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Below the Salt: Decentralizing Value-Added Taxes

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Abstract

Although VATs applied simultaneously within the same country by different levels of government were long considered to be either undesirable or infeasible, two quite different types of sub-central VATs – regional consumption taxes and local business taxes -- now exist in a number of countries. Brazil, Canada, and India have introduced regional (state and provincial) VATs which, like national VATs, are general taxes on consumption administered through a transaction-based credit-invoice approach. Although these three countries are very different, and each has established such a tax for its own reasons in different ways and with varying degrees of success, as this paper discusses, on the whole such regional VATs appear to work fairly well, especially in Canada.

The issues that arise with independent regional VATs are closely related to those arising with national VATs in a common market such as the EU. A number of problems such as ‘carousel’ (or ‘missing trader’) fraud have recently received considerable attention in the EU and a variety of alternative solutions to such problems have been suggested, some involving major structural changes in the VAT. Experience with regional VATs, however, suggests that what is needed to resolve most such problems is primarily a firmer ‘EU-wide’ framework for improving VAT administration.

The second type of sub-central VAT that has recently emerged in Italy, Japan, and France (as well as in several U.S. states) takes the form of a revised form of local business tax which is generally imposed on an ‘income’ (origin) basis in contrast to the destination-based consumption VATs discussed earlier. These taxes seem superior in some important respects to other forms of local business taxation and appear to be compatible with both regional and national VATs.

Although important economic and administrative aspects require careful consideration in designing and implementing ‘two-level’ (dual) VATs, such dual VATs (or even triple VATs, including an ‘income-type’ VAT at the local level) are evidently both feasible technically and acceptable politically. This conclusion does not mean that regional VATs are either inherently desirable or necessarily the best alternative for any country (or set of countries). But it does suggest that such taxes may work more satisfactorily in at least some countries than other forms of regional sales taxes or local business taxes. Indeed, both varieties of ‘decentralized VATs’ discussed here may become more important over time.

Keywords: VAT, local business taxation, common market, subnational taxation

JEL Codes: H25, H71, H77, F36

Introduction

Since the most striking tax development of the last half century has been the worldwide rise of the value-added tax (VAT), it is no surprise that most countries now have national VATs (Martinez-Vazquez and Bird 2011). More surprisingly perhaps, two quite different types of sub-central VATs – regional consumption taxes and local business taxes -- now exist in a number of countries. Can two (or even three) levels of government tax essentially the same base without creating undesirable tax competition, giving rise to unnecessary administrative and compliance costs, and requiring an unattainable level of intergovernmental cooperation?

VATs applied simultaneously within the same country by different levels of government were long considered to be either undesirable or infeasible. One reason was because of the high administrative and compliance costs of imposing two sales taxes on the same base. Another was that divided jurisdiction over such an important tax base might unduly limit the scope of central macroeconomic policy. Still another was simply because central governments were reluctant to allow others a share in this attractive tax base. However, the major technical problems perceived were undoubtedly those arising from cross-border trade and the need for border adjustment.

National taxes in a common market are analytically analogous to sub-central taxes within a country, so it is no surprise that most of these issues were first discussed in detail in the early years of European integration (Shoup 1967). The dominant view emerging from this discussion was that the only way in which sub-central units could effectively levy a VAT was on an origin basis and that unless they did so at uniform rates the results would be highly distortionary (Neumark 1963). The only way to impose acceptable origin-based sub-central VATs was thus in effect by giving up the fiscal autonomy (and accountability) that such taxes might otherwise provide to sub-central governments.¹ On the other hand, since it was generally thought that a destination-basis consumption VAT could be effectively imposed only through the invoice-credit method it seemed that such a tax could not be successfully implemented without physical border controls. In the absence of borders, the early discussion of this issue in the context of the European common market generally concluded that the only feasible approach would be some form of ‘clearing house’ in which transaction-based input tax credits and tax liabilities could be netted against each other, with any remaining balance being settled by interstate payments. But this approach was considered costly to administer and politically difficult to implement.² Summing up, sub-central VATs were generally considered to be distortionary if levied on an origin basis and unworkable if levied on a destination basis.

Despite such problems, several large federal countries – Brazil, Canada, and India – have introduced regional (state and provincial) VATs which, like national VATs, are general taxes on consumption administered through a transaction-based credit-invoice approach. Although

¹ The importance of such accountability and the role potentially played by ‘decentralized’ VATs in achieving it is discussed in Bird (2011).

² For discussions of these issues, see Neumark (1963), Shoup (1967), Cnossen and Shoup (1987), OECD (1988), and Poddar (1990). An interesting example of a clearing-house arrangement has long existed between Israel and West Bank-Gaza, although the flow of revenues has proved to be vulnerable to political factors.

these three countries are very different, and each has established such a tax for its own reasons in different ways and with varying degrees of success, on the whole such regional VATs appear to work fairly well, especially in Canada. Even imperfect regional VATs such as those in Brazil and India are less economically distorting than the taxes they replaced – gross receipts taxes in Brazil and pre-retail stage sales taxes in India – while being little or no more difficult to administer.³ The experience in Canada, where regional VATs (which successfully deal with border problems through the so-called ‘transitory’ deferred-payment system long used in the European Union have largely replaced retail sales taxes (RSTs) has been generally good.⁴ Section 2 discusses the experience with these regional VATs in some detail as well as other approaches to ‘decentralizing’ central VATs found in some countries.

As mentioned, the issues that arise with independent regional VATs are closely related to those arising with national VATs in a common market such as the EU. Section 3 reviews a number of problems that have recently received considerable attention in the EU context such as ‘carousel’ (or ‘missing trader’) fraud. A variety of alternative solutions to such problems have been suggested for the EU, some involving major structural changes in the VAT. As Canadian experience suggests, however, it appears that the problems with EU VATs on the whole call for administrative rather than structural solutions. Section 3 concludes with some suggestions on how a firmer ‘EU-wide’ framework for improving VAT administration may perhaps be achieved.

Section 4 turns to the rather different story of how decentralized local ‘business VATs’ have recently emerged in several countries. Interestingly, VAT was first conceived of in both Germany and the United States as a way of taxing business (Sullivan 1965). It is thus perhaps only fitting that the second type of sub-central VAT, which has emerged in recent years in Italy, Japan, and France (as well as in several U.S. states), has taken the form of a revised form of local business tax. In contrast to the consumption (destination) VATs that dominate in the world, these local business VATs are usually levied on an ‘income’ (origin) basis, which of course raises some of the same analytical questions mentioned earlier about such taxes. Section 4 concludes with a brief discussion of how such local business VATs may relate to regional and national VATs.

