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Abstract

This paper reviews the evolution and current state of subnational taxation in five large emerging countries: Brazil, Russia, India, China, and Nigeria – BRIC plus one. As these case studies show, intergovernmental fiscal relations in any country are inevitably both path-dependent and context-sensitive. In India and Brazil, for example, subnational governments already have a significant degree of fiscal autonomy in terms of being able to set some key tax rates. In both countries, however, substantial attention still must be paid to improving the general consumption taxes that are the main source of regional government revenues as well as the property taxes on which local governments mainly depend. Although Nigeria, like India and Brazil, is a federation, its fiscal system depends so heavily on oil revenues that almost all political attention has been focused on securing a bigger share of these revenues. Both China and Russia have made a number of important changes in the direction of centralizing rather than decentralizing effective control over subnational taxes. In both countries the key issue is the extent to which fiscal decentralization is to be accompanied by any significant political decentralization. At the present time, in neither China nor Russia is it clear that the central authorities are willing to permit subnational governments much autonomy in this respect.

Keywords: state and local taxation, intergovernmental fiscal relations, Brazil, Russia, India, China, Nigeria

JEL codes: H77, H71, P35, P43

1. Introduction

This paper looks at how subnational taxation actually works in five large emerging countries – Brazil, Russia, India, China, and Nigeria. To place this discussion in broader context, consider first the broad differences in taxing patterns observable between the seven large emerging countries -- including China, India and Russia but not the others studied here -- and the six developed federal countries included in Table 1. On average, central governments are slightly more important in the large emerging country group as taxers (71.6%) than in the developed federations group (69.8%). Central governments in large emerging countries also receive a slightly greater share of income taxes (62.6% compared to 60.4% for the developed federal countries) as well as considerably higher shares of consumption taxes (72.8% compared to 59.4%) and especially taxes on property (24.4% compared to 7.4%). India, Indonesia, and South Africa collect 100% of income taxes centrally, for example; among developed federal countries, only Australia does. In all the developed federal countries except Switzerland most or all taxes on property are collected by subnational (and usually local) governments. However, only in China, Russia, and Ukraine does the central government collect less than 10% of such taxes in the large emerging countries included in the table.

Such averages may provide interesting talking points. However, on the whole they probably conceal more than they reveal. Indeed, in the end perhaps the most important lesson to take from Table 1 is simply the wide variation in the allocation of tax bases by level of government that may be found in different countries around the world. The main lesson such data suggests is simply that countries have a wide range of choice when it comes to subnational taxation.

Table 1 also serves to illustrate why it is surprisingly difficult to make definitive statements about the nature and importance of subnational taxation in particular countries. Consider, for example, the summary information shown in Table 2 with respect to the extent of subnational revenue ‘autonomy’ (as measured by the extent to which regional and local expenditures are financed with ‘own source’ revenues) in a number of large countries, including four (China, Russia, India and Brazil) that are discussed in more detail later in the present paper.

Table 1
Share of Central and Subnational Taxes, Selected Countries and Years
(percent)

<i>Country and year</i>	<i>Total tax revenues</i>			<i>Taxes on income</i>			<i>Taxes on property</i>			<i>Domestic taxes on goods and services</i>		
	%Central	%State	%Local	%Central	%State	%Local	%Central	%State	%Local	%Central	%State	%Local
*Germany 1998	70.7	22.0	7.3	43.4	36.6	20.0	0.8	48.6	50.6	62.8	37.0	0.2
*Spain 1997	83.0	7.5	9.4	85.7	8.7	5.7	2.8	52.4	44.7	78.5	5.4	16.0
<i>Ukraine 2001</i>	<i>74.3</i>	<i>0.0</i>	<i>25.7</i>	<i>35.6</i>	<i>0.0</i>	<i>64.4</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>80.5</i>	<i>0.0</i>	<i>19.5</i>
*Canada 1999	52.5	38.5	9.0	63.5	36.5	0.0	0.0	21.1	78.9	41.0	59.0	0.1
*Russia 2001	69.7	0.0	30.3	27.6	0.0	72.4	5.2	0.0	94.8	82.7	0.0	17.3
*South Africa 1998	92.8	0.5	6.7	100.0	0.0	0.0	21.7	0.0	78.3	98.6	1.4	0.0
*Switzerland 2000	66.0	20.0	14.0	30.3	39.1	30.7	30.9	42.8	26.3	92.2	7.6	0.2
*Australia 1999	77.4	19.3	3.3	100.0	0.0	0.0	0.0	63.6	36.3	66.2	33.8	0.0
*United States 2001	69.3	19.1	11.6	83.0	15.5	1.5	10.0	8.0	82.0	15.7	67.6	16.8
*Argentina 2001	59.7	40.3	0.0	50.5	49.5	0.0	54.4	45.6	0.0	94.6	5.4	0.0
*India 1999	62.6	37.4	0.0	100.0	0.0	0.0	14.9	85.1	0.0	41.5	58.5	0.0
China 1999	45.0	55.0	0.0	24.4	75.6	0.0	0.0	100.0	0.0	55.7	44.3	0.0
<i>Indonesia 1999</i>	<i>97.1</i>	<i>2.9</i>	<i>0.0</i>	<i>100.0</i>	<i>0.0</i>	<i>0.0</i>	<i>74.9</i>	<i>25.1</i>	<i>0.0</i>	<i>95.9</i>	<i>4.1</i>	<i>0.0</i>

Source: As calculated from International Monetary Fund (2002) by Martinez-Vazquez, McLure, and Vaillancourt (2006). Countries are listed in order of tax-to-GDP ratio (from various sources and usually for a later year than the detailed tax data included in this table). The countries discussed in more detail later in this paper are shown in bold, other large emerging countries are shown in italics, and federal countries are indicated by an asterisk.

Table 2
Fiscal ‘Autonomy’ in Some Large Countries
(various years)

Country	Main Subnational Taxes	Subnational Own Source Revenues as % Total Subnational Revenue
Brazil	Sales, Property	75%
China	No true subnational taxes	<5%
India	Sales, Property	38% State, 25% Local
Indonesia	Vehicles, Fuel Surcharge, Income Tax	22% Province (N. Sulawesi) 6-9% Local
Russia	Sales tax, enterprise assets tax, land and property tax	30% Regional, 14% Local
US	Income, sales, property taxes	66% State, 55% Local

Source: Based on information presented in Martinez-Vazquez, Rider and Wallace (2008), pp. 214-15. Note that the information for Russia relates to 2002; as noted in the text subnational tax revenue structure changed radically in Russia several times during the last decade.

The relatively high importance of subnational revenues in China shown in Table 1 contrasts with the low degree of ‘autonomy’ reported in Table 2. Similarly, the relatively high ‘autonomy’ of local governments in India reported in Table 2 is hard to relate to the extremely low importance of local taxes shown in Table 1, and the non-existence of regional revenues shown for Russia in Table 1 is quite different from the considerable regional ‘autonomy’ noted in Table 2. There are, of course, logical explanations for each of these apparent discrepancies. For example:

- With respect to China, for example, virtually all subnational revenues are shares of national taxes or revenues from taxes that are completely determined by the central government.
- In the case of Russia, the explanation is in part one of timing: as discussed in Section 3 below the importance of regional taxes in Russia has changed substantially from year to year: indeed, at present the situation is unlike either that shown in Table 1 or in Table 2.
- Finally, with respect to India, the explanation is simply the very small importance of local governments as a whole.

An important point that emerges from this initial (partial) overview is thus simply that one should always view cross-country comparisons of subnational government finances

with considerable skepticism.¹ Nonetheless, there is still much that can be learned from considering how different countries have dealt with the issue of subnational taxation, as the case studies of experience in five large emerging countries in this paper illustrate.

2. Subnational Taxation in Brazil

Brazil is by far the most decentralized country in Latin America, with 26 states (plus a Federal District), and over 5500 municipalities. Since Brazil adopted its first federal constitution in 1891, it has since gone through several phases of decentralization and recentralization. Throughout much of Brazil's history the key political players have often been state governors, particularly those in the more important states such as Minas Gerais and Sao Paulo. During the 20 years of the military dictatorship from the mid-1960s to the mid-1980s Brazil went through a centralizing phase. With the return of democracy and the adoption of a new constitution in 1988, however, decentralization returned with a vengeance. At present, Brazil's fiscal structure gives both state and municipal governments an unusual amount of control over revenues and hence a substantial degree of fiscal autonomy.

Tax assignment in Brazil is summarized in Table 3. Although income taxes, which account for over 40% of all taxes, are entirely federal, the single most important source of tax revenue, the sales tax, is split among all three levels of government, with the greatest share accruing to the states.

Table 3
Tax Assignment in Brazil

Federal –	taxes on foreign trade corporate income taxes personal income taxes rural property taxes payroll taxes sales taxes (IPI)
State --	taxes on property transfers ^a taxes on vehicles sales taxes (ICMS) ^b
Municipal --	taxes on property transfers ^a urban property tax sales taxes (ISS) ^b

Notes: (a) federal government sets rate but state and local governments define base and administer the tax; (b) federal government defines base and sets rate.

¹ For discussion of the difficulties in making such comparisons and illustrations even in OECD countries, see OECD (1999, 2006); see also Ebel and Yilmaz (2003), Bird (2005), and Blochiger and King (2006).

Table 4 shows both the share of "own source" tax collection and, reflecting intergovernmental transfers of tax revenues (tax sharing), the share of taxes available to each level of government.²

Table 4
Brazil: Taxes by level of government, 2005

	<u>Own-source Tax Collection</u> ^a		<u>Disposable Tax Revenue</u> ^b	
	% GDP	% Total	% GDP	% Total
Central	26.7	68.5	22.5	57.8
State	10.1	25.9	9.8	25.2
Local	2.2	5.5	6.7	17.1
Total	38.9	100.0	38.9	100.0

Notes: (a) taxes imposed and collected by level of government;
(b) taxes received after adding and subtracting tax revenue sharing.
Source: Afonso and Araujo (2006).

Brazilian taxes are high even by developed country standards, around 39% (including Social Security) of GDP in 2005, with about 32% of this amount being collected directly by subnational governments, 26% by states alone (Serra and Afonso 2007). In addition, subnational governments are entitled to about half the revenue from the three main federal taxes -- personal and corporate income tax and a limited VAT on goods at the manufacturing stage called the IPI (*Imposto sobre Productos Industrializados*). The subnational share is split more or less equally between the states and municipalities, with the most important tax at each level being a sales tax -- the ICMS (*Imposto sobre Circulação de Mercadorias e Servicos*) at the state level and the ISS (*Imposto sobre Servicos*) at the local level. Although most revenues are collected in the richer and more urbanized areas, they are distributed within each level of government on the basis of redistributive criteria. In total, states control 25% of tax revenue in Brazil and municipalities -- the big gainers from revenue sharing -- 17%, for a total of 42%.

The final result of this complex system of tax assignment and intergovernmental transfers is that Brazil is one of the most fiscally decentralized countries in the world, with subnational governments accounting for close to three quarters of all expenditures. However, as Arretche (2007) notes, while the 1988 Constitution did grant broad tax autonomy to states and municipalities in the sense they can establish the rates of their own taxes, the federal government generally retains authority to establish both subnational tax bases and the conditions under which states and municipalities can exercise their fiscal authority. Legislation governing subnational taxation is exactly like any other legislation as far as the federal government is concerned: there are no special rules that govern such legislation.

² See Afonso (2004) for similar annual figures for the 1988-2004 period. Subsequent revisions to GDP figures lowered the gross tax ratio for 2005 to only 33.7% of GDP (Werneck 2007) but this revision does not affect the structural division of revenues which is the central issue here.

Moreover, since the only requirement for constitutional amendment is the approval of the central legislative bodies there is also no formal subnational veto of changes to their fiscal powers. Thus despite its fiscal decentralization, in Brazil, much more than in most developed country federations (e.g. Australia or the United States), the federal government can to a large extent do what it wants in principle when it comes to subnational taxes and often also, in the end, in practice. If the states do not like the results, they must muster a majority of members of the federal legislature to vote down the legislation or, in some cases, a substantial minority in order to defeat a constitutional amendment.³ The experience of recent years suggests that state pressures on national legislatures are generally too weak and state delegations insufficiently cohesive to overcome the influence of the national government on most legislative decisions (Cheibub et al. 2006)

The most important state taxes are the ICMS, a VAT, and a tax on the ownership of vehicles. The ICMS, introduced in the late 1960s to replace an earlier turnover tax, is particularly important, accounting for over half of state own revenues and most of the growth over time of those revenues. The most important municipal taxes are those on urban property and on services not subject to tax under the ICMS.⁴ Brazil's federal VAT (IPI) applies at a variety of rates only selectively to industrial goods at the manufacturing and import level. In contrast, the state VAT (ICMS) taxes the circulation of goods in general as well as some services (i.e., interstate and inter-municipal transportation and communication services). In 2005, IPI revenue (1.2% of GDP) was less than 1/5 of the revenue yielded by the ICMS. In addition to these two general sales taxes, municipalities impose a sales tax (the ISS) on a specified list of services not reached by ICMS that yields about 0.4% of GDP. In addition, parts of the contributions for the Social Security system (COFINS, *Contribuição para o Financiamento da Seguridade Social* and PIS, *Programa de Integração Social*) are also imposed on business turnover and yield another 0.6% of GDP. In total, this array of taxes on goods and services account for a substantial proportion – over 40% -- of taxes in Brazil as well as 36% (of which almost two thirds came from ICMS) of the growth in the Brazilian tax ratio in the early years of this century (Afonso 2008).

Reforming Indirect Taxes

It is thus not surprising that most of the extensive discussion on tax reform that has occurred in Brazil during the last decade has focused on simplifying and rationalizing its complex structure of indirect taxation. Despite the federal influence over bases and rates noted earlier, in reality the important Brazilian indirect tax system has long been largely controlled by the states even during the military regime, when the rate setting power was given to the federal Senate. Domestic and foreign experts alike unite in

³ To pass a constitutional amendment requires a 3/5 majority in two rounds of voting in the two federal legislative houses (chamber of deputies and Senate).

⁴ The rural property tax is the responsibility of the central government, although 50% of the proceeds are shared with the municipalities.

categorizing the present system as both inefficient and potentially destabilizing.⁵ Nonetheless, despite the overriding federal constitutional power noted above, the prospects of reforming the system remain fraught because, as Diaz-Cayeros (2006, 231) has stressed, "... Brazilian federalism is still characterized by the rejection of a centralized fiscal compromise. States have not given up their capacity to tax, nor are they likely to do so in the near future."⁶

Brazil is one of three countries in the world with important subnational VATs; the other two are India and Canada. It was the first to adopt such a tax and, perhaps unsurprisingly, since Brazil preceded even most European countries in adopting a VAT the initial version of the ICMS was defective in many ways (Ter-Minassian 1997). A major reform introduced by the federal government in 1996 moved the state indirect tax base closer to the "normal" VAT by introducing zero rating for exports of non-manufactured goods as well as an input tax credit for the purchase of capital goods.⁷ Nonetheless many problems remain. For instance, different rates apply to intrastate (usually 17%) and interstate transactions (12%, except for exports to less developed states at 7%). Since every state has its VAT law, there are actually 40 different rates -- with (tax-exclusive) rates as high as 40% on some sectors such as telecommunications (Werneck 2007) -- applying in Brazil's 27 states as well as different rules for crediting. These rates both complicate administration and facilitate evasion. Both problems are exacerbated by the extent to which different states have granted exemptions and preferential treatments for different sectors to the point where this interstate competition for mobile investors is usually referred to in Brazil as a "fiscal war."⁸ In addition, the state VAT base is far from perfect: it excludes most services and appears to fall to a significant extent on capital formation.⁹

Finally, each state imposes this tax on a production (origin) basis, applying the interstate rates just mentioned to sales within Brazil. Since exports are zero rated, the result is that states that are net exporters may end up rebating taxes that were actually paid to other states (Longo 1990). In effect, this is an exacerbated version of the same problem (with the Central Sales Tax) noted in Section 4 in India. In both countries any

⁵ For example, see the discussions by Ter-Minassian (1997), Rodden (2003), Rezende and Afonso (2006) and Facchini and Testa (2009).

