product)	Tax Revenue (% of gross domestic product)	Taxes on Goods and Services	Taxes on Income, Profits and Capital Gains	Taxes on International Trade	Other Taxes	Non-tax Revenue	Grants and Other Revenue
1	2	3	4	5	6	7	8	9
Developing Asia	18.15	13.64	30.08	25.04	9.60	3.50	20.50	29.62
Latin America and the Caribbean	22.42	17.54	34.23	24.49	12.68	5.61	21.43	18.46
World	23.52	14.51	32.18	21.80	4.49	1.99	37.50	15.61

Notes:

- 1: Data for Latin America and the Caribbean are for 21 countries: The Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Dominican Republic, El Salvador, Grenada, Guatemala, Honduras, Jamaica, Nicaragua, Paraguay, Peru, St. Kitts and Nevis, St. Vincent and the Grenadines, Trinidad and Tobago, Uruguay, and Venezuela. Data for Developing Asia are averages for the same 26 economies in Table 5.
- 2: While World Bank's World Development Indicators (WDI) contain data on 214 economies, they provide no information on the actual number included in different (weighted) averages given that there are problems with missing data.
- 3: The non-tax revenue share was estimated by the author as $(\text{column 2} - \text{column 3}) / (\text{column 3}) * (\text{column 4} + \text{column 5} + \text{column 6} + \text{column 7})$. Some non-tax revenue sources (such as fines and penalties) are included as "other revenue" in the WDI classification system.

Sources: WDI (accessed 23 December 2013) and author's estimates.

C. Fiscal Resources, Per Capita Income, Poverty, Inequality, and Governance

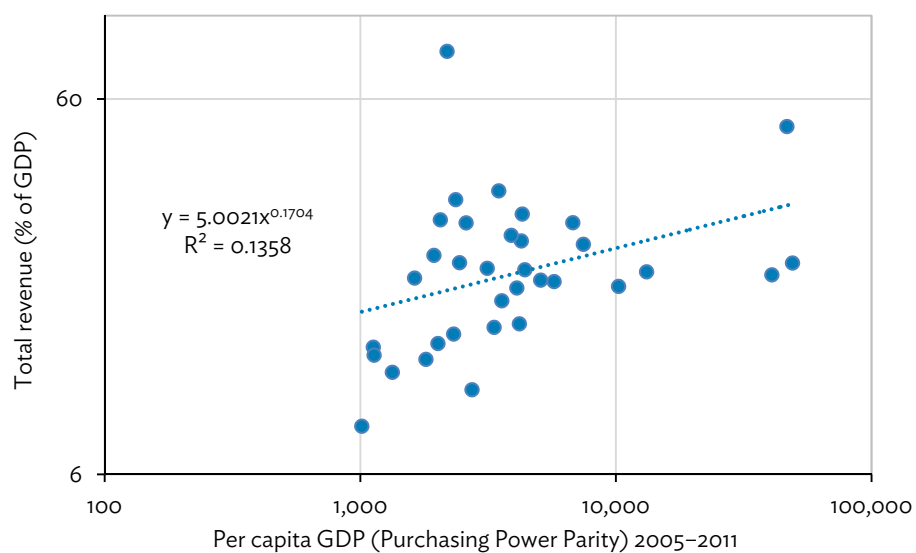
How fiscal resources are related to major national characteristics like per capita income, its distribution, and good governance in developing Asia is examined in Figures 2 to 5.³⁶ As the figures show, revenue is only mildly positively related to GDP per capita (PPP) and its inequality as measured by the Gini Index. The positive link to per capita GDP is expected and replicates results in earlier studies.³⁷ The positive link to inequality suggests that taxes are mildly progressive in this cross section of economies. On the other hand, revenues are negatively related to the incidence of poverty in the economy, again as expected. The negative link to poverty is the strongest of the three correlations having an R-squared value of 0.38. No strong link is observed to good governance and the absence of corruption possibly due to data limitations; nevertheless, the link between good governance and revenue is, if anything, positive, again as expected.³⁸

³⁶ Data on variables used here are from WDI. Sample sizes of economies in developing Asia are 36 for per capita GDP, 23 for the Gini Index, 21 for the poverty headcount, and 27 for the Country Policy and Institutional Assessment Index.