As the concluding Section 5 suggests, the varied national experiences discussed here demonstrate clearly that, although important economic and administrative aspects require careful consideration in designing and implementing ‘two-level’ (dual) VATs, in some circumstances such dual VATs (or even triple VATs, including an ‘income-type’ VAT at the local level) are evidently both feasible technically and acceptable politically. This conclusion does not imply that regional VATs are either inherently desirable or necessarily the best alternative for any country (or set of countries). But it does mean that such taxes may work more satisfactorily in at least some countries than other forms of regional sales taxes or

³ See, for example, the discussion in Artana et al. (2012). This study evaluates the effects of alternative forms of provincial sales taxes in Argentina (which now has a gross receipts tax) and concludes that a provincial VAT would be economically preferable.

⁴ For example, Smart and Bird (2009) show that empirical evidence in Canada supports the conclusion that a provincial VAT is better from a growth perspective than a provincial retail sales tax.

local business taxes. Moreover, some of the lessons learned from experience with regional VATs seem applicable to a common market such as the EU. Similarly, while local business VATs like those discussed here may not be suitable for all countries, countries facing problems in financing local public services, especially in large metropolitan areas, would seem well advised to consider the possible role of such taxes. On the whole, both varieties of ‘decentralized VATs’ discussed here may well become more common and more important around the world as time goes on.

1. Decentralizing the VAT

Most countries have avoided the complications of decentralizing VATs by the simple expedient of keeping VAT central. However, a number of countries, both federal and unitary, have in effect ‘decentralized’ the VAT to varying degrees in a number of different ways. For example, some countries such as Germany and Morocco direct a specified share of VAT collections to regional governments, often on the basis of a formula based on such factors as population and poverty. Even more countries, like Argentina and Colombia, have similar formula transfers with the ‘pool’ of funds transferred being established as some percentage of all central tax collections, including VAT. China attempts to allocate the provincial share of VAT on a ‘derivation’ (origin) basis, as did Russia for a time.⁵ Other countries, such as Spain and Japan, allocate the local share on the basis of estimated ‘final’ consumption in the local jurisdiction, a system that was suggested for the EU some years ago (Commission 1996). Finally, countries such as Portugal and Mexico apply different rates in particular territories for administrative or incentive reasons.⁶

Seventeen of the 20 federal countries listed in Table 1 have central VATs (of varying scope) with standard rates ranging from 5 percent in Canada and Nigeria to 21 percent in Argentina and (on a tax-exclusive basis) 25 percent in Brazil.⁷ Most of the approaches just mentioned may be illustrated by these countries.

⁵ If the revenues of a nationally uniform VAT are shared on the basis of origin, much the same undesirable and distortionary incentives are created as in the case of non-uniform sub-central origin-based VATs. As Baer, Summers, and Sunley (1996) emphasize, when the central VAT is actually administered by sub-central governments, these problems are accentuated, which is one reason the VAT in Russia is now centralized (Martinez-Vazquez, Rider and Wallace 2008). Although VAT administration is centralized in China, its system of sharing the revenues still gives rise to allocative and incentive problems (Wong and Bird 2008).

⁶ For a more detailed discussion of ‘decentralized’ VATs in OECD countries, see Bird (2010).

⁷ Not all the countries listed in Table 1 are formally constitutionally federal e.g. Spain and South Africa, but all operate in a sufficiently federal way to be considered as such here. The Forum of Federations (www.forumfed.org) lists four other ‘federal’ countries – Bosnia and Herzegovina, Comoros Islands, Micronesia, and St.Kitts-Nevis, as well as two additional countries considered (perhaps optimistically) to be “in transition to federations” – Iraq and Sudan.

Table 1
VAT in Federal Countries

(1) Country	(2) Population (million)	(3) GDP Per Capita (US\$'000)	(4) Central VAT (standard rate)	(5) Special Territorial Rates of Central VAT	(6) Subnational Share Of Central VAT	(7) Regional VATs (standard rate)
Argentina	40.3	6.6	21			
Australia	21.4	43.3	10		100	
Austria	8.3	45.2	20	19 ^b	26.8 ^e	
Belgium	10.7	42.6	21		56.8 ^f	
Brazil ^a	187.8	6.9	20		10.0 ^g	17-19
Canada	33.4	43.5	5			7-9.975
Ethiopia	79.2	0.2	15			
Germany	82.2	40.4	19		47.9 ^h	
India	1,138.8	1.0	12			12.5
Malaysia	27.7	6.9	None			
Mexico	106.7	8.5	16	11 ^c		
Nigeria	148.1	1.2	5			
Pakistan	164.5	0.9	16			
Russia	141.9	9.1	18			
South Africa	47.8	5.9	14			
Spain	46.1	32.1	18	0.5 to 13 ^d	35.7 ⁱ	
Switzerland	7.6	58.1	8			
UAE	4.3	42.9	None			
USA	305.3	45.8	None			
Venezuela	28.0	8.6	12			

Sources: Columns (2), (3), and (6) are taken from Bird (2010) and in most cases reflect 2007-2008 data. The VAT rates in columns (4), (5) and (7) come from the OECD (2010) and a variety of other sources such as the webpages of Deloitte, KPMG, World Bank, IMF, and various countries as consulted in May 2012).

Notes: (a) In Brazil, tax rates are calculated on a tax-inclusive basis so that a rate of 20 percent is equivalent to 25 percent on the tax-exclusive basis used in most countries. (For details on current VAT rates in Brazil, see Arroyo, Jimenez and Mussi 2012). (b) This rate applies only in two small border regions. (c) This rate applies (except for sales of real estate) in designated areas (not whole states) adjacent to the US border and Belize. (d) These rates apply in the Canary Islands and two small territories in Africa (Ceuta and Melilla). (e) 11.6 percent to municipalities and 15.2 percent to states. (f) Belgium does not share VAT revenues with regions but with its linguistic communities (which in some instances are coterminous with regions). (g) To compensate states for the loss of their VAT (ICMS) revenues through zero-rating exports, 10 percent of the revenues of the central VAT (the IPI) are shared with the states in proportion to their share of industrial exports; in turn, as with ICMS revenues in general, 25 percent of this transfer is shared by the states with their municipalities. (h) 2.1 percent to municipalities and 45.8 percent to states. (i) 35 percent goes to the states (autonomous communities) and an additional 1.0583 percent of the remaining central VAT to municipalities.