⁶ Rezende and Afonso (2006, 180) make essentially the same point in a more negative fashion: "there is a broad consensus on the inadequacy of the Brazilian tax system.... nevertheless, no attempts to reform the tax system... have succeeded."

⁷ Serra and Afonso (2007) attribute some of the problems of recent years to this reform, however, particularly the abolition of ICMS on exports. Revenue losses on this account were supposed to be compensated by a federal transfer; subsequently, however, constant friction about the amount and allocation of this transfer have exacerbated federal-state relations.

⁸ See Varsano (2001). An important recent example was the lobbying with respect to automobile assembly plants.

⁹ Werneck (2007) estimates that 17% of all indirect taxes fall on capital formation. Some states, such as Sao Paulo have in effect accentuated this problem by introducing a system of VAT "withholding" that requires distributors to collect in advance the estimated ICMS that is estimated to be likely to be owed, but unlikely to be collected, from final sellers. However, it should also be mentioned that by administering its VAT in this way, Sao Paulo has to some extent "broken" the chain of informality and hence, as was its intention, reduced tax evasion (de Paula and Scheinkman 2009).

solution will require substantial revenue redistribution across states and may not be feasible unless substantially sweetened by federal compensation. Despite all these problems in the structure and operation of the ICMS, however, a recent detailed examination of state sales tax administrations suggests that in some states at least there have been substantial improvements in both collections and administration in recent years (Pinhanez 2007).

An important aim in the ongoing tax reform discussion in Brazil in recent years has been to reform and simplify federal and state indirect taxes.¹⁰ A recent federal proposal, for example, while maintaining IPI more or less as it is would combine the two Social Security levies on turnover (COFINS and PIS) mentioned above with some other taxes such as that on motor fuels into a single tax (Brazil, Ministerio da Fazenda 2008). As with some past federal proposals, however, the envisaged objectives of the reform are somewhat more sweeping when it comes to the state ICMS, recommending the creation of new unified ICMS legislation at uniform rates to be determined by CONFAZ (National Council of Fiscal Policy) subject to approval by the federal Senate.

The system proposed would have many advantages including the complete "untaxing" of exports as well as the end of the "fiscal war" between states. It would also remove much of the present taxation that falls on business costs as well as reducing substantially the so-called "custo brasileiro" (Brazilian cost) imposed on enterprises by the present complex tax system. Perhaps in an effort to make this package more attractive to the states, in addition to guaranteeing them against revenue losses in adopting this proposal, the federal government also proposed removing the present constitutional requirement that a certain share of ICMS revenues must go to the municipalities (which, apparently, are also to receive a federal guarantee against revenue losses).

This proposal is hardly the last word, however, as Brazil continues to generate a variety of ideas, if as yet not all that much action, with respect to tax reform. For example, a competing proposal currently in the Senate would introduce a single integrated national VAT on both goods and services (incorporating the present Social Security contributions imposed on turnover) to be collected by the state governments, with the revenue being shared on the (destination) basis of consumption (Afonso 2008). No doubt still other ideas will emerge in the near future. As yet, however, it is far from clear in which direction Brazil will move with respect to reforming indirect taxes or subnational taxation in general, let alone when it might do so.

¹⁰ Werneck (2007) discusses a number of diverse proposals for reforming indirect taxes that were considered during this period. An important aspect of Brazilian tax reform that is not discussed here is the well-founded concern of the central government with the questionable nature of some of the taxes through which it has maintained and expanded its revenues over the last decade or so, particularly such cascading taxes as those on financial transactions. For an interesting argument that Brazil should, instead of eliminating such taxes, build on them to reform its fiscal system more broadly, see Cintra (2009).

Local Finance

Brazilian municipalities, like Brazilian states, appear at first glance to be far more fiscally autonomous than those in most countries. And so they are, again subject to the important and overriding constitutional principle that it is the federal government which establishes extensive and detailed legislation to control subnational taxes in most of their critical parameters (Arretche 2007). Nonetheless, Brazilian municipalities are unique in the sense that they are not under the direct control of state governments in all respects. Although states do control the creation, consolidation and dissolution of municipalities, legally municipalities have the same status as states as members of the federation (Afonso and Araujo 2006).

As is common throughout the world, however, in Brazil as in most countries revenue-sharing and other transfers are the main source of revenue at the municipal level. In addition to federal tax-sharing transfers to municipalities (22.5% of the IPI and income tax collections as well as 50% of the rural land tax), the states as a whole now transfer more to municipalities than they receive from the federal government for their share of the same federal transfer, in large part because they are required to transfer 25% of ICMS revenues and 50% of their motor vehicle tax revenues to municipalities. At least 75% of the ICMS share must be distributed in proportion to operations in the municipalities, with the balance being shared by variety of different criteria in different states. The share of state motor vehicle tax revenues is distributed based on the number of licensed vehicles, just as the federal tax on rural land and property is shared according to the property located in the jurisdiction. The larger federal tax-based transfer to municipalities takes a different form: 22.5% central collections of income taxes and IPI go to a "municipal participation fund" which is then distributed in a basically equalizing fashion, favoring small municipalities. This favoritism is one reason for the substantial increase -- from 3991 in 1980 to 5560 in 2006 -- in the number of municipalities in Brazil in recent years (Afonso and Araujo 2006). Municipalities also received significant additional transfers from the federal government particularly with respect to the health system.

The major own source revenues of municipalities are the tax on services (ISS), almost all of which is collected by the largest municipalities (Rezende and Garson 2006) and the urban property tax as well as a tax on property transfers. Together these two sources account for almost 60% of total local taxes. Total own revenues at the municipal level (including the important federal district which is treated differently in some respects), however, account for only 20% of municipal revenues in large cities and less than 10% in other areas, with the ISS and the two taxes on property being almost equally important and together accounting for about 80% of local taxes. Although municipal taxes constitute little more than 5% of Brazil's high total tax ratio or about 2% of GDP, they have more than doubled in importance since the 1988 reform and are now more important in municipal total revenues than the mandatory federal transfer based on IPI and income tax revenues (Afonso and Araujo 2006).

ISS is imposed on all services except communications and interstate and intercity public transportation, which are taxed by the state ICMS. Generally, the ISS is a fixed

percentage of retail sales although more presumptive methods of assessment are used in some cases. National law fixes the minimum rate of the ISS at 2% as well as maximum rates that differ by the type of service, with the usual maximum being 5% of gross revenue. The base of the ISS was expanded slightly a few years ago to include road tolls and the introduction of municipal public lighting fees. Both measures originated in actions by municipalities which were initially found by the courts to be unauthorized by law but were later legally enacted by federal legislation that ratified them.

The general consensus appears to be that on the whole the ISS is poorly exploited by local governments and that the only way to tax services more effectively is probably to abolish the ISS and incorporate services fully into a comprehensive value-added tax (Werneck 2007). While serious political opposition to this position is of course anticipated from local governments, little attention seems as yet to have been paid to the desirability of providing local governments, particularly those in large urban areas, with an adequately expansive source of revenue that is within their own control.

Brazil's earlier experience with overly soft budget constraints at both the state and local levels (Rodden 2003) supports the importance of imposing adequately hard budget constraints on subnational governments. It is difficult to see how this can be done in a sustainable way, however, when subnational governments are charged with carrying out activities which require increased financing unless those governments are themselves capable of and responsible for securing a significant proportion of the expanded revenue needs from their own citizens in a clearly accountable fashion.

Urban property tax is imposed on the assessed value of land and buildings and is completely administered by local governments, including the determination of rates. Significant administrative improvements in some cities in recent years have led to an increase in the importance of property taxes: for example, through simplified forms of mass appraisal, using a few readily observable and measurable characteristics of each property (Bahl et al. 2005).¹¹ On the other hand, as Afonso (2007) emphasizes, as in most emerging countries the actual performance of most municipal property taxes in Brazil remains poor owing to inadequate laws, low rates, outdated property registers, and costly and ineffective administration.

Summing Up

Brazil has long had a state VAT (ICMS) as well as a much more limited federal VAT (IPI) and a municipal tax on services (ISS). As in the case of India discussed below, the key immediate question with respect to subnational tax reform is to get the federal and state VATs in particular working better, and together. In recent years many plans along these lines have been put forth by the federal government and others. The current federal plan, for example, would clearly improve the VAT in Brazil substantially, but perhaps at the unnecessary expense of reducing state fiscal autonomy too much. As Bird (2010) discusses, in principle both levels of government can tax essentially the same base

¹¹ Afonso (2007) notes that in Sao Paulo taxpayers whose fiscal relations with the city government are conducted electronically can save up to 50% on local property taxes -- a not insignificant incentive.

with the tax being administered either by one level or by both levels in a closely coordinated fashion while still allowing the states substantial rate flexibility. Canada now does this; India is on the road to doing so. However, it is as yet unclear in which direction Brazil will move with respect to reforming indirect taxes or subnational taxation in general, let alone when it might do so.

At the municipal level, the consensus appears to be that on the whole the ISS is poorly exploited by local governments and that the only way to tax services more effectively is probably to abolish the ISS and incorporate services fully into a comprehensive value-added tax. However, perhaps insufficient attention has been paid to the desirability of providing local governments, particularly those in large urban areas, with an adequately expansive source of revenue that is within their own control. In addition, since the performance of most municipal property taxes in Brazil seems to be relatively poor, there is, as always, considerable room for further reform of this tax

3. Subnational Taxation in Russia¹²

Russia began the process of evolving a modern tax and intergovernmental fiscal system from the unpropitious launching pad of a central planning system. Three important problems had to be dealt with: the development of an adequate tax administration, the implementation of a modern tax structure, and the evolution of a sound system of intergovernmental finance. As Martinez-Vazquez, Rider and Wallace (2008) discuss, over the last two turbulent decades Russia has to a considerable extent accomplished the second of these tasks. Like every country's tax structure, Russia's is far from perfect. Nonetheless, in principle at least it perhaps now provides a generally sound basis for future development.¹³ Some limited progress has also been made on the other two fronts mentioned. Indeed, Russia (unlike China) has, after considerable vicissitudes and not without difficulty, established some limited but genuine subnational taxes. As Martinez-Vazquez, Rider and Wallace (2008) and especially De Silva et al. (2009) discuss in detail, however, there is still much room for improvement with respect both to tax administration and to clarifying and strengthening subnational finances.

Initially, in Russia (as in China) the old central planning system of treating all revenues physically collected in a jurisdiction – for example, because a head office was located there – as “belonging” to that jurisdiction was carried over into the new tax system -- but only partly. A city with a vodka distillery or a region with an oil well, for example, under the old system felt “entitled” to all the fiscal proceeds derived from these sources, even though in economic terms most of the taxes thus collected were probably being paid by consumers elsewhere.¹⁴

¹² This section draws heavily on material from Martinez-Vazquez, Rider and Wallace (2008) as well as Bird (2003); see also De Silva et al. (2009).

¹³ For an interesting discussion by an insider, see Shatalov (2006).

¹⁴ As noted below, under the new system the application of the derivation principle for major shared taxes produced results that were, if not exactly the same, largely similar.

This approach encouraged subnational governments to consider all the money flowing from their territory as “their” contribution to the central government, and then to net these outflows against explicit federal inflows in order to assess whether they are gainers or losers in the federal fiscal game. While such “balance-sheet federalism” is not unknown in other countries, it makes no sense to ignore the real economic incidence of taxes and expenditures, as such calculations invariably do.¹⁵ What matters in efficiency terms is not who *collects* (or *receives*) the revenue, but who *decides* and who *pays*. These are very different questions. Establishing a clear connection between those who decide how much governments should spend on what, those who pay fiscally for these decisions, and those who benefit from them is critical to sound public sector policy (Bird et al. 2003).

Of course, when some areas are rich and others are poor, any significant decentralization of revenue will eventually exacerbate regional disparities. This outcome is frequently modified by transfers or by treating different areas asymmetrically in some other way. Every federation has some asymmetry in its fiscal system to some degree (Watts, 2000).¹⁶ Martinez-Vazquez and Boex (2001) and Martinez-Vazquez (2006) argue that Russia in the 1990s went too far in the direction of differential treatment, although Treisman (1999) suggested that to some extent what was done along these lines under the Yeltsin government may at the time have been essential to national survival. Subsequently, however, as De Silva et al. (2009) discuss in detail, the Putin government undertook a substantial degree of recentralization, going even further than the 1994 reform in China discussed in Section 5 below.

Table 5 illustrates some of the major changes in revenue sharing in Russia over the last two decades, and Table 6 summarizes the current revenue assignment set out in the Tax Code. As Table 6 suggests, at present all major revenue sources are in effect assigned to the federal government.¹⁷ As Table 5 shows, however, all of the proceeds of the personal income tax, some excises and land and property taxes flow to subnational governments, as do half the yield of the liquor excise, a small fraction of extraction taxes and almost three-quarters of the enterprise profits tax. In all these cases, however, since the tax rate and base are established entirely by the federal government these are not “genuine” subnational taxes.¹⁸

¹⁵ This issue is discussed in detail in Bird (2005); for an attempt to make a more ‘economic’ calculation of interregional fiscal flows (for Canada), see Vaillancourt and Bird (2007).

¹⁶ For a thorough examination of this issue, see Bird and Ebel (2007).

¹⁷ In 2004, for instance, VAT accounted for 48% of all taxes and customs duties for 38%, with enterprise and income taxes accounting for 9% each and excises. These are all federal taxes although, as shown in Table 4, some of the revenue may be allocated to the regions.

¹⁸ For an extended discussion of this point, see Bird (2009).

Table 5
Sharing Rates of Major Taxes in Russian Federation
(selected years)

Tax	1991	1991	2001	2001	2006	2006
	Federal	Regions	Federal	Regions	Federal	Regions
VAT	75 ^a	25	100	0	100	0
Profits	37	63	31	69 ^b	27	73
PIT	14	86	1	99	0	100
Liquor	50	50	50	50	50	50
Excise						
Energy	100	0	100	0	--	--
Excises						
Other	0	100	0	100	0	100
Excises						
Oil extraction	--	--	--	--	95	5
Gas extraction	--	--	--	--	100	0
Property taxes	0	100	0	100	0	100
Land tax	30 ^c	70	30 ^c	70	0	100
Social	100	0	100	0	100	0
Security						

Notes: (a) VAT on imports exclusively federal; (b) from 2001 to 2004, regional share included a share earmarked for local government; (c) tax revenues from agricultural land were shared differently.