³⁷ See Bahl and Bird (2008). The link is stronger for tax revenues alone.

³⁸ A discussion of various determinants of revenues from different sources is in Keen (2012).

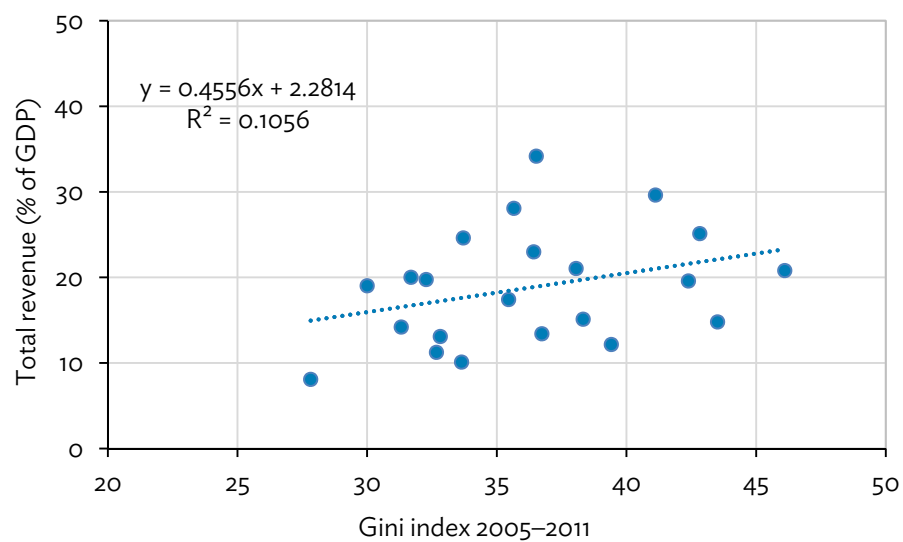
Figure 2: Total Revenue versus Per Capita Gross Domestic Product
(Log scales)



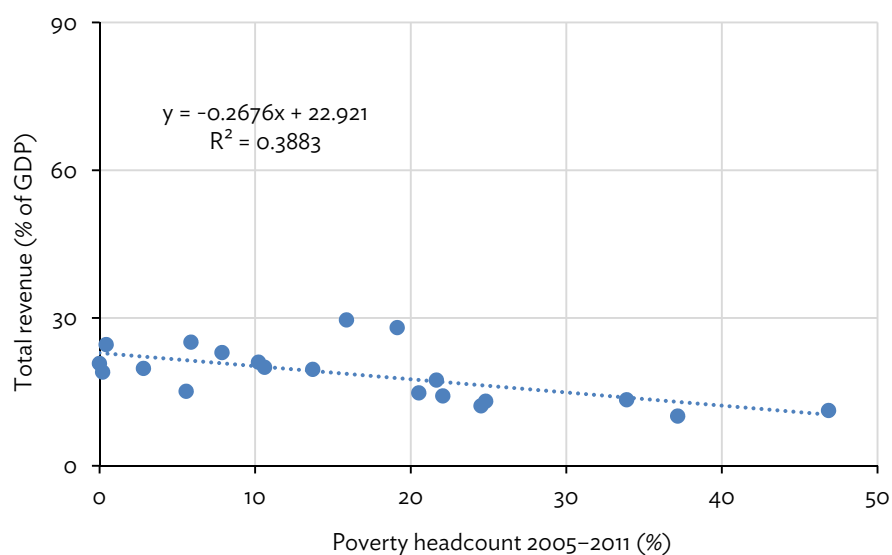
PPP = purchasing power parity.

Source: Author's estimates using World Bank's World Development Indicators (accessed 14 August 2013).