Rate Differentiation

Three VAT federations impose territorially differentiated rates of the central VAT, with by far the most important case being Mexico. The special rate in Mexico, which applies to sales (with a few exceptions such as real estate) within 20 kilometers of the US border, was initially introduced when the VAT was adopted in 1980 in order to discourage cross-border shopping, given the much lower retail sales tax rates applied in adjacent US states.⁸ When Mexico increased its VAT from 15 percent to 16 percent in 2010, the border rate was similarly raised from 10 to 11 percent.

Both the perceived benefits and the costs of the border rate have shifted over time, with the benefits being lowered by the substantially increased costs of crossing into the United States since 2001 and the costs increased as trading patterns within Mexico have been distorted to take advantage of the geographic discontinuity in the VAT rate (Davis 2011). In any case, most analysts agree that Mexico should apply a unified rate (e.g. Giugale, Lafourcade and Nguyen 2001), and proposals have been made recently to abolish this preferential rate.

Another unusual feature of Mexico's VAT is that, under agreements with the federal government, states play an active role in its administration. States may not only audit and verify compliance with VAT but they are also entitled to keep a significant share of any additional revenues secured through such activities. The rationale underlying this system is that local knowledge – derived, for example, from experience with the former state turnover taxes - should help enforcement and the prospect of revenue gain should encourage state enforcement efforts. However, such potential advantages may perhaps be outweighed by the adverse effects arising from the geographic variation in effective taxation owing to differential efforts in different states as well as reduced incentive for more effective federal enforcement.⁹

Sharing VAT Revenues

Of the 17 VAT countries shown in Table 1, only five explicitly share VAT revenues with subnational governments, with the extreme case being Australia, where all the proceeds of the central VAT are transferred to state governments. Interestingly, the two federal OECD countries that are most fiscally decentralized -- Canada and Switzerland -- are the only two in which there is no explicit "regional" element in the federal VAT in terms of either rates or the designated use of the revenue it yields. In Switzerland, the VAT is a uniform federal tax and all revenue goes to the federal government. The same is true of Canada's federal VAT (the GST, or Goods and Services Tax). In addition, however, Canada is the only OECD country in which subnational governments have the choice of whether or not to impose their own VATs, as discussed further below.

⁸ The area was subsequently expanded slightly (e.g. to include a municipality bordering Belize in the south).

⁹ This question appears to deserve closer attention than it has received (though see the interesting analysis of differential enforcement effects in Germany by Baretta, Huber, and Lichtblau 2001). For example, one rationale mentioned for the current 'pilot' merging of the local business tax and the national VAT in Shanghai and some other areas in China (see Section 4 below) appears to be to encourage more local enforcement effort.

Five federal OECD countries with central VATs earmark explicit shares of VAT revenues to sub-central governments, as shown in column 6 of Table 1. Germany has a ‘shared’ federal-state VAT, that is, a federal tax with a share of the revenue being earmarked for the states (*länder*). Almost half of VAT revenues are distributed to the states (largely on the basis of population, although there is also an ‘equalization’ factor because revenue capacity is also taken into account) in addition to a small percentage to municipalities. In Austria’s similar system, about one quarter of VAT proceeds are distributed to the states and municipalities. Over a third of the VAT in Spain goes to the regional governments (and a small additional share to local governments). The extreme case of VAT revenue sharing, however, is Australia in which all the revenues from the federal VAT are distributed to the states.¹⁰ Finally, in Belgium’s peculiar federal structure (Bayenet and de Bruycker 2006), a share of the VAT is transferred not to the regions but to the “communities” (linguistically based units) in proportions determined initially by the number of school-age children, with the proceeds being used to finance education. The extent to which and the manner in which federal countries tax sales at more than one jurisdictional level is not static. In 2001, for example, the share of the VAT in the Russian Federation going to the regions was changed from 25 percent to zero (Martinez-Vazquez, Rider and Wallace 2008).

In addition to such specific VAT sharing, some countries share VAT revenues like other central taxes with subnational governments either through some form of general revenue sharing (as in Argentina, for example) or through general unconditional grants to subnational governments financed by federal revenues, and often allocated in accordance with some kind of equalization formula.¹¹ With such transfer systems, the revenue that regions receive is not directly related either to the amount of revenue directly collected by the central government from VAT registrants in that region – the so-called ‘derivation’ basis found in China and some other countries– or the (assumed) final impact of the VAT on consumers – the so-called ‘destination’ basis. An important exception is Spain, where the VAT share is distributed in accordance with territorial consumption, as estimated by the National Statistical Institute, thus approximating the destination basis (Sanchez-Maldonado and Gomez-Sala 2007).¹²

Summing up, perhaps the main conclusion suggested by Table 1 is simply that countries have considerable discretion when it comes to VATs: they can decide what, if any, geographical

¹⁰ In Australia, unlike any of the other countries mentioned, both levels of government, federal and state, must unanimously agree to any changes in VAT rate. Interestingly, a similar, though much weaker, commitment to coordinated rate changes played a role in the initial adoption of the HST (Harmonized Sales Tax) in some Canadian provinces (Bird 2012).

¹¹ For further discussion of equalization transfers, see Ahmad (1997), Bird and Smart (2002), and Martinez-Vazquez and Searle (2007).

¹² A somewhat similar system is used in Canada for the HST, as discussed below, as well as in the United Kingdom, which allocates revenues to the Isle of Man under a formula which until July 2011 increased in accordance with the growth of the island’s GDP, on the implicit assumption that the structure of that GDP was similar to that of the UK as a whole. However, when it became apparent that much of the recorded island GDP growth in recent years was in tax-exempt sectors (finance), the formula was revised so that the subsidy – substantially reduced – is now increased according to the growth of different sectors.

variation exists in the rates of the central VAT,¹³ how any regional VATs are structured, what (if any) revenue from the central VAT flows to regional and/or local jurisdictions, and what degree of control such jurisdictions have over the amount of revenue they receive from this source. In only three large federal countries, however – Brazil, India, and Canada - do regional governments at present have VATs that are really independent of the central VAT in some way.

Regional VATs

Table 2 summarizes some of the key characteristics of the regional VATs in these three countries. Although the degree of independence of regional governments is in some respects greater in Brazil and India, as discussed below the somewhat more restrictive Canadian approach appears to work best administratively as well as in terms of reducing economic distortions while simultaneously promoting fiscal autonomy and accountability.