Source: Martinez Vazquez, Rider and Wallace (2008).

Table 5
Tax Assignment in Russia, 2005

Federal Taxes

- Value-added tax
- Special excises
- Customs duties
- Enterprise profit tax
- Taxes and royalties on natural resource extraction
- Personal income tax
- Unified social security (payroll) tax

Regional taxes

- Transport tax
- Enterprise assets tax
- Gambling tax

Local taxes

- Individual property tax
- Land tax

Source: Martinez-Vazquez, Rider and Wallace (2008).

Indeed, the history of subnational taxation in Russia shows clearly that the amount and nature of the revenues received by its regional and local governments are now determined almost exclusively by the central government. With the exception of a short period in the 1990s when regional governments did have a certain degree of fiscal autonomy, the situation in Russia in reality thus seems rather similar to that in China discussed in a later section.¹⁹ However, in Russia (as is also true in China and India, but not in Brazil or Nigeria) the regional levels of government continue to have significant autonomy when it comes to how much of the revenue that passes through their hands they redirect to local governments. In other words, local governments, like regional governments, are largely at the fiscal mercy of the next higher level of government.

As Bird (2010) stresses, unless subnational governments have significant freedom to alter the level and composition of their revenues, neither autonomy nor accountability can be fully meaningful. In particular, as noted earlier, if – as in a federal system – subnational governments are expected to exercise some independent authority in particular areas -- they should be able to set tax *rates* (albeit perhaps within limits).²⁰ Such rate flexibility is essential if a tax is to be adequately responsive to local needs and decisions, while remaining politically accountable to their citizens. Canada and Russia, for instance, are almost at opposite ends with respect to this critical aspect of fiscal federalism at the regional level.

Understandably, subnational governments that have access to revenues from sources for which they are not accountable to their citizen-taxpayers will -- like national governments -- prefer to exploit such sources rather than openly tax their own residents. However, doing so largely obviates the basic efficiency argument for their existence. The access of subnational governments to taxes that fall mainly on nonresidents -- such as most natural resource levies, corporate income taxes, pre-retail stage sales taxes and, to some extent, even nonresidential real property taxes – should therefore be limited, if at all possible. The importance of this consideration with respect to natural resource revenues was stressed with respect to Russia in Wallich (1994), for example, and has frequently been a matter of concern in other countries, notably Nigeria (as discussed in Section 6 below). Similar problems arise with many other taxes. Even most so-called “retail” sales taxes, for example, often fall to a considerable extent on business inputs: In Canada, for example, one study found that up to 50 percent of the retail sales tax base in some provinces consisted of such inputs (Kuo, McGirr, and Poddar 1988).²¹ Similarly, a high

¹⁹ See, for instance, the discussion in Shalotov (2006) with respect to the gradual evisceration and then elimination of the regional sales tax in Russia. In Russia, as in China, at bottom “the pertinent question is whether fiscal federalism is possible in the absence of political decentralization and whether political decentralization is possible without some degree of revenue autonomy” (De Silva et al., 2009, 106).

²⁰ A minimum rate may be needed to prevent distorting “tax competition” (with richer jurisdictions -- those with larger tax bases -- lowering rates to attract still more tax base). A maximum rate may similarly be needed to prevent distorting “tax exporting” (as when jurisdictions in which breweries or gas distribution pipelines are located impose especially heavy taxes on such facilities in the expectation that the taxes will ultimately be paid by persons not resident in the jurisdiction).

²¹ Ring (1999) shows that the same is true with respect to retail sales taxes in the United States. Of course, one might make the case that a “perfect” retail sales tax may in principle be as or more successful than the “average” VAT in removing taxes on business inputs. However, no such RST has yet been observed in any

proportion of local property taxes levied on businesses are likely exported to other jurisdictions (Ballantine and Thirsk 1982). Such concerns seem equally relevant with respect to enterprise taxes at the subnational level (Wallich 1994). When subnational governments depend heavily on such taxes, the critical connection between spending and revenue-raising is broken.

If inappropriate tax bases are assigned to sub-national governments, an all too likely result is an undesirable combination of wasteful competition and politically unaccountable tax exporting. In Russia, for example, where most enterprise profits taxes are assigned to regional governments on the basis of derivation, this is certainly true (as it is in China).²² It was even truer in the early 1990s when the VAT was – as it still is in China -- partly assigned to regions on a derivation bases as well as in the late 1990s when a separate regional sales tax was in force in many regions (see Martinez-Vazquez, Rider and Wallace 2008).

One way to deal with such problems might be to establish a uniform set of tax bases for local governments (perhaps different for different categories such as large metropolitan cities and small rural municipalities), with a limited amount of rate flexibility (Bird 2010). From this perspective, the present assignment of taxes to regional governments in Russia seems deficient. Significant vertical imbalance remains between expenditures and revenues in Russia, with consequent implications for autonomy, efficiency, and accountability.²³ While the recentralization of the VAT and elimination of the regional sales tax along with other changes have undoubtedly reduced the costs of administration, costs of compliance, and costs arising from tax-induced inefficiencies arising from the previous confusing subnational tax system in Russia (Shatalov 2006), this improvement came at the expense of largely eliminating any real local autonomy and accountability.

Financing Regional and Local Governments

If Russia's central government wanted to develop a more fiscally responsible subnational fiscal structure, the most important issue facing Russia it would face would be to develop a satisfactory revenue base for regional governments -- one for which those governments are politically responsible. More could be done, for instance, to permit

country. Indeed, as Tait (1988) notes, this problem was one of the major reasons that led Norway to adopt VAT to replace its existing (high rate) RST.

²² De Silva et al. (2009, 73-74) provide several examples of such regional tax competition.

²³ This vertical imbalance is greater than the numbers one usually sees may indicate since, although part of the proceeds of many taxes accrue to subnational governments, those governments have little or no say over the rate or base of such taxes: what is going on is really that a central tax is levied and then transferred to the region in which it is collected. As Martinez-Vazquez and Boex (2001) stress, this statement is not entirely true since the curious "dual subordination" of the tax administration in Russia means that the actual collection effort is to some extent responsive to local as well as national pressures. Nonetheless, regional governments in Russia are clearly far more dependent on central tax policy than is true in most developed country federations: see e.g. Bird (1986) for a comparison of Australia, Austria, Canada, Germany, Switzerland, and the United States as well as Bird and Tarasov (2004) for a quantitative comparison of these countries (as well as Belgium and Spain).

differential regional excise taxes, especially on vehicles and fuels, and perhaps even regional differentials in personal income taxes. Given the evolution of the personal income tax in Russia, the last of these possibilities seems unlikely (Shatalov 2006). Nonetheless, when regional governments have significant expenditure responsibilities, as they do in Russia, there appear to be only two important revenue sources that can be levied relatively efficiently at the subnational level -- a surcharge on the central personal income tax (PIT) or some form of consumption tax like the VAT. On the whole, "piggybacking" through surcharges on the national PIT or VAT appears to be the most viable way in which subnational governments could continue to be large spenders while becoming more politically accountable to their own people.

At one point, income tax surcharges did appear to have been the chosen instrument for this purpose in Russia. In the 1999 budget, for instance, regions were empowered to levy a rate of up to 35 percent in addition to then federal PIT rate of 3 percent. This allocation presumably reflected that fact that, until then, 100 percent of the PIT had gone to the regions. However, regions were to have no discretion in setting their tax rate. In 2000 the attempt to follow the surtax route was dropped and most (84 percent) of PIT revenue was allocated to the regional governments, with the balance to the federal government. When a flat 13% PIT rate was introduced in 2001, only 1% of PIT revenues accrued to the federal government with the remainder going to the regions. Since 2002 *all* PIT revenue has gone to the regional governments. Nonetheless there is no meaningful sense in which the PIT in Russia can be considered to be a regional tax.²⁴

Curiously, Russia does operate a piggyback scheme with respect to the enterprise profits tax (EPT) -- and indeed one with a considerable degree of regional discretion. Regional governments are permitted to reduce the tax rate by up to four percentage points, so that the regional rate can vary between 13.5 and 17.5%, compared to a federal rate of 6.5%. Unfortunately, as US experience made clear long ago (McLure 1986), subnational taxes on company profits are invariably problematic especially when regional tax base differences are accentuated, as in Russia, by apportioning profits to the regions in which companies locate their headquarters. The potential for wasteful regional competition is clear, as is the incentive for regions that benefit from the present system to block future tax reforms.²⁵

A more promising answer for subnational revenues may perhaps lie in consumption taxation. Russia was probably quite right to move away from the original system -- still largely employed in China -- under which a portion of the VAT was distributed amongst regions. On the other hand, a differential regional surcharge on the federal VAT seems quite feasible in principle (Bird and Gendron 2001). Such a tax already exists and works well in Canada (Bird and Gendron 2009). While the Brazilian experience discussed in Section 2 above has often been used to argue against the use of

²⁴ Interestingly, Australia is in the same situation with respect to the VAT: the tax is a federal tax but all the revenues go to the states: for further discussion, see Bird and Smart (2009).

²⁵ Similar problems have emerged in India and Brazil. In Russia, with some exceptions (De Silva et al. 2009), they have essentially been overcome by fiat, and in India in part by compensation; so far such problems largely remain unresolved in Brazil, as discussed earlier in Section 2 above.

subnational VATs in developing countries, that experience has not been as bad in all respects as has sometimes been asserted (Pinhanez 2007). Moreover, in principle it appears feasible to implement regional surcharges in some instances even in countries with less well-developed tax administrations.²⁶ Although this path to increasing responsible regional taxation in Russia would not be either simple or straightforward, it may perhaps warrant further exploration – always provided, of course, that the central authorities actually wish to implement a sound and sustainable fiscally decentralized system.

An alternative approach, one that also works quite well in Canada, actually existed in Russia for number of years in the form of an independent regional sales tax.²⁷ In 1998, following a brief earlier experience with regional sales tax, the federal government attempted to make a substantial reduction in the regional VAT share more acceptable by permitting regional governments to impose a sales tax. Unusually, regional governments were allowed to choose to impose the tax or not, to determine its base, and to set the rate up to a maximum of 5%. Over the next few years, as more regions began to introduce the tax and its administration improved revenue from the sales tax more than doubled -- rising to 8.5% of subnational tax revenue in 2001. Because regions had to give up certain other taxes in order to impose the sales tax, some regions chose not to do so in part (presumably because they may have lost revenue on balance).

In response to many problems arising from the original ambiguity and poor drafting of the sales tax law, it was revised when incorporated in the tax code in 2001. The tax base was defined uniformly as the sales to individuals of goods and services within the territory of a given region, subject to a list of exempt goods similar to that for the VAT. However, there continued to be a number of differences in the application of this tax in different regions; for example, some regions exempted basic foodstuffs only if they were produced within the region. Moreover, although only sales to individuals were supposed to be taxed -- that is, business purchases were supposed to be exempt -- there remained many problems in implementing this exemption. Finally, since the tax was not supposed to be reported separately to consumers, its potential relevance as a basis for citizens to evaluate the efficiency and efficacy of their governments was clearly limited. Despite these and other problems, in many ways it was unfortunate that the regional sales tax was abolished in 2004. In principle it may be both feasible and attractive to impose a federal VAT and a regional retail sales tax on essentially the same tax base and either to have both administered by the same authority or to coordinate the two administrations closely.²⁸

Turning to local as distinct from regional taxes, apart from user charges, there seem to be only two major possibilities for an improved tax base in Russia as in most

²⁶ See, for example, Varsano (2000), Keen and Smith (2000), McLure (2000) and Bird and Gendron (2000).

²⁷ This discussion is based largely on Martinez-Vazquez, Rider and Wallace (2008), Shatalov (2006), and Mikesell (1999).

²⁸ No country now does this, but Canada comes close and in some ways so did France when it first introduced its VAT: this possibility appears to warrant further detailed exploration in the context of particular countries.

countries -- a revised, and revived, property tax and some better form of local business taxation. As already mentioned, there is much to be said for property taxes as a source of local finance. Unfortunately, as experience in a number of countries suggests (Bird and Slack 2004), it is likely to be many years before this tax can provide consistent and significant revenues in Russia (as in most transitional countries), in part since the ownership of some of the potential tax base remains murky.²⁹ Even if these problems could be overcome, while the property tax is certainly a potentially important source of local revenue, it is unlikely to provide sufficient resources to finance local public services in the near future in Russia. Indeed, even countries with well-established property taxes have been hard-pressed to maintain revenues in the face of inflation and political difficulties, as Bird (2010) discusses.

Major policy reforms are needed to turn the property tax into a responsive instrument of local fiscal policy in Russia. First, and most importantly, as emphasized earlier, local governments must be allowed to set their own tax rates, probably within some limits. Secondly, the tax base must be maintained adequately. Property assessment is both a technical and a controversial matter, and much effort and considerable resources are required to establish and maintain the tax base. Finally, as with all taxes in Russia, major procedural reforms are needed to improve collection efficiency, valuation accuracy, and the coverage of the potential tax base (Timofeev 2004). None of these steps is easy, but there are no short cuts to successful local property taxation (Kelly 1994).

Taxing Business

Given the considerable investment needed in Russia to create a significant property tax, perhaps the more immediately critical problem facing local government in Russia is to reform the present unsatisfactory sub-national taxes on business. While the ability to distort market conditions through such taxes should be severely restricted, as noted earlier, there is both an economic (benefit) case for some regional and local taxation of business and, it seems, often an overwhelming political need for genuinely responsive and responsible local leaders to impose such taxes (Bird 2003a). Indeed, given the restrictions on other taxes and the unreliability of central transfers, local business taxes may sometimes provide almost the only way in which local governments in countries like Russia are able to expand revenues in response to perceived local needs. Certainly, they are preferable to the EBF free-for-all in China discussed in Section 5 below as well as to the present unsatisfactory system of local business taxation found in Russia (and Ukraine).³⁰

Unfortunately, most forms of local and regional business taxes found around the world -- corporate income taxes, trade taxes, business taxes, differentially heavy non-

²⁹ As Martinez-Vazquez and Boex (2001), p. 55, put it: "The lack of real estate markets, land ownership, and multiple institutional constraints are powerful obstacles for the development of an ad valorem real estate property tax in Russia." For a review of such taxes around the world, see Bird and Slack (2004).

³⁰ For a brief discussion of the Russian and Ukrainian systems, see Bird and Wallace (2004).

residential property taxes, and even sales taxes (which are in practice often levied on estimated gross receipts) may introduce serious economic distortions. One way to reduce such problems that has recently been suggested is through imposing a so-called “business value tax” (BVT) – in essence, a relatively low rate flat tax levied on an income-type value-added base. This possibility is discussed further in Bird (2003a, 2010).