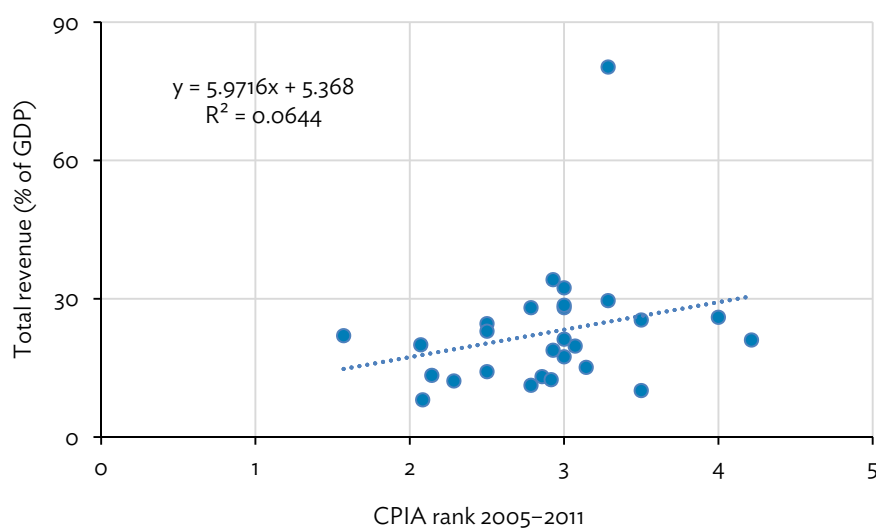
Figure 3: Total Revenue versus Per Capita Gross Domestic Product



Source: Author's estimates using World Bank's World Development Indicators (accessed 14 August 2013).

Figure 4: Total Revenue versus Poverty Headcount

Source: Author's estimates using World Bank's World Development Indicators (accessed 14 August 2013).

Figure 5: Total Revenue versus Country Policy and Institutional Assessment Index

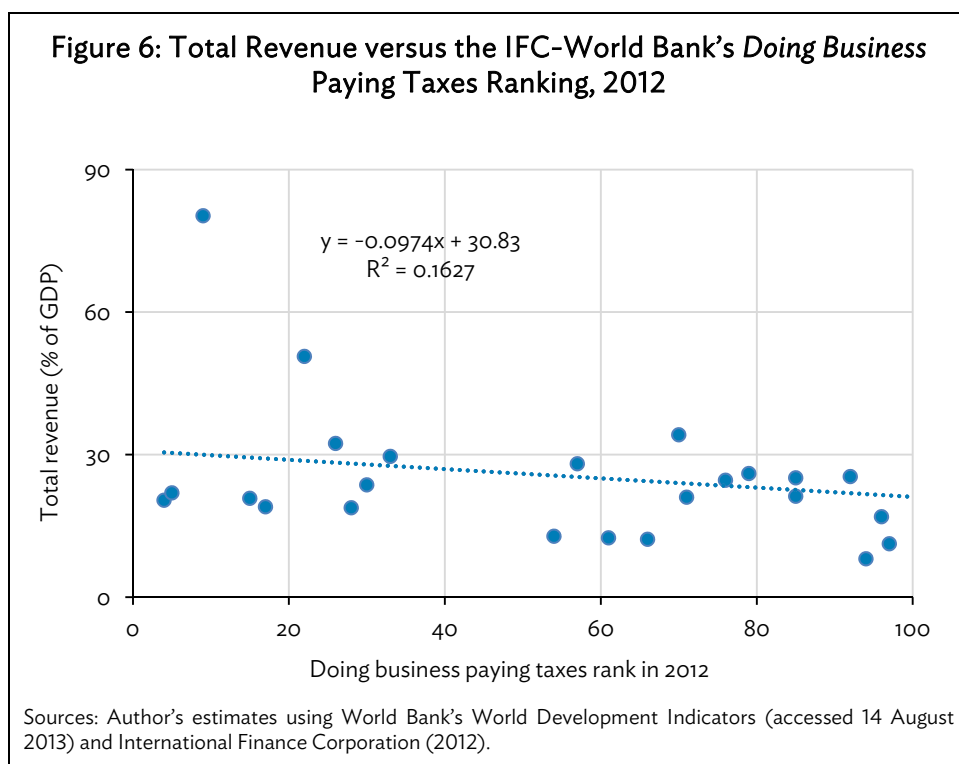
CPIA = Country Policy and Institutional Assessment.