Brazil: The Perils of Pioneering?

Few seem to realize the extent to which Brazil has been a pioneer in the VAT world. Not only was Brazil among the earliest adopters of any form of VAT in 1967 --- preceded only by France (1954) and Côte d'Ivoire (1960) -- but it was also the first country to adopt a more or less comprehensive VAT; the member states of the European Economic Community did so only in 1968. In addition, Brazil was also the first (and for a long time, the only) country to introduce VAT at the regional as well as central level.¹⁴ Brazil has thus had a two-level VAT for almost half a century. The federal VAT (the IPI) is limited essentially to the manufacturing sector with rates varying by commodity (including some over 100 percent) and an average rate of around 20 percent.¹⁵ The 27 regional (26 states and the federal district) VATs (the ICMS) are essentially origin-based, with standard rates of 19 percent in Rio de Janeiro, 18 percent in Sao Paulo, Parana, and Minas Gerais, and 17 percent elsewhere, as well as a federally-established rate of 12 percent on interstate transactions (7 percent on goods sent to less developed regions).¹⁶ Each state has its own ICMS law with different rates, exemptions, and incentives.

¹³ Recall, for example, that the 'border' rate in Mexico is not delimited by jurisdictional boundaries. Note also that even unitary countries like France, Portugal, and Greece can and do establish different VAT rates in different – usually small, border, or island – parts of their national territory (Bird 2010).

¹⁴ For an earlier version of this section, see Bird (2012a). An interesting appraisal of the initial Brazilian proposals in light of the virtually concurrent discussion in Europe is Shoup (1965); the state VATs actually introduced in 1967 are discussed in detail in Guerard (1973).

¹⁵ The federal government also imposes two (non-creditable) taxes on the broader VAT base -- CONFINS (a social security tax) and PIS, with standard rates of 7.6 percent and 1.65 percent, respectively. About half the revenue from the three main federal taxes, including the IPI, is split more or less equally between the states and municipalities.

¹⁶ In addition, as discussed further in Section 4 below, municipalities impose a (non-creditable) services tax (ISS), usually at a standard rate of 5 percent, on a list of services established by the federal government (excluding services subject to ICMS). Local governments can and do vary both the rates and, by choosing different sets of services, the base of this tax.

Table 2
Comparison of Features of Regional VATs

	Canada	Canada	Brazil	India
	QST	HST		
Comprehensive federal VAT with similar base	Yes	Yes	No	No
Federal VAT proceeds shared with regions^a	No	No	Limited	No
Sub-national taxes on destination basis	Yes	Yes	No	No
Sub-national rate setting autonomous	Yes	Yes	Yes (except for interstate trade) within limits set by federal government	Yes (except Central Sales Tax on interstate trade, which is supposed to be abolished) ^c
Broadly uniform base^b	Yes	Yes	Yes	Yes
Administration	Regional	Central	Regional	Regional
Strong Administration	Yes	Yes	Varies	No

NOTES:

(a) In all three countries, some VAT revenues are shared either through general revenue sharing or general unconditional intergovernmental transfers. However, as noted in Table 1, there is no specific VAT sharing with subnational governments in these countries, apart from a small transfer in Brazil intended to compensate states for the revenue cost of zero-rating exports. In turn, 25 percent of this transfer, like all ICMS revenues, is redistributed to municipalities, in large part in proportion to the value added originating in the municipality. As Ter-Minassian (2012) notes, this procedure both distributes more to localities with large industrial bases and also creates an incentive to municipal fragmentation in order to maximize transfers per capita.

(b) Only in Canada are both central and regional VATs imposed on largely similar and broadly comprehensive bases. In all three countries, however, the regional VATs have relatively broad and similar bases, although in each case there are some exceptions. In India, different states may exempt different goods, there are differences in the extent to which input credits are allowed for capital goods, and the extent to which services are encompassed in the tax base is limited. In Brazil, states may grant different exemptions, input credits on capital goods are restricted, and most services are subject to a separate municipal tax. In Canada, there are also some (lesser) deviations from uniformity under both forms of provincial VAT.

(c) The CST also applies to sales within state of a few “declared goods” such as aviation turbine fuel.

Brazilian taxes are relatively high (35 percent of GDP in 2010), with about 25 percent of these taxes imposed and collected by state governments (Ter-Minassian 2012). Since local governments are also unusually large taxers (6 percent of total taxes), Brazil is one of the most fiscally decentralized countries in the world. Both states and municipalities are fiscally autonomous in the sense that they can establish the rates of their own taxes. However, as Arretche (2007) notes, the federal government not only establishes what states and municipalities can tax but it may also specify the conditions under which they can exercise their fiscal authority. If the states disagree, they must muster a majority of members of the federal legislature to vote down the legislation (or, depending on the nature of the federal law, a substantial minority -- 41 percent -- to defeat a constitutional amendment), which they have found increasingly difficult in recent years (Cheibub, Figuerido and Limongi 2009)

A major reform introduced by the federal government in 1996 moved the state indirect tax base closer to a conventional VAT by introducing zero rating for international exports of non-manufactured goods as well as an input tax credit for the purchase of capital goods. However, many problems remain.¹⁷ Both domestic and foreign experts have long argued that Brazil's indirect tax system is both inefficient and potentially destabilizing.¹⁸ Not only do different rates apply to intrastate and interstate transactions but since every state has its own VAT law some 40 different rates -- with (tax-exclusive) rates as high as 40 percent on some sectors such as telecommunications (Werneck 2008) -- apply to varying degrees in different states, as do different rules for crediting.¹⁹ These differences complicate administration, raise compliance costs, and facilitate evasion.

Because Brazilian state VATs are origin-based -- taxing exports and exempting imports -- both problems are exacerbated by the freedom with 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."²⁰ Since each state imposes its VAT on a production (origin) basis while (international) exports are zero rated, states that are net international exporters may even end up rebating taxes that were paid to other states. Finally, the base of state VATs is not comprehensive because it excludes most services. For this and other reasons a significant proportion of the burden of the ICMS falls on business inputs including capital formation.²¹ Despite such problems, at least some

¹⁷ Indeed, Serra and Afonso (2007) attribute some of the problems of recent years to this reform, particularly the abolition of ICMS on exports. Revenue losses on this account were supposed to be compensated by a federal transfer, but over subsequent years constant friction about the amount and allocation of this transfer has exacerbated federal-state relations.

¹⁸ For examples, see Ter-Minassian (1997), Rodden (2003) and Rezende and Afonso (2006).