The earlier suggestion of a possible regional VAT surcharge – or perhaps a regional sales tax imposed on final sales to consumers in the region using the same tax base as the federal VAT basis -- was motivated primarily by the desire to provide more adequate “own” revenues to regional governments and hence to encourage greater fiscal responsibility and accountability. In contrast, the BVT is intended primarily to improve the allocative efficiency of sub-national revenue systems by, in effect, charging businesses for the public productive services of which they make use. In effect, such a tax might be thought of as a sort of generalized benefit tax -- one that, unlike the enterprise profits tax or the differentially heavier taxes often imposed on business real property, is nondistortionary. Such a tax might, for example, be imposed at the regional level replacing the present distortionary regional EPTs.³¹ Local governments might then be able to impose a surcharge on the regional tax to replace all or most of the present confusing array of business taxes.³² A tax along these lines would probably not encounter a very receptive political or business audience in Russia today. Nonetheless, such an approach may offer a potentially promising alternative to the spectre of increasing, and distorting, sub-national business taxes that may otherwise loom in Russia’s future -- as well as, perhaps, to the more general question of how best to tax small businesses in emerging countries.³³

Summing Up

Russia was probably correct in moving away from the original system -- still largely employed in China -- under which a portion of the VAT was distributed amongst regions. Similarly, the abolition of the highly imperfect regional sales tax was perhaps equally justifiable. Nonetheless, if there are to be any real regional-level governments in Russia, in many ways consumption taxation -- either a differential regional surcharge on the federal VAT or a revived regional sales tax imposed on the same base as the federal VAT and administered federally – remains a logical choice. If moves in this direction are considered to be a step too far in current Russian circumstances, but it is nonetheless desired to give some flexibility to regional governments an alternative might perhaps be to consider permitting some regional variations in the current flat-rate PIT, all the revenues of which already flow to the regions.

Turning to local as distinct from regional taxes, apart from user charges there seem to be only two major possibilities for an improved tax base in Russia (as in most

³¹ For a similar proposal (including an empirical application) in the Canadian context, see Bird and McKenzie (2001).

³² The structure would essentially be similar to that of the existing Italian IRAP, which has both regional and local rates (Bird 2003a).

³³ See, for example, the recent discussions of these issues in World Bank (2007) and Corthay (2009).

countries) -- a revised, and revived, property tax and some better form of local business taxation. In particular, a better business tax should be imposed at the regional level to replace the present distortionary regional EPTs, perhaps with local governments being allowed to impose a surcharge on the regional tax. Of course, none of these suggested change is likely to be popular with ordinary Russians and it seems unlikely at present that the central government is actively interested in bestowing any real fiscal autonomy on subnational governments. Nonetheless, if fiscal decentralization is to be effective, as a rule it needs to be accompanied by at least a modicum of political decentralization. If it is not, there are relatively few lessons that such countries can learn from either the literature on fiscal federalism or the experience of other, more politically decentralized countries.

4. Subnational Taxation in India³⁴

Since India, like Brazil, is a well-established federal country it is appropriate to begin with a brief discussion of the basic formal structure of the Indian fiscal system. India has been a federation since the adoption of its Constitution in 1950 so it is not surprising that issues of federal finance have been a persistent concern over the years despite a constitutional set-up that allows the central government substantial room to control, regulate and even replace state governments.³⁵ The issue of center-state fiscal relations is highlighted every five years by the report of a Finance Commission which determines the percentage of the net proceeds of central revenues to be assigned to the states, subject to the constraint that taxes devolved from the center and other transfers such as those by the Planning Commission should not exceed 37.5% of central revenues.³⁶ Although non-binding, the recommendations of all Finance Commissions to date have been accepted with minor exceptions.

For many years the taxes shared were essentially personal income tax and excise duties (except alcohol, which is taxed by the states). Following lengthy negotiations, however, a simplified system that shares a proportion of overall central tax revenues was established a few years ago. These shared taxes together with central transfers have always constituted a major source of main revenue for states, which over the years have grown from the original 14 to 28 in number. (There are also seven territories including the national capital territory, Delhi.) Over the years the Finance Commissions have developed a series of complex formulae -- the overall rationale of which is somewhat difficult to understand -- that are used to divide the state share of tax revenue among the different states.

³⁴ I am indebted to Govinda Rao and Arindam Das-Gupta for helpful comments on an earlier draft of this section, although of course I am solely responsible for what is said here.

³⁵ The strong federal power to override state decisions led Wheare (1963) to categorize India as a quasi-federal country. In recent decades, however, states appear to have been able to act relatively independently in most respects.

³⁶ However, as Singh and Srinivasan note (2006, 340) the ceiling does not seem to encompass loans (which are usually very soft) and various forms of implicit transfers from center to the states.

The taxes that may be levied by the states are set out in the Constitution and are clearly separated from those that may be levied by the federal government (the Union): see Table 7. Essentially, India has always followed the principle of tax separation: that is, any one type of tax should be levied by only one level of government. Moreover, as in most federal states, the most important taxes – income and corporate taxes and excises -- were consciously assigned to the central government. Unusually, however, the authority to levy taxes on agricultural income and property is assigned solely to the state governments. Although (or perhaps because) most Indians are still engaged in agriculture, in reality agricultural income (or property) is taxed in only a few states, and it is nowhere taxed effectively. States also have authority to impose, subject to a relatively low ceiling, what is in effect a (presumed) income tax on the self-employed -- the "professions tax." However, some states do not impose this tax at all, and even when it is imposed it generally amounts to little more than yet another tax withheld from some salaried employees in larger organized firms.

More generally, in spite of the long list of taxes assigned to the states by the Constitution, such possible state taxes as electricity tax, entertainment and hotel tax, and transportation tax are seldom utilized effectively. The major source of state tax revenue in India has always been some form of sales tax. In fact, constitutionally final sales can only be taxed by states, although in practice administrative difficulties in collecting sales taxes over time led most states to shift the tax largely to the stage of production, thus in effect overlapping much of the base of the center's consumption taxes (manufacturing excises). As noted below, by far the most important change in India's tax structure in recent years has been the further gradual evolution of both the federal and state general consumption taxes towards a VAT.

The fundamental interdependence of the tax bases of the center and the states makes it impossible to demarcate tax bases as clearly as the Constitution attempts to do. Overlapping has been particularly important in the area of sales taxation. As in other federal countries, to avoid the worst economic effects from the resulting complex (and, in terms of both administrative and compliance costs, costly) situation a considerable degree of coordination and harmonization is required. India has moved significantly in this direction in the last few years. However, as discussed further below, it still has some distance to go.

Both urban and rural local governments -- the two have always been clearly distinguished in India -- were also given limited taxing power in the Constitution. In 1993, an important constitutional amendment substantially enhanced their role and, in particular, permitted rural local governments (*panchayats*) for the first time to collect directly some local taxes. In addition, each state was required to set up a State Finance Commission to assign the revenue of certain state taxes to the *panchayats* and in general to ensure that both rural and urban local governments received adequate financial resources. In fiscal terms, India today is thus in principle a sort of 'cascading' federalism, with most revenues being collected at the center but with a substantial portion being passed on to the state governments which in turn pass on a share of their own revenues from all sources to rural and urban local governments.

Table 7
Tax Assignment in India

Central government

Taxes on income other than agricultural income
 Customs duties including export duties
 Excise duties except alcohol and narcotics
 Corporation tax
 Taxes on capital value of assets exclusive of agricultural land
 Taxes on capital of companies
 Estate duty except on agricultural land
 Succession duties except agricultural land
 Taxes on goods or passengers carried by railway sea or air
 Taxes on transactions in stock exchanges and future markets
 Stamp duties on bills of exchange, checks, promissory notes, bills of lading, letters of credit, insurance policies, transfer of shares, adventures, proxies in receipts
 Taxes on newspapers (including advertisements)
 Taxes on interstate consignment of goods
 Any tax not elsewhere listed or mentioned

State government

Land revenue
 Taxes on agricultural income
 Succession duties on agricultural land
 Estate duty on agricultural land
 Taxes on land and buildings
 Taxes on mineral rights (subject to limitations imposed by Parliament)
 Excise duty on alcohol beverages and narcotics (including countervailing duty at the same rates on imports from other states or territories)
 Taxes on the entry of goods into local area for consumption, use or sale
 Tax on consumption or sale of electricity
 Taxes on sale or purchase of goods other than newspapers
 Taxes on goods and passengers carried by road or on inland waterways
 Taxes on vehicles suitable for use on roads
 Taxes on animals and boats
 Tolls
 Taxes on professions, trades, and employments
 Capitation taxes
 Taxes on luxuries including entertainments, amusements and gambling
 Stamp duties not assigned to the central government

Local government

Rural local governments are assigned 20 exclusive taxes including octroi (a tax on the entry of goods), property taxes, produce taxes and professional labor taxes as well as seven tax is concurrent with state governments including taxes on annual crops and land. Urban local governments have nine exclusive taxes in which octroi and property taxes are most important. Others include taxes on vehicles and professions. In addition they have 11 concurrent taxes with state governments. There are wide variations across states and the level and structures of both urban and rural local government revenues.

As yet, however, the system below the state level does not appear to be functioning particularly well in most states. The recommendations of the State Finance Commissions seem seldom to have been implemented and in any case few of these commissions have done much to clarify local taxing powers (Singh and Srinivasan 2006). Indeed, a consistent note sounded in almost all studies of local finance in India is that the general lack of data renders it difficult to know exactly what is going on, let alone to formulate workable plans to improve matters.³⁷

This brief introductory overview of the complex development of fiscal federalism in India suggests that at least three important intergovernmental fiscal problems remain to be resolved. The first is the creation of adequately "hard" budget constraints at both the state and local levels of government. This task is both particularly important and particularly difficult because India's central government has for some years itself been running a significant deficit.³⁸ The second and closely related task is to establish clearly delineated and properly functioning tax systems at both the state and local levels of government. The third (and inextricably connected) task is to reform consumption taxes again at both the central and state levels -- and perhaps even eventually at the local level. Because substantial progress has been made in reforming consumption taxation in India in recent years, and success in this task is an essential element in tackling the other two tasks mentioned, it is appropriate to begin with this question.

Sales Tax Reform

The 1950 Constitution assigned taxes on manufacturing to the central government and taxes on sales to the state governments. Services were not mentioned except for a few specific items such as hotels and restaurants that were to be taxed by the states, although the center had residual powers to tax other services. For many years, the central government imposed a tax at various rates on manufactured goods – the Union excise duty. This central excise was included in the state sales tax base. In addition, interstate trade was generally taxed at a uniform rate of 4% under what is called the Central Sales Tax -- although the revenues were both collected and retained by the state of origin. This rate was considerably lower than taxes on sales within states, resulting in substantial evasion. Services essentially were not taxed except for a few at the state level.

Beginning in the mid-1980s, the central government gradually began to introduce the credit principle of VAT and to reduce considerably a number of tax rates: the resulting sales tax was called Modified VAT or MODVAT. By 2005 many services were taxed by the central government and the number of tax rates had been reduced to two -- 8% and 16% (with a few higher rates applied to a few articles). The new tax was called Central VAT or CENVAT. However, it was still not a full VAT for several reasons (Shome 2008):

- First, as in China (Wong and Bird 2008) full credit is not given for capital goods purchases: although initially credit was allowed, it was subsequently given only over a two-year period, essentially for revenue reasons.

³⁷ See, for example, World Bank (2004), Bahl et al. (2005), and Datta (2008).

³⁸ This important issue is not discussed in detail here: for a detailed discussion of the "softness" of the state budget constraints in India, see McCarten (2003).

- Second, owing to the different excise rates and the fact that the single rate service tax is different (12%), input tax credits accumulated over time.
- Finally, and most importantly, taxes on goods beyond in manufacturing stage could not be credited at the central level since they were taxed only at the state level.

Future reforms in CENVAT hinge to a large extent on what happens to the state sales taxes.

Fortunately, state sales taxes have been changed even more than the federal (Union) central sales tax in recent years. Unlike Brazil where, as discussed in Section 2 above, state sales tax reform has largely been in the hands of a centrally convened body (CONFAZ), in India state sales tax reform has been in the hands of what is called the Empowered Committee (EC) which is constituted by the state finance ministers. Following an initial stage during which the EC harmonized state sales taxes to some extent by introducing floor rates for four commodity groups and freezing tax incentives, a state level VAT was introduced in 2005. At the last minute, however, some states controlled by parties that were in opposition to the central government dropped out. To break the impasse, the central government agreed to compensate states that adopted VAT if they had less than 17.5% growth in revenue after adopting the tax: compensation would be equal to 100% of the difference in the first year, 75% in the second year and 50% in the third year. This offer did the trick, and eventually all states (and Union territories) adopted VATs. Since the actual revenue growth turned out to be close to 25%, no compensation was required in the end.

Perhaps the most encouraging feature of this story is that the significant changes brought about by the EC demonstrate that even in the always turbulent Indian political scene effective inter-state coordination is possible and can yield major benefits.³⁹ As is not uncommon, the process of reaching agreement among India's very heterogeneous states took longer than originally envisaged. Nonetheless, in the end agreement was reached not only on a common standard rate but also on such critical building blocks for the future as a common classification of goods for central and state taxes and common taxpayer identification numbers.

There are two state VAT rates -- 4% and 12.5%, with the latter (standard) rate at the retail level being close to the effective level of the federal standard rate (16% at the manufacturing level). In effect, state and federal governments in India thus now divide the sales tax base more or less evenly. Although the central sales tax on interstate trade by 2009 had been reduced to 2% and is supposed to be abolished by 2010 -- the original target date was 2005 -- it is not creditable. Additional distorting elements are that CENVAT (which is still limited to the manufacturing level) is included in the base of the state VAT and that, as noted above, state sales tax and the central taxes cannot be credited against each other. As with the Union government's VAT, there is thus still some distance to go before the reform of state sales taxes is complete.

Currently, it is planned to adopt by 2010 what would in effect be an integrated VAT structure -- called the Goods and Services Tax (GST) -- with both central and state taxes covering goods and services, extending to the retail level, and on a fully creditable basis.

³⁹ This and some of the other observations in this section are based in part on valuable work in progress to which Arindam Das-Gupta kindly gave me access: I am of course fully responsible for the use made here of this information.

However, the rates of the two taxes -- the central GST (CGST) and the state GST (SGST) -- would be independent and there would be no crediting between levels of government. The adoption of this system, which in some ways resembles the structure of the system existing in the Canadian province of Québec -- where independent federal (GST) and provincial (QST) VATs operate (Bird and Gendron 1998)⁴⁰ -- would reduce substantially the long-standing economic distortions arising from India's system of consumption taxation.

The current plan is thus to adopt a full-fledged GST (VAT) at both levels of government in India in 2010, with the central government imposing its CGST and the state governments independently imposing their SGSTs on the same base as the CGST (Empowered Committee 2009). For this plan to succeed, however, a good deal will first have to happen. For example, a constitutional revision is necessary, for instance, to allow the states to tax services. Excluding services from the tax base distorts relative prices, reduces the buoyancy of revenues, and probably makes the tax more regressive. In addition, to achieve the GST another compensatory revenue underwriting agreement may be necessary from the central government; a more limited compensatory agreement is already envisaged with respect to the planned abolition of the Central Sales Tax (the levy on interstate trade mentioned earlier) in 2010.⁴¹ Moreover, further discussions will be needed between the central and state governments to determine rate structures, not least since both will be taxing the same tax base. Finally, while it is clear that CGST and SGST will not be creditable against each other, important details remain to be worked out -- or at least revealed -- with respect to the workings of the proposed Integrated GST (IGST) which is the intended mechanism for dealing with the difficult creditable issues arising with interstate trade (Empowered Committee 2009).⁴² Nonetheless, India has advanced a long and impressive way down the difficult path towards a fully reformed VAT system at both central and state levels since this task was officially placed on the policy agenda in 1995.