Source: Author's estimates using World Bank's World Development Indicators (accessed 14 August 2013).

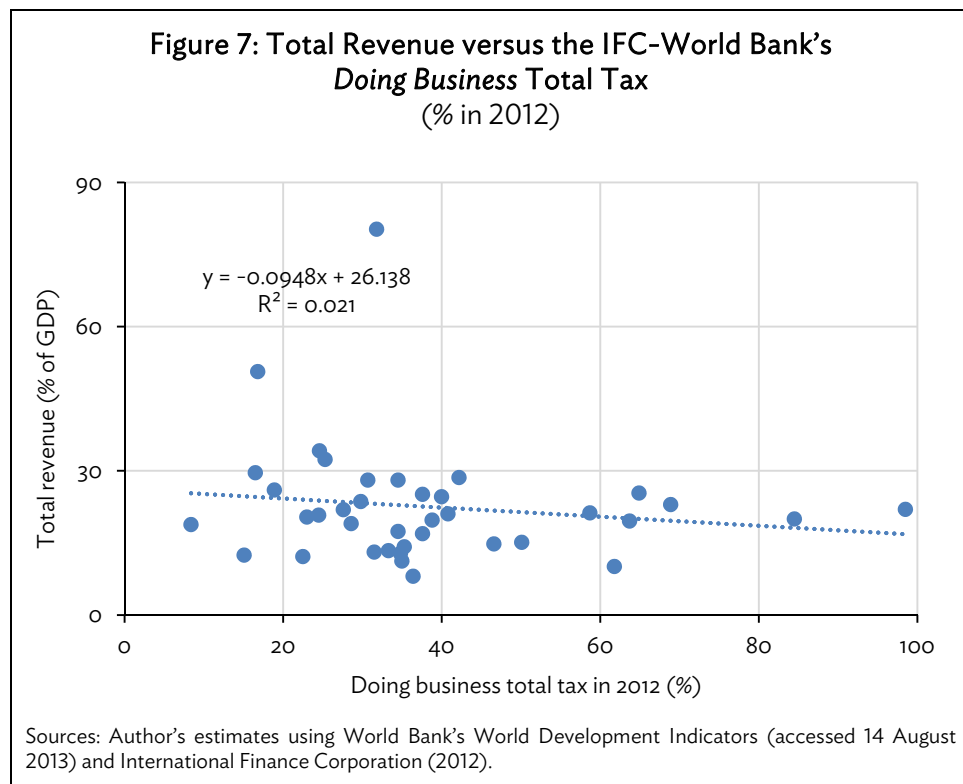
D. Compliance Burden of Taxes

The total economic burden of raising fiscal revenue discussed above includes resource misallocation costs, and tax evasion and avoidance costs, in addition to administration and compliance costs. No cross-section data are readily available on resource costs. Regarding administration and compliance

costs, the IFC–World Bank’s periodic *Doing Business* surveys are available, most recently for 2012. The “Paying Taxes” ranking from this survey measures the burden on businesses of paying taxes according to a number of indicators, including the time it takes to make tax payments, the number of tax payments needed per year, and the actual tax paid as a percentage of profits. Combining these indicators in a single index yields the composite Paying Taxes rank. The survey covers 185 economies, including 46 in developing Asia. The least burdensome system in developing Asia is that of Hong Kong, China (ranked 4) followed by Singapore (5) and Kiribati (9). The most burdensome tax system is that of Tajikistan (175), followed by Sri Lanka (169), and the Kyrgyz Republic (168). Figure 6 shows that there is a mildly negative relation between administrative and compliance costs, and total fiscal revenues.³⁹ On the other hand, the tax rate has a much weaker link to fiscal revenue (Figure 7).