¹⁹ State rates are limited for different categories of products by the range of rates -- ranging from 0 to 35 percent -- set by the federal senate (Arroyo, Jimenez and Mussi 2012). However, states are free to establish their own rates for particular products, and different categories of goods (e.g. capital goods, food) are taxed at quite different rates in different states. Werneck (2008) reports the range of positive rates was from 1 to 250 percent. Some states with international ports even impose lower ICMS rates on imports, thus providing foreign goods a comparative advantage over imports from other states (Ter-Minassian 2012).

²⁰ Another factor exacerbating interstate competition is that many states still collect the bulk of the ICMS at the production stage on the basis of estimated tax liability for an average production chain in particular sectors rather than on final retail sales (de Mello 2007). For an interesting analysis of the economic effects of this approach, see de Paula and Scheinkman (2010).

²¹ Werneck (2008) estimates that 17 percent of all indirect taxes fall on capital formation.

states have substantially strengthened and improved their sales tax administrations in recent years (Pinhanez 2008).²²

Although there have been numerous proposals in recent years intended to reform and simplify Brazil's complex VAT system, as yet none has succeeded, perhaps because most have taken the form of federal proposals to increase central power over the VAT.²³ Since the state VATs (the ICMS) need reform, perhaps the best way to do so may be as part of a comprehensive reform establishing 'dual VATs' at both the federal and state levels, with similar bases, some state autonomy in setting rates, and much more coordinated administration. If, as Ter-Minassian (2012) suggests, such a reform were extended to encompass most services in the tax base, in effect replacing the present municipal tax on services (the ISS), then Brazil would have a system that would closely resemble that now found in Canada.²⁴

Brazil was a pioneer in sub-central VATs. A common price paid by 'first movers', however, is that it sometimes turns out that they may not have adopted the best possible system. Brazilian experience suggests that it may be extremely difficult to alter the initial framework, no matter how imperfect it is. Still, Brazil's regional VATs have for over 40 years succeeded in providing very substantial 'own' revenues to state governments. States clearly value both the revenue and the autonomy so it remains far from clear in which direction Brazil will move with respect to reforming indirect taxes or subnational taxation in general, let alone when or even if it will do so.

Regional VATs in India: A Work in Progress?

Unlike Brazil, India has always followed the principle of tax separation: that is, in principle any one type of tax should be levied by only one level of government. The taxes that may be levied by the states are thus clearly separated in the constitution from those that may be levied by the federal government (the Union). Although the constitution provides that final (retail) sales on goods can be taxed only by states, for administrative reasons most states actually impose sales taxes mainly on prior production stages, thus overlapping much of the base of the central taxes on manufactured goods. With respect to services, however, while the constitution assigns a few specific taxes like those on hotels and restaurants to the states the center has the residual power to tax other services. This initial division of taxing powers has not made the adoption of a sensible VAT in India easy at either the central or the state level.²⁵

In practice, the central government has long imposed taxes at various rates on manufactured goods, initially as the Union Excise Duty. The states have similarly imposed taxes at a variety of rates on much the same goods (including the central tax in the base). In addition,

²² However, there is still no coordination between the administration of the federal IPI and the state ICMS with, for example, different taxpayer identifications, different returns, and different administrative procedures.

²³ Arroyo, Jimenez and Mussi (2012) summarize a number of these reform proposals.

²⁴ In Brazil's case, inclusion of services in the tax base would require close attention to the difficult question of how to replace this component of local revenues – by 'sharing' central and state VAT revenues with municipalities or perhaps by introducing some new VAT-like form of local business tax such as those discussed in Section 4 below.

²⁵ For an earlier version of this section, see Bird (2012a).

for many years interstate trade has been taxed at a uniform rate under the so-called Central Sales Tax (CST), with the revenues of this tax being collected and retained by the state of origin and the importing state levying its own sales tax in addition -- although it has always been relatively easy to avoid CST simply by transferring goods to branches in other states. For the most part, however, few services were taxed by either center or states.

In the mid-1980s the central government gradually began to introduce the credit principle of VAT to the Union excise duty and to reduce considerably the number of tax rates: the resulting tax was called Modified VAT (MODVAT). By 2005, when the name of the tax was changed to Central VAT (or CENVAT), a considerable number of services were taxed by the central government at a rate of 12 percent and the number of tax rates on goods had been essentially reduced to two -- 8 and 16 percent (although a few higher rates applied to specific articles). CENVAT remains far from a full consumption VAT for several reasons. First, credit is given for capital goods purchases only over a two-year period (essentially for revenue reasons). Secondly, taxes imposed on sales of goods beyond the manufacturing stage are not creditable at the central level since such taxes are imposed only by the states. And, thirdly, the differential central rate structure can result in the accumulation of unrefunded input tax credits.

Since further reform to the central VAT to a large extent depends on what happens to state sales taxes, for the last decade or so most attention has been paid to reforming those taxes. As in Brazil, where state sales tax reform has largely been in the hands of a centrally convened council of state finance ministers (CONFAZ), in India state sales tax reform has largely been driven by what is called the Empowered Committee (EC) 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 the sales tax incentives that had become increasingly prevalent in some states, a state level VAT was introduced in 2005.²⁶ At the last minute, however, some states controlled by parties in opposition to the central government dropped out of the agreement. To break the impasse, the central government agreed to compensate states that adopted VAT if they had less than 17.5 percent growth in revenue after adopting the tax: compensation would be equal to 100 percent of the difference in the first year, 75 percent in the second year and 50 percent in the third year. This offer did the trick, and eventually all states adopted VATs. Since the actual revenue growth turned out to be close to 25 percent, no compensation was required in the end.

Perhaps the most encouraging feature of this story is that it demonstrates that even in the always turbulent Indian political scene effective inter-state and state-central coordination is sometimes possible. Unsurprisingly, the process of reaching agreement among India's very heterogeneous states took considerably longer than originally envisaged. Nonetheless, in the

²⁶ Maharashtra had pioneered in 1995 by beginning to phase its sales tax into a subtraction-type VAT over time. Although the state reverted to its old sales tax in 1999, it continued to provide for partial crediting of input costs until it adopted the new 'standard' state VAT in 2005. The Maharashtra experiment had many defects, but it did show that it was possible for a state, acting on its own, to introduce at least some key VAT features. (For other, quite different, discussions of the feasibility of states acting independently in this way in the US context, see Bird (2007) and McLure (2010).) Haryana was actually the first state in India to introduce the 'standard' VAT in 2003, with the last state to do so being Uttar Pradesh in 2008 (Das-Gupta 2011).