⁴⁰ In the Québec case, both taxes -- the federal GST and the provincial QST -- are operated by the provincial government. However, as Empowered Committee (2009) makes clear, in the Indian case, the state and central taxes will be administered separately. Rao (2008) highlights the many issues that still need to be resolved before India has a fully operational "dual VAT" along the envisaged lines. While Empowered Committee (2009) has answered some of the questions raised by Rao (2008), there remain a number of important unresolved issues, notably the tax rates, the 'place of supply' rules, and just how the envisaged 'clearing house' system would work (Misrah 2009). Although these details cannot be further discussed here, it should be noted that the most complex technical issue is perhaps the place of supply rule -- a problem that is largely finessed in Canada by the revenue allocation system that has been adopted (Bird and Gendron 2009). It is far from clear whether the same result can be obtained under the proposed Indian clearing house system. Similarly, the adoption of the proposed new system appears to depend in large part on the ability of the central treasury to provide adequate compensation to states that will lose revenues if they remove existing tax distortions. Given the current fiscal deficit at the center, this problem may well delay the intended 2010 implementation date. Finally, it may also perhaps be worth mentioning that in some ways the apparently intended uniform standard rate in the Indian states is closer to the other Canadian system called the harmonized sales tax (HST) under which three provinces have their VATs administered by the central government with one proviso being that they impose uniform rates, although there is no technical reason why this is necessary (Smart and Bird 2007) and in fact, the province of British Columbia currently intends to join the HST system 2010 with a different rate.

⁴¹ As Bird and Gendron (2009) show, Canadian experience suggests that it is not necessary to reach full agreement of tax base, provided that any disagreements take place at the retail sales level -- for example, one level (or one jurisdiction at any level) taxes retail sales of books and the other does not.

⁴² In some ways, the brief description of the intended mechanism in Empowered Committee (2009) appear similar to a system proposed for Brazil some years ago by Varsano (2000), but at the time of writing insufficient information is available to enable a full assessment of the proposed system (Misrah 2009).

Local Government Finance

As mentioned earlier, surprisingly little is known about local public finances in India particularly in rural areas. Although the Constitution provides for the basic rural local government, the *gram panchayat*, to have the power to tax, state governments not only determine which taxes their local governments may levy but also how much autonomy local governments with respect to taxation. On the whole, it appears that there has been little revenue decentralization to the third tier since the constitutional amendments of the early 1990's. While states differ in the revenue sources that they assign to local governments, and (as noted in Table 9) many local taxes exist, none are really broad-based or produce much revenue, and all are hampered by the generally low administrative capacity of rural local governments in particular in most of India.

In West Bengal, for example, both the property tax base and ceiling rate are set by the state, although local governments are responsible for keeping the tax rolls and for collecting and enforcing the tax. Although the tax base in West Bengal includes both agricultural and nonagricultural property (which is not the case in most states), there is no systematic evaluation process and in practice the taxes are often levied on the basis of area or some other notional basis. Moreover, even on what seems to be a very much undervalued base collection appears to be at a low level: indeed, one recent study characterized property tax payments to rural local governments as essentially "voluntary" since those governments had no effective enforcement capability (Bahl et al. 2005). Unsurprisingly, very few revenues are collected and the consensus of observers is that the performance of the property tax -- the only potentially important tax in most rural areas in India -- is very weak.⁴³

Matters are not much better in urban areas with respect to property taxes.⁴⁴ As a recent survey suggested, India could perhaps learn much from Brazil's approach to property taxation through a combination of field surveys, a highly simplified form of mass appraisal, and use of construction cost data in both rural and urban areas (Bahl et al. 2005). Although substantial attention should be paid to improving collection efficiency also (Dillinger 1991), the relatively high yield of the property tax in Delhi, which traditionally had a better valuation system than most Indian cities, suggests that efforts along these directions would be worthwhile.⁴⁵

Property tax reform is clearly important and desirable in both urban and rural India. It is particularly critical in rural areas where there are essentially no alternative possible sources of local "own" revenue. Of course, reform is also particularly difficult to achieve in those areas given the combination of the dominance of the rural elite in many local areas and the understandable resistance of all potential taxpayers to increased property taxes in the absence of

⁴³ For an interesting general discussion of rural local public finances in India, see Datta (2009). Another "local" tax is the entertainment tax, levied on admissions to various events. In West Bengal the rate of this tax is 10% but it is collected by the state government, with 80% of the collections being distributed to urban local governments and 20% to rural local governments. This is a state transfer, not a local tax.

⁴⁴ See Naresh (2004) and Sridhar, Bandyopadhyay, and Sikdar (2008).

⁴⁵ In this regard, however, see the questions raised by Slack (2006) on the long-term sustainability of two critical elements of the major reform in the Delhi property tax 2004 -- self-assessment and the unit area value approach. Datta (2008) mentions numerous issues that adversely affecting property tax collections in urban areas such as weak valuation and assessment systems and poor collection efficiency.

immediate and visible offsetting benefits. Property tax reform is also desirable in urban areas given the importance of rising land values as a source of wealth expanding market economies. However, it may be similarly hard to implement given what Datta (2008, 15) calls the “general political resistance to utilize visible taxes at the sub-national level.”

At present, in most of India’s cities, particularly the larger cities a much more important revenue source is *octroi*, an archaic local levy on goods entering the city, which a few years ago was reported to account for 70% of urban tax revenue in the country as a whole compared to only 20% for property taxes (Rao and Singh 2005, 310). Economists as a rule dislike *octroi* (essentially a local import duty) as an inefficient, distortionary tax that is often administered very corruptly. Although some states have abolished this tax, in some instances it has been replaced with an “entry tax” with similar characteristics, and some states have even introduced *octroi* itself in recent years. In India’s rapidly growing urban areas there is probably no realistic possibility of replacing the share of local revenues that now comes from *octroi* simply by increasing property taxes, no matter how well designed and well implemented.

Unfortunately for economists, it does not appear that their favorite proposal for local fiscal reform – a bigger and better property tax -- will be easy to accomplish, let alone to implement soon enough and successfully enough to produce sufficient revenues to replace *octroi*. Given the expected rapid degree of urbanization in India in future years if its development continues along its current path, it thus seems likely that Indian cities will need another major revenue source if they are to cope with their growth even to the relatively unsatisfactory extent that they have managed to do so to date, let alone to accommodate the new wealthy, the expanding middle class, and the incoming rural migrants that threaten to inundate them both. China, Russia and Brazil already have various forms of local business taxes, however imperfect, that help meet such needs. Perhaps India too will have to consider permitting at least larger urban areas to impose such levies if they are to be able to meet the fiscal challenges they face now and in the future.

Summing Up

In India, two key problems are how to create adequately “hard” budget constraints at both the state and local levels of government and how to establish clearly delineated and properly functioning tax systems at both the state and local levels of government. The key to both problems is to continue to reform consumption taxes at the central level and correspondingly at the state level. With the most recent report of the Empowered Committee (2009), India has set out the clear goal of adopting both central and state GSTs in 2010. However, several important steps remain: (1) a constitutional revision to allow services to be taxed under the new GSTs; (2) another compensatory revenue underwriting agreement (in addition to that already reached with respect to the Central Sales Tax) from the central government, which must also finally abolish the CST; (3) and finally, and most importantly, there may still be some distance to go before reaching full agreement on how the proposed new “dual VAT” system (the CGST and the various SGSTs) will work with respect to interstate trade. Still, very considerable progress has been made with respect to reforming consumption taxes, and the future looks brighter in this respect than ever before. Other countries – perhaps especially Brazil – may perhaps learn from the Indian example.

At the local level, as in most countries property tax reform is clearly important, perhaps especially in rural areas where there are essentially no alternative possible sources of local "own" revenue. In urban areas, however, there is probably no realistic possibility of replacing the share of local revenues that now comes from *octroi* simply by increasing property taxes, no matter how well designed and well implemented. Indian cities almost certainly need another major revenue source if they are to cope with their growth. India may thus have something to learn from Brazil and other countries on how urban areas may be able to better meet the fiscal challenges they face now and in the future in part by imposing some form of local business taxation – although, as always, great care is necessary to avoid encouraging undesirable forms of local tax competition.

5. Subnational Taxation in China⁴⁶

Subnational taxes are important in China. Indeed, from a statistical perspective it appears at first glance (see Table 1) that subnational governments in China are both more important taxers and more heavily reliant on 'own revenues' than those in most countries. Unsurprisingly, subnational taxes are therefore critical to China's future in many ways, for example, with respect to the regional and rural-urban distribution of income and wealth and the delivery of such basic services as education and health. Indeed in many ways, as Wong and Bird (2008) argue at length, the key not only to China's public finance system but also its political stability may lie in getting subnational taxes and the other critical components of its intergovernmental fiscal system right.

Despite all the revenue they seem to control, however, some serious problems have emerged in the finances of many of China's subnational governments in recent decades – problems that are distorting resource allocation and increasing distributional tensions and that may over time slow down the impressive growth rate of the Chinese economy.⁴⁷ Although the fundamental problem is the inappropriate assignment of revenues, and more fundamentally of expenditures, to the subnational level, this problem is exacerbated by the lack of any real control by subnational governments over the formal taxes whose revenues flow to them.

China's fiscal development illustrates clearly the importance of 'path dependency.' How a country's institutions develop depends critically upon where they start. To understand either the present or the future of China's fiscal system, one must understand that it emerged from a system that had been installed in the 1950s, largely reflecting then-current Soviet practice. Under that system, essentially all expenditures were determined at the center. However, responsibilities for day-to-day public administration and social services such as education (except universities), public safety, health care, social security, housing, and other local/urban services were all

⁴⁶ This section draws heavily on the more detailed discussion in Wong and Bird (2008). I am heavily indebted to Christine Wong for much help in understanding China's complex public finances, although I am of course solely responsible for what is said here.

⁴⁷ For analyses of local government financial problems, see World Bank (2002) and Wong (2007). World Bank (2002) argues that local government financial problems had, by the late 1990s, become an obstacle to implementation of the national development agenda on health and education. Wong (2007) emphasizes the adverse distributional consequences of the present intergovernmental fiscal system.

delegated to several layers of subnational government -- provinces, counties, and townships as well as, less formally, village associations. Financing for these services was provided by the central government through the revenue-sharing system, under which all revenues-- which came largely from industrial profits and were collected in a highly uneven pattern from different regions and localities -- belonged to the central government. In principle, sharing rates were set annually at levels leaving each local government sufficient resources to finance its (centrally) approved expenditures. In practice, however, the revenue-sharing system was largely negotiated in nature.

As the mechanisms of the planned economy – administrative prices, compulsory procurement and planned delivery, monopoly state ownership of industry – began to be dismantled, China’s formal revenue system quickly began to erode. The immediate impact of market reform was dramatic erosion of the tax base as state enterprise profits and hence revenue collection declined steeply. Central revenues were especially hard-hit because local governments in rich regions often shielded local enterprises from taxation to avoid sharing revenues with central government.⁴⁸ The Chinese tax system rested on the local collection of revenues that were then remitted to the center. This administrative structure proved vulnerable to erosion as central economic control lessened. Unfortunately, since this fundamental problem was not initially understood, the immediate response to the perceived revenue problem was a series of changes in tax structure and revenue sharing arrangements (Wong 1992, 1993). For example, an income tax on state-owned enterprises introduced in 1984 to replace profit remittances was quickly replaced in 1986 by a ‘contract’ system, under which enterprises signed multi-year contracts specifying their profit remittances.

Fiscal revenues continued to decline, however, in part because the central government was unable to monitor what was going on at the provincial level. In 1988 the central government therefore introduced a further system of fiscal contracts with subnational governments. These contracts stipulated a lump-sum remittance to the center from each province, to increase annually by an agreed rate with any excess revenues accruing to the province. In return, provinces accepted responsibility for meeting their expenditure requirements from retained revenues. By de-linking revenue-sharing from expenditure needs, this system in effect for the first time put local governments on a self-financing basis – a de facto devolution of responsibilities later codified in the 1994 Budget Law.

The new system did not, however, solve the central government’s financial problems. Revenues continued to decline. Indeed, because the contracts gave subnational governments a disproportionate share of new revenues, the central share of revenues fell even more sharply to the startling figure of only 3 percent of GDP in 1993. As discussed below, however, this decline in revenues was in a way largely an illusion owing to the rapid growth of ‘extrabudgetary revenues’ throughout the 1980s and 1990s. Nonetheless, since most of these revenues accrued primarily to subnational governments their expansion did little to offset the erosion of allocative control by the central government. All this was changed in 1994 by a drastic reform that

⁴⁸ For example, under the planned economy Shanghai remitted more than 80 percent of its revenues to the central government. This high ‘tax’ on Shanghai revenues created incentives for collusion between the municipal government and its subordinate enterprises to realize the potential for informally sharing the “saved revenues” within Shanghai. See Oksenberg and Tong (1991) and Wong (1991, 1992).

recentralized the fiscal system with two paramount objectives—stemming the decline of revenues and clawing back a majority share for the central government.

The 1994 Reform

The 1994 reform drastically changed China's tax structure, notably by introducing a VAT to replace the previous complex system of turnover taxes. It also fundamentally changed the way revenues were shared between the central and provincial governments by shifting from a negotiated system of general revenue sharing to a mix of tax assignments and tax sharing. Under the new system, all taxes are either specifically assigned to central or subnational government, or shared (Table 8). Despite the length of the list in Table 8, only three taxes really matter much: the VAT, the enterprise income tax (EIT) and excises. Since the VAT accounts for over half of all tax revenues in China and 75% of VAT proceeds go to the central government, the reform greatly strengthened central government revenues. By reducing local 'ownership' of turnover taxes, the reform significantly diluted the linkage between enterprises and local revenues. However, in order to maintain incentives for promoting local industry the second largest tax in revenue terms, the enterprise income tax (EIT), continues to be divided by ownership (or subordination) with central enterprises paying EIT to the central government, provincial enterprises to the provincial government, and so on.

An additional important element of the 1994 reform was that it established a national tax administration in China for the first time. The previous local tax bureaus were split into two distinct offices: a national tax administration responsible for collecting central and shared taxes (the VAT, excises and customs duties, as well as the EIT from central enterprises), and a local tax administration responsible for collecting local taxes. By removing central taxes and the VAT from local administration, the reform largely eliminated opportunities for local governments to divert central revenues into local coffers through manipulations of tax assessments. The result was that central revenue (not just tax) collections rebounded from only 11 percent of GDP in 1996 to levels closer to 20 percent by the end of the decade.