³⁹ The link to tax revenue alone is weaker.



Overall, the analysis of developing Asia's revenue systems suggests that on average, governments do not raise adequate revenues and rely too much on taxation and not enough on non-tax revenue. Within taxes, the major share is that of indirect taxes on goods and services. According to Park (2012), this poor tax performance is caused by high tax evasion and large informal sectors. The other negative factors to raising more revenue tentatively identified in this analysis are poverty and most importantly high administrative and compliance costs.⁴⁰ Poor governance and low per capita incomes have less of a negative influence on raising fiscal revenue.

E. Diversity of Resource Systems in Developing Asia

The resource systems in developing Asia display great diversity underscoring the often quoted maxim that there is no "one size fits all" reform strategy. The following brief comments on different economies illustrate this diversity.

Cambodia's tax system is currently undergoing extensive reforms and modernization given its troubled past. Several elements of a modern tax system, including a full corporate and non-corporate income tax, are still missing while the VAT is barely 5 years old. Much needs to be done to increase the strength of its medium and large taxpayer populations from the current 19,000. Furthermore, administrative capacity has to be augmented if the large volume of tax arrears is to be reduced.⁴¹

⁴⁰ Weak administration is also a factor identified by Park (2012).

⁴¹ See Chansopheak (2007), Puthipol (2011), and Um (2012).

Contrasting sharply with Cambodia, Singapore's tax system is one of the simplest anywhere with full-fledged legislation with almost no gaps. Its tax administration, one of the most modern in the world, is highly automated and focused on excellence in taxpayer services.⁴²

One of the major issues the PRC illustrates is the importance of well-designed resource transfer systems for potentially fiscally inclusive local government finances. It also points to the possibly greater importance of non-tax revenue sources for local governments.⁴³

India illustrates the importance of political impediments to reforming fiscal resource systems. Subnational units (or states) have their own constitutional powers to raise resources, powers that they aggressively use. As a result, subnational tax reforms are subject to long, drawn-out negotiations and consensus building. For example, the subnational component of a country-wide VAT first suggested in 1985 is still incomplete. Inefficiencies in raising resources persist for years after reforms are identified.⁴⁴

The remote Pacific island of Kiribati depends crucially on external economic opportunities for its continued growth and development. The economy is currently highly reliant on foreign aid. Of internal resources, non-tax revenue from the sale of fishing licenses is the major revenue source, so future strategies for raising resources must strive to improve external economic relations and, to the extent possible, domestic economic activity.⁴⁵

A landlocked Himalayan country with limited domestic industry, Nepal's revenue-GDP ratio (excluding grants) is lower than all its South Asian neighbors. Though partly because of poverty, tax collection is below even its limited potential due to a poorly designed and administered tax system. For Nepal and some other similarly placed countries, improving tax design and strengthening revenue administration should be a major element in the strategy to promote inclusive growth.⁴⁶

The Philippines, like India, is a relatively open democracy with a free press. That both have similarly low tax-GDP ratios raises the possibility that democracy and relatively "free" societies cause low tax capacity. Parallels in their tax systems are striking and include sophisticated academic and research establishments for taxation; sophisticated and "modern" tax laws that, however, are riddled with tax concessions, some possibly due to political pressure groups; direct taxes predominating in their revenue structures, unusual for countries at their income levels; large-scale tax evasion; and allegedly deeply corrupt tax administrations.⁴⁷

Finally, Georgia and Uzbekistan, among former Soviet Union countries, have sharply contrasting problems with their tax administrations.⁴⁸ The *Doing Business* Paying Taxes ranking places Georgia 33rd out of 185 economies; however, Georgia's tax administration, though allegedly free of corruption, has an adversarial attitude toward business taxpayers leading to uncertainty, high costs,

⁴² See, for example, Ararat (2009).