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.

The present system is far from perfect (Das-Gupta 2011; Cnossen 2012). Nonetheless, by 2012 over 30 states (and union territories) had introduced VATs on a more or less uniform basis. There are two state VAT rates – 4 percent and 12.5 percent, with the latter (standard) rate at the retail level being close to the effective level of the federal standard rate (16 percent at the manufacturing level). In effect, state and federal governments in India now divide the sales tax base more or less evenly. The CST tax on interstate trade was reduced from 4 percent to 3 percent in April 2007 and then to 2 percent in April 2008. Although this tax was supposed to have been abolished by 2010 -- the original target date was 2005 -- it still exists and is not part of the VAT system since it is not creditable. In addition, not only is CENVAT included in the base of the state VAT but state VATs and central taxes still cannot be credited against each other. Moreover, there are also important problems with the design of the state taxes -- for example, most commodities considered to be "inputs" are taxed at 4 percent while most final goods are taxed at 12.5 percent. Finally, despite considerable discussion of the need for substantial improvements in state sales tax administration and the desirability of introducing some sensible system for taxing interstate trade, little appears to have been done in either respect. In practice, most state VATs are still imposed on an origin basis and at pre-retail levels (Purohit 2012).

In principle, India would apparently like to move to what would in effect be an integrated VAT structure -- called the Goods and Services Tax (GST) -- with central and state taxes both covering goods and services, extending to the retail level, and on a fully creditable basis.²⁷ However, the rates of the two taxes -- the central GST and the state GST -- would be independent and there would continue to be no crediting between levels of government. If this system were to be put in place, the resulting system would be close to that existing in Quebec, Canada (described below), although in the case of Quebec both taxes are operated by the provincial government and most Indian commentators appear to favor a common and preferably central administration (as with the HST in Canada). Exemptions and rate structures are far more varied among states in India than in Canada, however, and as yet India remains some distance from being in a position to integrate either the central and state VAT administrations or the different state administrations.

To move further in the direction of an integrated VAT, a constitutional revision to allow the states to tax services seems needed. Excluding services from the tax base distorts relative prices, reduces the buoyancy of revenues, and probably makes the tax more regressive. In addition, further compensatory revenue underwriting by the central government may be necessary: indeed, such an agreement is envisaged with respect to the planned (but much delayed) abolition of the CST. Finally, considerable and doubtless lengthy and contentious discussions between the central and state governments are needed on rates, especially if both

²⁷ Despite the important issues about state VATs remaining unresolved in the Indian debate, Indian economists have boldly estimated both how much revenue might be produced by such a system and how it would be divided up. Unsurprisingly, given the poor data and the need to make numerous assumptions, their estimates do not always agree: see, for example, Purohit and Purohit (2010) and Das-Gupta (2011).

are to tax essentially the same tax base (Cnossen 2012) – although, as the Canadian case discussed below shows, a completely uniform base is not strictly necessary provided differences are confined to the retail level. All in all, while India has moved a considerable distance in the direction of establishing regional VATs in recent years it is still, at best, very much a work in progress, with much more work needed at both the political and the administrative levels before implementing even an imperfect comprehensive VAT either the central or the state levels, let alone ‘dual VATs’ that would, as in Canada, work together in a more or less integrated way.

Canada: Getting it Right?

In contrast to Brazil and India, Canada, a richer country with a strong tax administration and a good central VAT, faced an inherently easier task when it came to introducing sub-central VATs. Still, it took considerable time and effort before Canada’s federal and provincial sales tax system evolved to the point at which it can be said that the incremental adoption of a mixed ‘dual’ federal-regional VAT system now approximates an ‘integrated’ national sales tax (Bird 2012).²⁸

As Table 3 shows, by 2012 five provinces had adopted a VAT in the form of the federally administered Harmonized Sales Tax (HST), while one province administers its own VAT, three small provinces continue to administer Retail Sales Taxes (RSTs), and one province (and three small federal territories) have no sales taxes at all. Canadian experience thus demonstrates that both central and sub-central VATs can work well even in a country in which some regions administer their own VATs, some have their own retail sales taxes (RSTs), and some have no sales tax at all.

The evolution of the system shown in Table 3 has not been quick or easy, and, as indicated in the last column of the table, the system continues to evolve – and not always in the same direction. Taxpayer reaction to the introduction of VAT has often been negative at both levels of government. Indeed, two general elections, one federal and one provincial, have arguably been fought – and lost – in large part over the question of introducing a VAT.²⁹ Most recently, following a bitter political fight that pivoted to a considerable extent on the issue of the HST, British Columbia’s new government decided in 2011 to replace the HST in 2013 by an RST similar to that which the HST had replaced in 2010.³⁰ Nonetheless, this

²⁸ The present section draws heavily on this paper as well as Bird and Gendron (2010), and Smart and Bird (2012). The good words said here with respect to Canada’s regional VATs do not imply that the basic central VAT – the federal GST – is particularly good: for recent critical appraisals of the GST see, for example, Bird (2009), Smart (2012), Bass and Gendron (2012), and Gendron (2012).

²⁹ The federal Progressive Conservative government that introduced the GST was reduced to just 2 seats in the general election of 1993 – although this was of course not the only issue in the campaign. The province of Saskatchewan announced its intention to adopt the HST in 1991, but this decision was reversed by a new government that came into power the same year, before implementation occurred. Most recently, the government of the province of British Columbia managed to stay in power only by replacing its leader and agreeing to abide by a referendum that subsequently led to the decision to revert from the HST to the RST.

³⁰ Five countries that had adopted VAT similarly previously abolished it. Subsequently, however, all five reintroduced the tax (Bird and Gendron 2007). It is too soon to say whether BC will follow this precedent. At the time of writing, the province appeared to be considering the extent to which the distortions arising from returning to

reversal has been offset to some extent by the decision in 2011 by an additional province (the small province of Prince Edward Island) to join the HST system in 2013 as well as by the decision by Quebec to move its separate provincial VAT (the QST) much closer to the base of the federal GST (as well as to the bases of the HST in the neighbouring provinces of Ontario and New Brunswick) in 2013.