One important outcome of this reform for subnational governments was the creation of a new business tax on services (see also the discussion in section 2 above of the ISS in Brazil) and its assignment to local governments. This tax now rivals in importance the share that local governments receive from VAT revenues. The local shares of both VAT and EIT are calculated on a derivation basis (where taxes are collected, such as the headquarters of enterprises). One outcome of this system was that an increasing number of complaints have been voiced about "tax competition" -- local governments luring enterprises to move their headquarters with offers to 'rebate' a portion of their tax payments.⁴⁹

⁴⁹ As mentioned in Section 3 above, similar complaints were also common in Russia (Shatalov 2006).

Table 3
Tax Assignment in China

I. Taxes exclusively assigned to the Central Government

1. Excise taxes
2. Taxes collected from the Ministry of Railroads and from the headquarters of banks and insurance companies
3. Income taxes, sales taxes and royalties from offshore oil activities of foreign companies and joint ventures
4. Energy and transportation fund contribution
5. Seventy percent of the three sales taxes collected from enterprises owned by the Ministry of Industry, the Ministry of Power, SINOPEC (petrochemicals), and the China nonferrous metals companies.
6. All customs duty, VAT and excise taxes on imports
7. Enterprise income tax collected from banks and other financial institutions.

II. Taxes shared between the central and local governments

1. Value-added tax (75 percent central, 25 percent provincial)
2. Natural resource taxes (coal, gas, oil, and other minerals if the enterprises are fully Chinese owned.)
3. Construction tax on the cost of construction of buildings that are outside the plan and financed from retained earnings
4. Salt tax
5. Industrial and commercial tax, and income tax levied on foreign and joint venture enterprises.
6. Security and exchange tax (50 percent central, 50 percent provincial) – added in late 1990s
7. Income tax of all enterprises – added in 2002
8. Personal income taxes – added in 2002.

III. Taxes exclusively assigned to local governments

1. Business (gross receipts) tax falling on sectors not covered by VAT (transportation and communications, construction, finance and insurance, post and telecommunications, culture and sports, entertainment, hotels and restaurants, and other)
2. Rural market (stall rental) trading tax
3. The urban maintenance and construction tax (a surcharge on the tax liability of enterprises for business tax, consumption tax, and VAT)
4. The urban land use tax
5. Vehicle and vessel utilization tax
6. Thirty percent of the product and VAT revenues collected from enterprises owned by the Ministry of Industry, Ministry of Power, SINOPEC, and the China nonferrous metals companies
7. Value-added tax on land
8. Education surtax
9. Entertainment and slaughter taxes
10. Property tax
11. Surtax on collective enterprises
12. Resources tax
13. Fixed asset investment tax (discontinued in 1999)
14. Fines for delinquent taxes.

Source: Wong and Bird (2008).

Another result of the new system was that revenue-rich regions kept more. In particular, the richer and more rapidly growing coastal provinces gained revenue shares relative to inland provinces. However, because expenditure assignments were left unchanged, subnational governments as a whole continued to be faced with a huge fiscal gap. The outcome was that, unlike the previous regime under which only poor provinces received transfers, all provinces (including Shanghai and Beijing) are now dependent on central transfers to finance expenditures. In aggregate, provinces are now dependent on transfers to finance nearly 50 percent of their expenditures.

Continuing Concerns

Through a combination of monetary and financial policy and continued political control from the centre, China has managed to overcome the macroeconomic problems that might have arisen from this fiscal imbalance. Nonetheless, the mismatch of expenditures and revenues between levels of government resulting from the 1994 reform has led to various problems as different layers of government have struggled to find their fiscal feet in this fundamentally distorted structure. In particular, many subnational governments have attempted to cope with their increasing fiscal problems by increasing revenues in a variety of legal, quasi-legal, and even illegal ways.

Despite the resulting relatively chaotic operation of the overwhelmingly important subnational government sector, to date Chinese officials and entrepreneurs have in aggregate obviously been able to cope. However, in many cases they have done so by means that create further problems. In particular, much of the recent fiscal story at the subnational level has taken place outside the formal budget system. In addition to the rapid growth of extrabudgetary funds mentioned earlier a host of implicit and hidden revenues, transfers, and expenditures pervade the system, driven in part by the lack of any good formal local tax bases and facilitated by the continuing obscurity of the line between 'government' and 'business' in China, especially at the local level.

Allowing local governments to tap off-budget revenues was initially seen as a stop-gap measure to enable them to secure sufficient finance to carry out their assigned functions. In 1996 a nationwide audit found that 'extra-budgetary funds' (EBF) were about 50 percent more than the reported figures and equal to 6 percent of GDP. Since budgetary revenues were only 11.3 percent of GDP that year, this amounted to more than half of budget revenues and more than one-third of resources available to government. By 1998, EBF had become even more important, with estimates of 15 percent or more being cited by official sources.⁵⁰

⁵⁰ This number was widely cited in the State Administration of Taxation (SAT) newspaper, *zhongguo shuiwubao*, and attributed to the highest officials of SAT, including its deputy chief as well as chief economist. The numbers are rough because reporting requirements are much looser for EBF than for budgetary resources, because of differing and changing definitions of what is 'extrabudgetary', and because recipients of EBF have no incentive to disclose fully the extent of their receipts. A broad definition is that EBF constitute all resources managed directly or indirectly by administrative branches of the government outside the normal budgetary process. The term 'extrabudgetary funds' is, however, generally used in China in a narrower sense than this to refer primarily to fees and funds that are not taxes or budgetary items

A new fiscal reform was launched in 1998 to “convert fees into taxes” (*feigaishui*). This target seemed appropriate because *luanshoufei* (the reckless collection of fees) had become the bane of businesses and citizens alike. This practice created a serious problem for the central government because it eroded tax capacity and subverted the whole budgeting process, thereby impeding the government’s ability to carry out its own core fiscal functions (macro management, equalization, and resource allocation).

Although certainly not unknown at times in other transitional countries,⁵¹ China represents an extreme case of dependency on extrabudgetary finance, especially at the subnational level. Subnational governments are responsible in China for providing significant expenditures, including social safety nets (pensions, unemployment insurance, disability, minimum income support, etc.) and capital investment (especially the need to replace or refurbish obsolete and poorly maintained infrastructure). However, they can neither set tax rates nor change the bases of collection nor introduce new taxes. On the other hand, they often control substantial assets such as land, enterprises, and sometimes natural resources.

In these circumstances, it is not surprising that subnational governments have responded to fiscal pressures in a variety of ways. For example, they have accumulated arrears -- wage arrears to teachers, medical workers, and civil servants as well as payment arrears (pensions, unemployment insurance, and debt to suppliers such as utilities). Moreover, although there is no firm statistical evidence on this phenomenon, many subnational governments are reported to have borrowed (usually illegally) from state enterprises, pension funds, unemployment insurance funds, and banks. Most importantly, however, they have focused their efforts on developing EBF. Virtually all levels of government in China – down to municipal districts and even villages (which do not constitute a formal level of government – have the capacity to exact payments under various names from local businesses and residents. It is not surprising that most subnational governments seem to have done so.

Since there is no effective system of monitoring and control (either by higher level governments or by an electorate), the extensive decentralized “taxing power” that has been exercised through the EBF mechanism is obviously prone to abuse. The Chinese press cites many instances of excessive spending by local governments -- construction of a huge international airport across the border from Hong Kong in Zhuhai, the tens of thousands of “development zones”, “tourism spots” and luxury hotels, and, increasingly in the 21st Century, elaborate plazas and city center shopping malls. Even in poor localities there is a good deal of lavish public spending on banquets and karaoke bars, etc. One result has been worsening popular perceptions of governments at all levels that seem to be abusing their power by imposing fees and levies to enrich themselves.

but that are nonetheless specifically authorized by some government body. This definition leaves out significant public resources -- such as the sale of land leases -- that are neither budgetary nor extrabudgetary in this sense. Such funds are variously called self-raised funds, extra-extrabudgetary funds, off-budgetary funds, or extra-system revenues.

⁵¹ See, for instance, the discussion of similar problems in Russia in World Bank (1996).

Further reforms in 2002 attempted to bring extra-budgetary revenues under better central budgetary control but the problem persists in many areas.

Although EBF have provided considerable and arguably desirable autonomy to local governments, they have also added considerably to the obscurity and probably also the regressivity of the general public finance scene in China. No one really knows what is going on within the bowels of China's complex and opaque fiscal system.⁵² No news is not necessarily good news. In fact, it is decidedly bad news from the perspective of building a more transparent public sector to support China's continuing drive to modernization.

China is in some ways one of the most fiscally decentralized countries in the world. Unfortunately, the coherence of the intergovernmental fiscal system in China has been steadily chipped away by piecemeal incremental changes over the years, largely in reaction to perceived problems as they surfaced. Many problems at the top of the national agenda originate to a considerable extent from problems with the intergovernmental fiscal system – e.g. pension and civil servant wage arrears, arrears or defaults on living stipend support for laid-off workers and problems in financing rural basic education, and civil service wage arrears. Ultimately, many of these problems arise in part because of the difficulties local governments face in performing their assigned responsibilities.

The Basic Problem

At base, the problem is that subnational governments in China have unsustainable expenditure assignments. Social security and pensions are the responsibility of cities and counties. Until 2001, education and health care were also primarily the responsibilities of city districts and townships. Unfortunately, such major and growing expenditure responsibilities are supported neither by adequate revenue assignments devolving real responsibility on subnational governments nor by an effective system of transfers. Many local governments are simply unable to perform their assigned functions. Nor is any supporting system in place to ensure minimum standards of service provision across regions and localities. As economic growth became more concentrated in coastal regions during the 1990s, for example, income disparities accelerated (Wong 2007). The outcome was a sharp rise in interregional disparities in fiscal spending and in particular a gradual deterioration in public services provided in the inland provinces. With local funding problems limiting services the national government has also been unable to deliver on schedule such priority programs such as universal basic education. In 2005, for example, China was still some distance away from providing the nine years of free education to all children originally targeted for the year 2000.

⁵² For instance, there is considerable confusion about the real size and nature of the important 'public sector units' (PSUs) -- schools, hospitals, transport systems – that actually provide services. There is no central data source on the operation and finances of the 'public sector' broadly defined: different data are collected by different ministries for different purposes, and most such data are not publicly available in any case.

As part of a reform to the intergovernmental transfer system in 2002 the income tax was shifted from a local tax to a shared tax, with the central government putting any additional revenues it received as a result of this change in excess of the amount that it previously received (20%) into a special equalization transfer fund. Nonetheless, central government bail-outs of subnational governments have continued to increase in response to emerging problems in pension arrears, financing rural basic education, and the like. What subnational governments have probably learned over time is that the Ministry of Finance will intervene whenever necessary to preserve social stability and will in particular go to great lengths to prevent wage arrears from getting out of hand. One result is that even though civil service wages -- set by the central government -- have more than doubled since 1999, government employees have become almost 'free goods' to local governments.⁵³ The perverse result is that many local governments added staff during a period in which a draconian program was being implemented at the central government level to downsize the civil service.

Like the misallocation of revenue, the murkiness of expenditure assignments has damaged accountability. When everyone is responsible, no one is responsible. In the difficult fiscal circumstances of recent years, as each level of government has increasingly tried to capture revenues by redefining the 'sharing' of revenues in its own favor as much as possible, many problems cascaded down to the lowest (and least influential) levels. For example, despite increases in staff financed largely by increased transfers some rural counties in recent years have had little or no revenue to pay for other recurrent expenses in activities ranging from schools to agricultural stations. Increased transfers often resulted in more local government employees -- but not necessarily in more services for local residents.⁵⁴

Even major reforms intended to improve the well-being of those at the bottom of the system have had perverse effects. For example, the Rural Fee Reform (RFR) rolled out since 2002 for nationwide implementation in three phases was intended to reduce the overall burden of taxes and fees in the rural sector and to end unreasonable levies by township and village officials. At one stroke, this reform eliminated all fees levied by township governments and village associations. Almost simultaneously, the long-standing agricultural tax was also abolished to improve rural well-being. The net result of these changes is that China's grassroots governments are now even more dependent on transfers than before (Bird et al. 2009).

In short, as yet China has not managed to resolve such critical aspects of intergovernmental finance as expenditure and revenue assignment and the design and implementation of a sound transfer system. Continuing party dominance dampens some of the possible problems that might otherwise have emerged, but the underlying situation

⁵³ Despite China's decentralization in many respects, both administrative appointments and political accountability remain highly centralized. One result is that local governments in poorer areas have been doubly penalized: on one hand, they have few resources of their own; on the other, they are often further penalized for being unable to respond adequately to central policy initiatives (Liu and Tao 2007).

⁵⁴ For a more detailed look at the resulting problems in public service provision in rural areas, see Bird et al. (2009).

has not been improved. China may perhaps be nearing the end of its repeated ad hoc and piecemeal attempts to avert imminent fiscal calamity in one or another part of the public sector.

One essential ingredient in the next big reform of the public finance system may have to be turning over more direct responsibility and better instruments for raising revenues to China's big cities (Bird 2005a) and indeed to subnational governments in general. Those governments already have access to far more revenues than their counterparts in most countries. However, they also have even more expenditure responsibilities and extremely limited ability to alter revenue outcomes. In both the largest urban and the smallest rural areas, the fiscal decentralization literature summarized in Bird (2010) suggests that giving some greater degree of revenue autonomy to subnational governments may be an essential element in the development and improvement of efficient and effective public service delivery by these governments. On the other hand, increased decentralization of taxing authority in the absence of more explicit and adequate local accountability mechanisms may result in even more corruption, inefficiency, and distortions than the present system. Fiscal decentralization in China may thus continue to generate increasing problems in a number of related areas unless it is accompanied by more profound changes in political decentralization.

Summing Up

In China, subnational governments already have access to far more revenues than their counterparts in other countries. They also have more expenditure responsibilities and little ability to expand their revenues in non-distorting ways. Both sides of this budgetary dilemma demand attention. Although neither of these subjects has been discussed in detail here, probably more expenditure responsibilities should be shifted to the central government and a better and probably more equalizing transfer system introduced. At the same time subnational governments might be given at least limited freedom to alter tax rates -- for example, property tax rates and perhaps also to impose provincial surcharges on some central excises and perhaps even personal income taxes. Although more caution is needed in allowing subnational governments free access to taxes like VAT and EIT that may result in wasteful tax competition, as Bird (2010) discusses, it may also be possible to eliminate this danger while permitting subnational governments to tap these major revenue sources more responsibly and accountably. Experience elsewhere suggests that giving more revenue freedom to some extent to subnational governments may be an essential element in the development and improvement of efficient and effective public service delivery by these governments. On the other hand, even well designed increased decentralization of taxing authority may be dangerous unless accompanied by more effective political decentralization to ensure better local accountability. It remains far from clear how or to what extent local fiscal autonomy can be effectively increased in China without substantial changes in the present political framework.