⁴³ Wang and Herd (2013) point out that provinces are likely to soon introduce annual taxes on residential property to reduce their reliance on transfers. As pointed out previously, their likely incidence on the rich implies that these taxes could well promote inclusion in addition to contributing to raising resources. For additional relevant discussion see Wong and Bird (2005).

⁴⁴ This paragraph is largely based on the author's interpretation of recent fiscal reforms and impediments. Also see, for example, De (2012) and Kelkar, Rajaraman, and Misra (2012).

⁴⁵ See IMF (2013).

⁴⁶ See Dahal (2009) and Dobrescu, Nemes, and Yu (2011).

⁴⁷ See Aldaba (2006), Blöndal (2010), Diokno (2010), Jeremias (2012), and World Bank (2013a).

⁴⁸ Dekhanov (2011), and Tadjibaeva and Komilova (2009) for Uzbekistan; and Transparency International Georgia (2010).

and possibly growing informalization. Uzbekistan has a corrupt but inefficient tax administration that is being reformed and which, as a result, does not impose too high a cost on business. In Georgia, therefore, improving growth and raising revenue requires that the power of tax officials be curbed, while in Uzbekistan, better revenue performance should address corruption in the tax administration as is being done.

III. OVERALL ASSESSMENT AND SUGGESTED REFORM PRIORITIES

The following major conclusions about the resource systems of developing Asia appear warranted despite the limited information on which they are based.

- In developing Asia, economies rely too little on resources that have low economic costs and too much on broad-based taxes. Thus, the scope to raise resources more efficiently and inclusively exists by paying greater attention to non-tax revenues, property taxes, and corrective taxes. Within broad-based taxes, there is scope for some governments to enhance the productivity of the VAT.
- Poor and smaller economies have limited resource bases and lack the capacity to improve their strategies for raising resources unilaterally and so would benefit from external financial and technical support.
- The volatility of fiscal resource flows tends to be high for resource-dependent economies, especially if global market prices fluctuate over time.
- The informal sector—to which tax administration may itself contribute—weakens fiscal resource bases.
- Tax administration effectiveness and efficiency can be improved by more effective information utilization and by the adoption of advances in communication technology. Reforms of tax administrations need, however, to look at administrative institutions and incentives, and cannot be limited to technical reforms alone.

These conclusions can also be taken as setting priorities for short-run reforms to strengthen resource systems in developing Asia.

Developing Asia displays a great deal of diversity in the nature of its fiscal resource bases and administrations with respect to the extent of its reliance on direct taxes; VAT design and use; the number of taxes and the share of other taxes; the size and importance of subnational governments (if any); corruption in tax administration; and, on the other hand, business friendliness and lack of arbitrariness of tax administration.

For a more complete analysis, greatly improved data are needed particularly on the following:

- Seigniorage;
- Effective rates for major taxes, the extent of revenue loss through tax concessions, and the taxpayer base;
- Categories of non-tax revenues and their yield;
- The administrative and compliance cost of collecting taxes so that the cost of funds from different sources can be computed and compared; and
- The effectiveness of institutions regarding fiscal accountability and anticorruption.

Even this will not permit an analysis of the distribution impact of resource systems. For this, a combined incidence analysis of revenue and expenditures is required economy by economy.⁴⁹ Perhaps the way forward in the immediate future is to undertake case studies on those identified as the weakest fiscally.⁵⁰

⁴⁹ As in the pioneering study by Devarajan and Hossain (1995).

⁵⁰ Similar to the *International Monetary Fund Article IV Consultations* but for fiscal resource systems.

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* ADB recognizes China as the People's Republic of China.

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Fiscal Resources for Inclusive Growth

The paper presents a framework to assess the fiscal resource bases of economies in developing Asia as well as the growth and distribution effects of fiscal resources. The analysis suggests that in order to expand their relatively low fiscal resource bases, developing Asian economies need to pay greater attention to non-tax revenue and to taxes other than broad-based taxes on income and consumption, such as property taxes and corrective taxes.

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