Table 3
Sales Taxes in Canada, 2012

Jurisdiction	Name of Tax	Type of Tax	Rate (%)	Yield as Share of total taxes (%)	Administration	Comments
Canada	GST/HST	VAT	5	17.3	Federal except in Quebec, where it is provincial	GST rate (federal) is 5% and applied throughout the country; the federal government also administers a provincial VAT rate of 7-10% in the HST provinces.
Newfoundland and Labrador	HST	VAT	8	25.1	Federal	HST revenues collected in the five HST provinces are distributed to these provinces based on estimated taxable consumption.
Nova Scotia	HST	VAT	10	44.2	Federal	See comment on Newfoundland. Nova Scotia has announced that it will lower its HST rate to 9% in 2014 and 8% in 2015.
New Brunswick	HST	VAT	8	15.3	Federal	See comment on Newfoundland
Prince Edward Island	PST	RST	10	27.4	Provincial	Applied to retail sales price including GST. PEI is to move to the HST in 2013 at a rate of 9% (excluding GST from the base).
Quebec	QST (TVQ)	VAT	9.5	16.2	Provincial	Applied to GST base plus GST. Quebec is to move its tax much closer to the HST base in 2013 at a rate of 9.975% (excluding GST from the base). However, it will continue to administer its own tax (as well as the federal GST in Quebec)
Ontario	HST	VAT	8	22.3	Federal	See comment on Newfoundland
Manitoba	PST	RST	7	23.1	Provincial	Applied to retail sale price excluding GST
Saskatchewan	PST	RST	5	18.4	Provincial	Same as Manitoba
Alberta	None					Three northern territories (Yukon, Northwest Territories, and Nunavut) also have no sales tax
British Columbia	HST	VAT	7	16.8	Federal	British Columbia intends to revert to a provincially-administered RST (at same rate) in 2013

Source: updated from Bird (2012).

the RST might be reduced by permitting increased deductions for business inputs especially those for capital expenditures along the lines suggested in McLure (2010).

The initial introduction of the federal GST was complicated by the fact that all provinces but one already levied a retail sales tax. Perhaps desperate to get some province on board the GST train, the federal government finally managed to strike a rather curious deal with Quebec so that when the GST was introduced at the federal level in 1991 Quebec simultaneously replaced its RST by a new provincial VAT, the Quebec Sales Tax (QST). Under the federal-Quebec agreement, Quebec was to collect not only the QST but also the federal GST and to be compensated by the federal government for the costs it incurred in administering the federal tax.³¹ For over twenty years Quebec has thus been the only subnational jurisdiction in the world to operate an independently administered destination-based VAT.

The QST is a destination-based, credit-invoice VAT that subjects most goods and services consumed in Quebec to tax at a statutory rate (in 2012, 9.5 percent) applied to the GST-inclusive price of supplies.³² Goods and services produced and consumed in Quebec or imported into the province are subject to tax. Transactions conducted in the province are also subject, usually at the same time, to the federal GST at the (current) 5 percent rate. Both taxes are collected at the point of sale, and their amounts are generally not included in advertised prices although they are shown separately on all invoices, including those issued to final consumers.³³

The QST applies to a base that is now substantially harmonized with that of the federal GST.³⁴ However, the QST continues to differ from the GST by limiting input tax credits to large businesses for such items as fuel, transportation and communications equipment, and expenditures on meals and entertainment. When Ontario and British Columbia (BC) joined the HST system (see below) in 2011, they introduced somewhat similar restrictions. Like most deviations from the GST ‘norm’, these variant provisions are administered free of charge by the federal government in HST provinces. However, an explicit part of the 2010 agreements made by Ontario and BC with the federal government was that these credit limitations were to be phased out by 2015. Quebec has similarly agreed to phase out its restrictions on input refunds by 2020.

Other differences exist between the GST and the HSTs in different provinces as well as between the QST and the GST. For example, all provinces tax new housing differently. The federal GST pays a 36 percent rebate (i.e. rate reduction) on new houses sold for prices less than \$350,000, with the rebate phased out on prices between \$350,000 and \$450,000. In Quebec and Nova Scotia the reductions are much smaller, while Newfoundland and New

³¹ This fee is negotiated annually.

³² Beginning in 2013, under a new agreement with the federal government, Quebec has agreed to levy the tax on the GST-exclusive price. To maintain revenue, the tax rate will be increased to 9.975 percent.

³³ As Bird (2010a) discusses, the separate quotation of both federal and provincial VATs in Canada is unique, with the result that the public is always very aware of these taxes and their salience in political debate is much higher than with VATs in countries like those in the EU in which advertised prices include VAT.

³⁴ Until 2013, the most important base difference was the treatment of financial institutions, which are exempt under GST but were zero-rated under QST, so that financial institutions could recover the QST they pay on most of their inputs. The rationale for this favorable treatment presumably was to improve the attractiveness of basing the headquarters of financial institutions in Quebec, particularly relative to neighbouring Ontario (which, prior to adopting the HST in 2010, taxed such inputs as computers).

Brunswick went even further and opted for full taxation of housing. In contrast, Ontario offers an enhanced reduction of 75 percent of the provincial tax on the sale price of houses up to \$400,000.

HST provinces are allowed to deviate from the GST base so long as the affected commodities do not exceed 5 percent of the provincial tax base. For example, all provinces zero-rate books, which are taxable under the federal GST.³⁵ Such variations are particularly important in Ontario, Canada's largest province, in which children's clothing, books, newspapers, and feminine hygiene products, all of which were previously RST-exempt, are accorded "point-of-sale rebates" of the Ontario portion (8 percent) of the 13 percent HST. Since these goods bear only the 5 percent federal rate at all stages of the production chain, but full ITCs are available to traders, the provincial portion of HST is effectively zero-rated. Like the GST, both the HST and QST provide partial input tax rebates to exempt traders in the broader public sector at ranging from 50 to 100 percent of input taxes paid. Again, the level of these rebates differs between the federal GST and the different provincial VATs. With respect to municipalities, for example, which since 2004 receive a 100 percent rebate on the federal GST, Ontario gives a 78 percent rebate, Nova Scotia and New Brunswick 50 percent, and Newfoundland, like Quebec, gives nothing.

In the initial HST agreements the federal government required a uniform rate in all acceding provinces. However, as Table 3 shows, like the federal government, which reduced its GST rate from 7 to 5 percent a few years ago, provinces now have full autonomy in setting their HST rates. The original restriction on provincial rate autonomy created a major political stumbling block in the federal government's quest to induce provinces to adopt the tax and was one reason why the larger provinces were slow to agree to join the HST system.