6. Subnational Taxation in Nigeria

Nigeria is rich in natural resources and in particular in oil and gas. The oil sector's contribution to GDP is over 50 per cent; it accounts for more than 70 per cent of the government revenues and over 85 per cent of foreign exchange earnings. The recent increases in oil prices have resulted both in unprecedented buoyancy in revenues and unparalleled dependence on the oil sector. Nigeria is also, unfortunately, one of the clearest cases of what Collier (2007) calls "the natural resource trap": conflict over its natural resources resulted first in a vicious civil war in the 1960s, subsequently led to a series of military governments, and still today lies behind substantial regional unrest as well as corruption of the political process as different groups contend for control over larger shares of the flow of "free" resources flowing into the hands of the state.⁵⁵ Neither autocratic nor democratic rule has so far appeared to work out well in terms of growth, stability, redistribution or public sector effectiveness and efficiency in Nigeria's ethnically diverse society.⁵⁶

As Collier (2007, 46) points out, one reason big resource revenues weaken political restraints and often result in such bad outcomes is "because resource rich countries do not need to tax, they do not provoke citizens into supplying the public good of scrutiny over how their taxes are being spent." They do not do so, of course, because it is not really their taxes that are being spent. When no one feels they are paying, no one worries about accountability. However, without accountability citizens have no way to ensure that politicians and officials are responsive to their needs and not just acting in their own self-interest.

Nonetheless, despite obvious problems over the years, Nigeria has made considerable progress in some respects such as macroeconomic stabilization. Recent governments have also made some attempts to strengthen the systems and institutions of accountability, for example, by introducing budgeting at the federal level based on the reference price of oil to reduce the volatility of expenditures. Particularly important in some respects is the increased role of subnational governments which now control over 50 per cent of public funds, with the states in particular being primarily responsible for delivering core public services and having considerable autonomy in how they do so. Few states, however, have either efficient or effective public administration structures in place to do these good things even if they wanted to do so.

Nigeria, the most populous country in Africa, has been a federal state ever since it achieved independence in 1960, and indeed was run in a "federal" way even before then. Over the turbulent years since its independence -- years that have seen three constitutions, four republics and several military dictatorships -- the number of states has increased

⁵⁵ Asaduriam et al. (2006, 407) note that "there have been over 100 ethnic-religious conflicts and numerous other types of conflicts since 1960."

⁵⁶ Like democracy, decentralization in conflict-ridden societies like Nigeria can cut both ways to exacerbate or to ameliorate the problem problems of heterogeneous societies, depending on the precise nature of the problem and the precise nature of the decentralization initiative in question: see the interesting, if far from conclusive, case study in Diprose and Ukiwo (2008).

from the initial three to the present 36 (plus a capital territory). Federalism thus appears not only to exist in Nigeria in constitutional law but in fact. Nonetheless, Asadurian et al. (2006, 47) correctly say that "Nigeria's recent history has also been characterized by extremely centralized political and economic power."⁵⁷ While Nigeria's experience may appear to be a better example for critics of decentralization and federalism than for those who advocate such policies as ways to improve governance, these authors argue that it is not a fiscally federal state in any meaningful sense. Indeed, as another observer (Ibrahim 2001, 486) put it: "... the recent history of Nigeria is one of fiscal unitarianism rather than fiscal federalism... fiscal federalism requires effective decentralization of resources, of revenue and spending powers among the different tiers of government so that there is no excess of fiscal dependence of one level on the other. We do not have that situation in Nigeria."

Natural Resource Revenues

Most government revenue in Nigeria at all levels comes from oil and the federal government basically controls oil revenues although the precise nature and extent of its control has changed over time depending on the balance of political forces in the country. As Collier (2007)'s analysis would suggest, the political history of Nigeria since independence is, unsurprisingly, inextricably intertwined with the history of struggles over allocating revenue. Under the existing (1999) Constitution, direct taxes on income and profits are exclusively federal as are import and export duties, excises and the value-added tax. Since colonial times revenue sharing has been a central feature of Nigerian federalism. As Table 9 shows, most federal tax revenues are in principle shared with other levels of government to some extent, including the all-important oil revenues. In reality, however, the federal government has almost complete control over the allocation of all revenues between the federal, states, and local governments. States and local governments have neither well-defined jurisdictions nor significant autonomy.

As in most federal countries, most broad based taxes are levied and collected by the federal government in Nigeria, with most revenue coming from oil. As the political times have changed the extent to which revenues are shared on the basis of derivation (origin) as opposed to other more redistributive criteria has varied substantially over time.⁵⁸ At present, for example, 13% of oil revenue is distributed to states based on origin. The Federation Account -- see Table 9 -- was initially (in 1999) allocated 56% to the federal government (including the Federal capital territory and some special funds), 24% to state governments and 20% to local governments.⁵⁹ Over the next five years, the formula changed slightly to increase the share going to the states to 26.7% and to local governments to 20.6% with a correspondingly reduced share going to the federal

⁵⁷ For a somewhat more positive view of recent intergovernmental relations in Nigeria, see Alm and Boex (2002).

⁵⁸ A detailed catalog of the changes in revenue allocation formulas since 1947 is set out in Asadurian et al. (2006); see also the discussion in Ekpo (2004).

⁵⁹ As in Brazil, local governments receive their shares directly from the federal government; the funds do not pass through the states.

government to 52.7% (Epko 2004). More important than such details, however, is the fact that over time a smaller and smaller proportion of total federally collected revenue has flowed through this account. Before 1990, about 96% of all revenue was distributed through this mechanism; since the late 1990s, however, less than a third of revenue has flowed through the Federation Account.

Table 9
Tax Assignment in Nigeria

Federal government

- Import duties^a
- Excise duties^a
- Export duties^a
- Mining rents and royalties^a
- Petroleum profit tax^a
- Company income tax^a
- Capital gains tax^{a,d}
- Personal income tax^{a,b}
- Stamp duties^c
- Capital transfer tax^b
- Value-added tax

State government

- Betting taxes
- Motor vehicle licenses
- Entertainment tax
- Land registration fees
- Property taxes^e
- Market trading licenses^e

Notes: (a) These revenues flow to the Federation Account and are shared.

(b) States have the right to revenue from the personal income tax except for taxes imposed on nonresidents, residents of the Federal capital territory, the armed forces and police which proved the federal government.

(c) Capital transfer tax is administered by the state which also receives the revenue, while the administration and collection of stamp duties is allocated to both federal and state governments although all the revenues flow to local governments.

(d) Capital gains tax revenues are supposed to go to the states.

(e) These taxes are to be administered and collected by the local governments should also receive the revenue from them.

Source: Asadurian, Nnadozie, and Wantchekon (2006)

Alm and Boex (2002), for example, report that states received 24% of the Federation Account plus 50% of federal VAT revenue (with another 35% of VAT revenue going to local governments). As noted earlier 13% of oil revenues were distributed on a derivation basis, with the balance of the fund being distributed 40% in equal shares (i.e. each state gets 1/36), 30% based on population, 10% on land area and terrain, 10% on various "social development factors" such as school enrollment in hospital beds, and the final 10% on the basis of a measure of internal revenue effort. Their regression analysis suggested that almost two-thirds of the observed actual allocation of funds among states could be explained by population alone and that neither fiscal capacity nor fiscal effort had any significant effect.

Unfortunately, states have no other major income source than these revenue shares. Although in principle they have the power to collect personal income tax, the actual power to impose such a tax remains with the federal government. Few if any states that would likely be capable of administering this tax in any depth in any case. On average in the early 1990s over 80% of state revenue came from federal transfers, ranging from 74% in the Southwest region of the country to 95% in the Northeast region (Asadurian et al. 2006). Alm and Boex (2002) estimate that in 1999, 61% of state current revenue came from the Federation Account with another 14% from VAT sharing. The almost complete dependence on state budgets on fluctuating and volatile oil revenues both makes financial management difficult and recourse to other taxes unnecessary. Since the revenue also arrives with very few checks and controls on what happens to it once states get their hands on it, it is not a surprise that Nigeria's significant natural resource wealth seems so far to have bestowed relatively few benefits on most of its people.⁶⁰

Summing Up

The central fact in Nigeria is that the federal government has almost complete control over the allocation of all revenues between the federal, states, and local governments. States and local governments have little taxing power and almost no incentive to administer such taxes as the personal income tax or property tax, even if they had the capacity to do so. State (and local) budgets depend almost entirely on oil revenues sent down from the centre. The inherently undependable nature of this intergovernmental fiscal structure makes financial management difficult and acts as a strong discouragement to subnational tax efforts. Moreover, as and when central transfers arrive, there is little accountability to anyone for how the funds are disbursed, Nigeria appears to offer one of the clearest examples available of how abundant "easy" oil money can lead to corruption and waste and result in little noticeable improvement in public service delivery to the country's rapidly growing population. Restoring Nigeria's intergovernmental fiscal system to health seems likely to be a long-term a process that

⁶⁰ Although, as noted by Alm and Boex (2002, 12) fiscal data on local governments in Nigeria are "dated, incomplete, and inconsistent," it appears that most or all of the fiscal and accountability problems visible at the state level in Nigeria are replicated in its 774 local governments: see Epko and Ndebbio (1998) and Akindele et al. (2002).

will definitely have to begin at the top. Moreover, in all likelihood substantial efforts will be required to implement an adequate system of public finance management at all levels of government before much can be done to create a viable system of subnational taxation.

7. Conclusion

The five countries discussed in this report are very different. Despite their fiscal decentralization, China and Russia are basically politically centralized. This reality raises a major question, since as Bird (2010) argues, although some current subnational tax problems could undoubtedly be fixed in both these countries, it is not clear that a sound and sustainable system of subnational taxation can be established without somewhat more direct and effective political accountability to local people. On the other hand, India and Brazil are in principle and to a considerable extent in practice already both politically and fiscally decentralized. Both countries have already taken considerable steps towards creating better subnational tax systems and in many ways seem to be on the right path at the regional level, although both perhaps need to think more carefully about local government finance. Finally, Nigeria is unique in this group with respect both to the extent of its dependence on natural resource revenues and the relatively undeveloped nature of its subnational fiscal system. Of course, these two features are closely related, and until major changes take place in how the central government deals with its oil income, it seems unlikely that much can or will be done to improve subnational taxation.

Despite their marked differences, all five countries considered here share some problems in common:

- First, and importantly, the present assignment of taxes to their important subnational levels of government falls short of any reasonable ideal – as set out, for example, in Bird (2010)
- Second, in part for this reason there is significant vertical imbalance between expenditures and revenues, with consequent implications for autonomy, efficiency, and accountability. If subnational governments are to be big spenders, they must, in the interests of fiscal responsibility and accountability, become bigger taxers in most countries. Similarly, if such governments are to be efficient spenders, their spending must either be completely controlled by higher-level governments or they must be made accountable in a significant way to the local residents that they are supposed to be serving. Finally, if large regional governments are to be autonomous in any meaningful sense -- as is presumably the aim at least in such democratic federal countries as India and Brazil -- they should have both the right and the responsibility to raise their own revenues to the extent and in the manner that it is appropriate for them to do so. Some suggestions along these lines were noted earlier for each country covered here; a more comprehensive review of the character of a good subnational tax system may again be found in Bird (2010).

- Finally, even if political factors prevent moving to any kind of ‘ideal’ subnational tax structure, the present confused and confusing system of subnational taxation found in all the countries examined here results in significant costs — costs of administration, costs of compliance, and not least costs arising from tax-induced inefficiencies in the allocation of scarce resources. These costs can and should be significantly reduced. Again, some suggestions along these lines are set out in Bird (2010).

References

- Afonso, J.R. (2004) "The Relations between Different Levels of Government in Brazil," *CEPAL Review*, 84 (December) 133-55.
- Afonso, J.R. (2007) "Financing Cities," Presentation at VII Foro Alicante 2007, March.
- Afonso, J.R. (2008) "Tendencias de la Descentralización Tributaria en América Latina," Presentation at Inter-American Development Bank, Washington, DC.
- Afonso, J.R. and E.A. Araujo (2006) "Municipal Organization and Finance: Brazil," in A. Shah (Ed.), *Local Governance in Developing Countries* (Washington, DC: World Bank).
- Akindede, S.T., O.R. Olaopa, and A.S. Obiyan (2002) "Fiscal Federalism and Local Government Finance in Nigeria: an Examination of Revenue Rights and Fiscal Jurisdiction," *International Review of Administrative Sciences*, 68(4): 557-77.
- Alm, J. and J. Boex (2002) "An Overview of Intergovernmental Fiscal Relations and Subnational Public Finance in Nigeria," Working Paper 02-1, International Studies Program, Andrew Young School of Policy Studies, Georgia State University, January.
- Arretche, M. (2007) "The Veto Power of Sub-National Governments in Brazil: Political Institutions and Parliamentary Behavior in the Post-1988 Period," *Brazilian Political Science Review*, 1 (2): 40-73.
- Asadurian, T., E. Nnadozie and L. Wantchekon (2006) "Transfer Dependence and Regional Disparities in Nigerian Federalism," in J.S. Wallack and T.N. Srinivasan, eds., *Federalism and Economic Reform: International Perspectives* (New York: Cambridge University Press), pp.407-55.
- Bahl, R., E. Heredia, J. Martinez-Vazquez, and M. Rider (2005) "India: Fiscal Condition of the States, International Experience, and Options for Reform," USAID Fiscal Reform in Support of Trade Liberalization Project, Washington, DC, March.
- Ballantine, J.G. and W.R. Thirsk (1982) *Taxation without Representation: the Consequences of Taxing on Residential Property* (Ottawa: Canada Mortgage and Housing Corporation).
- Bird, R.M. (1986) *Federal Finance in Comparative Perspective* (Toronto: Canadian Tax Foundation).
- Bird, R.M. (2003) "Fiscal Federalism in Russia: A Canadian Perspective," *Public Finance and Management*, 3 (4, 2003): 32 pp. [available at <http://www.spaef.com/article.php?id=353>]
- Bird, R.M. (2003a) "A New Look at Local Business Taxes," *Tax Notes International*, 30 (7, 19 May 2003): 695-711.

Bird, R.M. (2005) “Measuring and Assessing Intergovernmental Fiscal Relations: Fiscal Flows, Fiscal Balance, and Fiscal Sustainability,” *The ICFAI Journal of Public Finance*, 3 (1): 64-84.

Bird, R.M. (2005a) “Getting it Right: Financing Urban Development in China,” *Asia-Pacific Tax Bulletin*, 11 (2): 107-17.

Bird, R.M. (2010) “Subnational Taxation in Emerging Countries: Lessons from the Literature,” A Report Prepared for the World Bank, January.

Bird, R.M., L. Brandt, S. Rozelle, and L. Zhang (2009) “Fiscal Reform and Rural Public Finance in China,” available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1498776

Bird, R.M., B. Dafflon, C. Jeanrenaud, and G. Kirchgassner (2003) “Assignment of Responsibilities and Fiscal Federalism,” in R. Blindenbacher and A. Koller, eds., *Federalism in a Changing World: Learning from Each Other* (Montreal: Published for the International Conference on Federalism 2002 by McGill-Queen’s University Press), pp. 351-72.

Bird, R.M. and R.D. Ebel, eds. (2007) *Fiscal Fragmentation in Decentralized Countries: Subsidiarity, Solidarity, and Asymmetry* (Cheltenham, UK and Northampton MA: Edward Elgar).

Bird, R.M. and P-P. Gendron (1998) “Dual VATs and Cross-Border Trade: Two Problems, One Solution?” *International Tax and Public Finance*, 5 (3), 429-42.

Bird, R.M. and P-P. Gendron (2000) “CVAT, VIVAT, and Dual VAT,” *International Tax and Public Finance*, 7 : 753-61.

Bird, R.M. and P-P. Gendron (2001) “VATs in Federal Countries: International Experience and Emerging Possibilities,” *Bulletin for International Fiscal Documentation*, 55(7): 293-309.

Bird, R.M. and Gendron, P-P. (2009) “Sales Taxation in Canada: The GST-HST-QST-RST 'System'” “ Revision of paper presented at American Tax Policy Institute Conference on Structuring a Federal VAT: Design and Coordination Issues, Washington, D.C., February 18-19, 2009. Available at SSRN: <http://ssrn.com/abstract=1413333>

Bird, R.M. and K.J. McKenzie (2001) *Taxing Business: A Provincial Affair?* C.D. Howe Institute, Toronto, Commentary No. 154, November.

Bird, R.M. and E. Slack (2004) *International Handbook of Land and Property Taxation* (Cheltenham, UK and Northampton, MA: Edward Elgar).

Bird, Richard M. and Smart, Michael (2009) “Assigning State Taxes in a Federal Country: The Case of Australia.” Available at SSRN: <http://ssrn.com/abstract=1435520>

- Bird, R.M. and A. Tarasov (2004) "Closing the Gap: Fiscal Imbalances and Intergovernmental Transfers in Developed Federations," *Environment and Policy C: Government and Policy*, 22: 77-102.
- Bird, R.M. and S. Wallace (2004) "Is It Really so Hard to tax the Hard-to-Tax? The Context and Role of Presumptive Taxes," in J. Alm, J. Martinez-Vazquez and S. Wallace, eds., *Taxing the Hard-to-Tax: Lessons from Theory and Practice* (Amsterdam: North-Holland, 2004), pp.121-158.
- Blochliker, H. and D. King (2006), 'Less Than You Thought: the Fiscal Autonomy of Sub-Central Government', *OECD Economic Studies* 43.
- Brazil, Ministerio da Fazenda (2008) "Reforma Tributaria: Apresentacao do Projeto Encaminhado as Congresso Nacional," Presentation, May.
- Cheibub, J.A., A. Figueiredo, and F. Limongi (n.d.) "Political Parties and Governors As Determinants of the Behavior of Brazilian Legislators."
- Cintra, M. (2009) *Bank Transactions: Pathway to the Single Tax Ideal* (Sao Paulo).
- Collier, P. (2007) *The Bottom Billion* (Oxford: Oxford University Press).
- Corthay, L. (2009) "Local Taxes, Regulations, and the Business Environment," *Investment Climate in Practice*, No. 5, April.
- Datta, A. (2008) "State Finance Commissions and Urban Local Bodies," National Institute of Public Finance and Policy, New Delhi, October.
- Datta, A. (2009) "Strengthening Panchayat Finance: A New Approach," Indian Institute of Public Administration, New Delhi, April.
- De Paula, A. and J.A. Scheinkman (2009) "Value Added Taxes, Chain Effects and Informality," PIER Working Paper 09-041, Penn Institute for Economic Research, Dept. of Economics, University of Pennsylvania, September.
- De Silva, M.O., G. Kuryandskaya, E. Andreeva, and N. Golovanova (2009) *Intergovernmental Reforms in the Russian Federation* (Washington: World Bank).
- Diaz-Cayeros, A. (2006) *Federalism, Fiscal Authority, and Centralization in Latin America* (New York: Cambridge University Press).
- Dillinger, W. (1991) *Urban Property Tax Reform: Guidelines and Recommendations*. Urban Management and Municipal Finance (Washington: World Bank).
- Diprose, R. and U. Ukiwo ((2008) "Decentralization and Conflict Management in Indonesia and Nigeria," CRISE Working Paper No. 49, Center for Research on Inequality, Human Security and and Ethnicity, University of Oxford, February.

- Ebel, R.D. and S. Yilmaz (2003) "On the Measurement and Impact of Fiscal Decentralization," in J. Martinez-Vazquez and J. Alm, Eds., *Public Finance in Developing and Transitional Countries* (Cheltenham, UK and Northampton, MA: Edward Elgar), Pp. 101-20.
- Ekpo, A.H. (2004) "Intergovernmental Fiscal Relations: the Nigerian Experience," Paper Presented at Financial and Fiscal Commission of South Africa, Cape Town, August.
- Ekpo, A.H. and J.E.U. Ndebbio (1998) *Local Government Fiscal Operations in Nigeria*. Research Paper 73. (Nairobi: African Economic Research Consortium).
- Empowered Committee of State Finance Ministers (2009) *First Discussion Paper on Goods and Services Tax in India*, New Delhi, November.
- Facchini, G. and C. Testa (2008) "Fiscal Decentralization, Regional Inequality and Bail-outs: Lessons from Brazil's Debt Crisis," *Quarterly Review of Economics and Finance*, 48: 333-44.
- Ibrahim, J. (2001) "Fiscal Relations and the Challenge of Nigerian Federalism," in R.M. Bird and T. Stauffer, eds., *Intergovernmental Fiscal Relations in Fragmented Societies* Institut du Federalisme, Fribourg, Suisse, Etudes et colloques, vol.33 (Basle: Helbing & Lichtenhahn), pp. 479-504.
- International Monetary Fund (annual) *Government Finance Statistics Yearbook* (Washington, DC).
- Keen, M. and S. Smith (2000) "Viva VIVAT!" *International Tax and Public Finance*, 7 (6): 741-51.
- Kelly, R. (1994) "Implementing Property Taxation in Transitional Countries: The Experience of Albania and Poland." *Environment and Planning C: Government and Planning* 12 (1994).
- Kuo, C-Y., T. McGirr, and S. Poddar (1988) "Measuring the Non-neutralities of Sales and Excise Tax in Canada," *Canadian Tax Journal*, 36: 655-70.
- Liu, M. and R. Tao (2007) "Local Governance, Policy Mandates and Fiscal Reform in China," in V. Shue and C. Wong, eds., *Paying for Progress in China* (London: Routledge), pp. 166-89.
- Longo, C. (1990) "The VAT in Brazil," in M. Gillis, C.S. Shoup, and G.P. Sicat, eds., *Value Added Taxation in Developing Countries* (Washington: World Bank), pp. 121-28.
- Martinez-Vazquez, J. (2006) "Asymmetric Federalism in Russia: Cure or Poison?" in R.M. Bird and R.D. Ebel, eds. (2007) *Fiscal Fragmentation in Decentralized Countries: Subsidiarity, Solidarity, and Asymmetry* (Cheltenham, UK and Northampton MA: Edward Elgar), pp. 227-66.
- Martinez-Vazquez, J. and J. Boex (2001) *Russia's Transition to a New Federalism* (Washington, DC: World Bank Institute).

Martinez-Vazquez, J., C. McLure and F. Vaillancourt (2006) "Revenues and Expenditures in an Intergovernmental Framework," in R. Bird and F. Vaillancourt, eds, *Perspectives on Fiscal Federalism*. WBI Learning Resources Series (Washington, DC: World Bank), pp. 15-34.

Martinez-Vazquez, J., M. Rider and S. Wallace (2008) *Tax Reform in Russia* (Cheltenham, UK and Northampton, MA: Edward Elgar).

McCarten, W.J. (2003) "The Challenge of Fiscal Discipline in the Indian States," in J. Rodden, G. Eskeland, and J. Litvack, eds., *Fiscal Decentralization and the Challenge of Hard Budget Constraints* (Cambridge: The MIT Press), pp. 249-86.

McLure, C.E. (1986) "The State Corporate Income Tax: Lambs in Wolves Clothing," in HJ Aaron and MJ Boskin, eds., *the Economics of Taxation* (Washington, DC: the Brookings Institution), 327-48.

McLure, C.E. (2000) "Implementing Subnational VATs on Internal Trade: The Compensating VAT (CVAT)," *International Tax and Public Finance*, 7: 723-40.

Mikesell, J.L. (1999) "Structure of the Russian Federation's New Regional Sales Taxes," *Tax Notes International*, 18: 1059-68.

Misrah, V. (2009) "Focusing on Core Issues of GST," *The Economic Times*, 11 November, available at <http://economictimes.indiatimes.com/articleshow/5217537.cms?prtpage=1>

Naresh, G. (2004) "Property Taxation in India," in R.M. Bird and E. Slack (2004) *International Handbook of Land and Property Taxation* (Cheltenham, UK and Northampton, MA: Edward Elgar).

OECD (Organisation for Economic Co-operation and Development) (1999) *Taxing Powers of State and Local Governments* (Paris).

OECD (Organisation for Economic Co-operation and Development) (2006) *Fiscal Autonomy of Sub-Central Governments* (Paris).

Okensberg, M. and J. Tong (1991) "The Evolution of Central-Provincial Fiscal Relations in China, 1953–1983: The Formal System." *China Quarterly*, 125: 1-32.

Pinhanez, M. (2007) "Reinventing VAT Collection: Industry Vertical Assessment, Revenue Increase, and Public Sector Reliability," Ph.D. dissertation, MIT, Cambridge, MA.

Rao, R. K. (2008) "Goods and Services Tax for India," Working Paper 57, National Institute of Public Finance and Policy, New Delhi, November.

Rao, M.G. and N. Singh (2005) *The Political Economy of Federalism in India* (New Delhi: Oxford University Press).

- Rezende, F. and J.R.Afonso (2006) "The Brazilian Federation: Facts, Challenges, and Perspectives," in J.S.Wallack and T.N. Srinivasan, eds., *Federalism and Economic Reform: International Perspectives* (New York: Cambridge University Press), pp.143-88.
- Rezende, F. and S. Garson (2006) "Financing Metropolitan Areas in Brazil," *Revista de economia contemporanea*, 10(1): 5-34.
- Ring, R. (1999) "Consumers' Share and Producers' Share of the General Sales Tax," *National Tax Journal*, 52: 81-92.
- Rodden, J. (2003) "Federalism and Bailouts in Brazil," in J. Rodden, G. Eskeland, and J. Litvack, eds., *Fiscal Decentralization and the Challenge of Hard Budget Constraints* (Cambridge: The MIT Press), pp. 213-48.
- Serra, J. and J.R. Afonso (2007) "Fiscal Federalism in Brazil: an Overview," *CEPAL Review*, 91 (April): 29-51.
- Shatalov, S. (2006) "Tax Reform in Russia -- History and Future," Special Report, International Tax and Investment Center, Washington, February.
- Shome, P. (2008) "India: VAT and GST -- Evolutionary Experience," presentation at Asia Tax Forum, New Delhi, May.
- Singh, N. and T.N. Srinivasan, "Indian Federalism, Economic Reform, and Globalization," in J.S.Wallack and T.N. Srinivasan, eds., *Federalism and Economic Reform: International Perspectives* (New York: Cambridge University Press), pp.301-63.
- Slack, E. (2006) "Alternative Approaches to Taxing Land and Property," in R. M. Bird and F. Vaillancourt eds, *Perspectives on Fiscal Federalism*. WBI Learning Resources Series (Washington, DC: World Bank), pp. 197-223.
- Smart, M. and R.M. Bird (2007) "The GST Cut and Fiscal Imbalance," in C. Beach, M. Smart, and T.A. Wilson, eds., *The 2006 Federal Budget: Rethinking Fiscal Priorities* (Montreal: McGill-Queen's University Press), pp. 73-100.
- Sridhar, K.S., S. Bandyopadhyay, and S. Sikdar (2008) "Improving the Fiscal Health of Indian Cities: a Synthesis of Pilot Studies," National Institute of Public Finance and Policy, New Delhi, February.
- Tait, A.A. (1988) *Value Added Tax. International Practice and Problems* (Washington, DC: International Monetary Fund).
- Ter-Minassian, T. (1997) "Brazil," in T. Ter-Minassian, ed., *Fiscal Federalism in Theory and Practice* (Washington, DC: International Monetary Fund), pp. 438-56.

Timofeev, A. (2004) "Land and Property Taxes in Russia," in R.M.Bird and E. Slack (2004) *International Handbook of Land and Property Taxation* (Cheltenham, UK and Northampton, MA: Edward Elgar), pp. 236-45.

Treisman, D. (1999) *After the Deluge: Regional Crisis and Political Consolidation in Russia* (Ann Arbor: University of Michigan Press).

Vaillancourt, F. and R.M. Bird (2007) "The Interregional Incidence of Central Budgets in Federations: Some Evidence from Canada," *Public Budgeting & Finance*, 27 (1): 1-19.

Varsano, R. (2000) "Subnational Taxation and Treatment of Interstate Trade in Brazil: Problems and a Proposed Solution," in S.J. Burki and G.E. Perry, eds., *Decentralization and Accountability of the Public Sector* (Washington: World Bank, 2000).

Varsano, R. (2001) "Brazil: Tax Reform and the 'Fiscal War' in the Federation," *Federations*, 1 (1), March.

Wallich, C. (1994) *Russia and the Challenge of Fiscal Federalism*. (Washington: World Bank)

Watts, R.L. (1999) *Comparing Federal Systems* (second edition; Montréal and Kingston: published for the School of Policy Studies, Queen's University, by McGill-Queen's University Press).

Watts, R.L. (2000) "Asymmetrical Decentralization: Functional or Dysfunctional?" Queen's University, Kingston, Canada

Werneck, R.L.F. (2007) "Tax Reform in Brazil: an Evaluation at the Crossroads," Catholic University of Rio de Janeiro, December.

Wheare, K.C. (1963) *Federal Government* (4th ed; London: Oxford University Press).

Wong, C. (1991) "Central-Local Relations in an Era of Fiscal Decline: The Paradox of Fiscal Decentralization in post-Mao China." *China Quarterly*, 128: 691-715

Wong, C. (1992) "Fiscal Reform and Local Industrialization: The Problematic Sequencing of Reform in Post-Mao China." *Modern China*, 18 (2):197-227.

Wong, C. (1993) "Public Finance and Economic Decentralization," in Walter Galenson, ed., *China's Economic Reform in the 1990s* (Ann Arbor, MI: University of Michigan Press), 177-196.

Wong, C. (2007) "Can the Retreat from Equality be Reversed? An Assessment of Redistributive Fiscal Policies from Deng Xiaoping to Wen Jiabao, in V. Shue and C. Wong, eds., *Paying for Progress in China* (London: Routledge), pp. 12-28.

Wong, C.P.W. and R.M. Bird (2008) "China's Fiscal System: A Work in Progress," in L. Brandt and T.G. Rawski, eds., *China's Great Transformation: Origins, Mechanisms, and Consequences of the Post-Reform Economic Boom*, (Cambridge: Cambridge University Press), pp. 429-66.

World Bank (1996) *Fiscal Management in Russia* (Washington, DC: World Bank)

World Bank (2002) *China: National Development and Subnational Finance, a Review of Provincial Expenditures* (Washington, DC: World Bank)

World Bank (2004) *India, Fiscal Decentralization to Rural Governments*, Report 26654-IN (Washington, DC: World Bank)

World Bank (2007) *Designing a Tax System for Micro and Small and Businesses: Guide for Practitioners* (Washington DC)