In the HST provinces, the provincial VAT is administered together with the federal GST and collected by the federal government. The revenues are then allocated on the basis of destination, not origin. The revenue collected in any particular province (or with respect to any particular transaction) is not 'tracked' but is instead defined as the total GST/HST payable in any particular year, with the annual revenue entitlement—the share—that any province receives being calculated by a formula that in effect allocates the national GST taxable base among all provinces—not just the HST provinces—and then applies the tax rate applicable to that province to its calculated share of the base. The approach taken to revenue allocation is highly pragmatic.³⁶ For example, taxes paid by federal departments and agencies (and also by HST provincial departments and agencies) are excluded from the revenue pool that is allocated, as are specified refunds and rebates as well as any interest and penalties. Nor is any allowance made to account for the facts that some reported GST is not paid and that collection efforts may produce further revenue subsequent to the closing date for adjustments. The federal government simply keeps any such later gains as well as any interest and penalties attributable to GST/HST accounts; on the other hand, it has to "eat" any unpaid GST/HST in determining the HST allocations.

³⁵ Newfoundland, Ontario, and British Columbia also offer a low-income credit (like the federal GST credit, on which see Bird 2009). This provision, like the book rebates, is provincially legislated but federally administered.

³⁶ For a detailed description, see Bird and Gendron (2010).

In contrast, the QST is administered by the provincial government together with the federal GST in Quebec. Revenu Québec (RQ) registers GST payers in the province, as well as registering a slightly larger population of QST registrants.³⁷ The emergence, and acceptance, of this ‘dual’ system reflects a number of specific conditions. Provincial administration was presented by the Quebec government as a necessary condition for harmonizing with its tax with the GST, reflecting the determination of the (separatist) governing party that the provincial government should be “the face of government” to the people of the province. Despite its recent agreement to harmonize its VAT base much more closely to the federal GST base, Quebec has continued to administer both the federal and provincial sales taxes in the province and to retain its separate QST rather than becoming a ‘participating province’ in the HST system.

The HST provinces not only have their sales taxes administered for free by the Canada Revenue Agency (CRA); they also received one-time “transition payments” from the federal government for having adopted a VAT. The three Atlantic provinces that initially agreed to adopt HST in 1997 received one-time payments totalling slightly less than C\$1 billion. Since these provinces agreed to substantial reductions in their sales tax rates as part of the HST agreement, these payments were structured as compensation for the forecast loss in provincial tax revenues resulting from the reform.³⁸ Subsequent transition payments made to acceding provinces, although smaller in per capita terms, were larger in total: Ontario received \$4.3 billion and BC \$1.6 billion for accession in 2010.³⁹ When Quebec agreed recently to harmonize its VAT base more completely, it also received what was in effect a retroactive payment of \$2.2 billion for its decision to adopt a provincial VAT in 1991. The recent transition payments were based on estimated provincial consumption rather than the estimated changes in provincial revenues.⁴⁰

Given the rate differences now applying among provinces, an important technical issue with provincial VATs might seem to be how to determine the “place of supply” (where tax liability accrues). Until recently, the primary criterion used at the provincial level with respect to the place of supply of services was the “place of performance” of a service so that in practice the tax on interprovincial services was generally applied on an origin rather than destination basis. This definition was adopted because of difficulties in defining a unique location for the supplier (or recipient) when either may have establishments located in more than one province that are engaged on one side or the other of particular services. This rule also ensures that no adverse consequences arise from collecting the HST on services rendered to businesses in other provinces. Since credits generated by such HST may be offset against GST, however, the HST has always been an integrated national tax rather than simply a “provincial” tax.

³⁷ In 2007-08, for example, 616,052 entities were registered for QST compared to the 588,489 entities registered for GST in Quebec.

³⁸ The RST rate in Newfoundland was 12 percent and it was 11 percent in Nova Scotia and New Brunswick at the time these provinces introduced the 8 percent HST.

³⁹ The province is required to repay this amount as a result of its move back to the RST in 2013.

⁴⁰ Under the original formula, since Quebec, Ontario, and BC did not have a decrease of more than 5 percent in their revenues as a result of the tax substitution, they would not have been eligible for compensation.

In 2010, the place of supply rules were changed to treat goods and services more symmetrically by shifting the place of supply with respect to services to a considerable extent from an origin to a destination basis, although it appears many details still remain to be worked out with respect to exactly how these rules will be applied in practice (Ruffalo 2011). This issue does not affect how revenues are allocated among HST provinces but it may of course increase VAT compliance and enforcement costs.

Under the QST, exports (whether to another province or outside Canada) are zero-rated. Imports are in principle subject to tax. For imports from abroad the QST is collected (with the GST) at the border by the Canadian Border Security Agency (CBSA) under an agreement with the federal government.⁴¹ However, imports by registrants for business purposes from other provinces are not subject to tax if an input tax credit could be claimed. The treatment of interprovincial imports under the QST is thus similar to the ‘deferred payment’ system in the EU.⁴² Finally, goods imported from elsewhere in Canada by Quebec residents who are not registrants are subject to QST on a self-assessment basis – a provision that seems unlikely to be any more effective than the similar ‘use tax’ provisions commonly found in retail sales taxes. Nonetheless, fraudulent interprovincial transactions are not seen as a big problem in Canada, in part perhaps because, as Bird and Gendron (1998) noted, the existence of the overriding federal GST provides an audit control on the reporting of interprovincial supplies for purposes of provincial HST (and QST).

Summing up, Canada has developed two quite different models of regional VAT. First, the QST and the federal VAT (GST) constitute an operational “dual VAT” system, arguably with few or none of the problems usually thought to be associated with such systems.⁴³ The rates of the two taxes are set independently by the respective governments. The tax bases are also determined independently, although they are close to uniform. From the beginning, both taxes have been collected by a single administration -- that of the province. Taxes on interprovincial sales from one business to another are basically handled by a zero-rating (deferred-payment) system similar to that now applied in the EU. Problems in enforcing the QST on interprovincial imports are largely obviated by the existence, and enforcement, of the federal GST (Bird and Gendron 1998).

The second model of the HST is similar in many respects. Again, provinces have both rate autonomy and, within limits, base autonomy, and the taxes are applied by a single administration – in this case the federal government – which essentially eliminates interprovincial enforcement problems and closely mimics how a regional destination-based VAT (like the QST) operates. Moreover, because HST revenues are distributed to the provinces on the basis of estimated taxable consumption times the provincial rate (with both the rate and, within limits, the base being established by provincial law) provincial tax autonomy remains strong.

⁴¹ Similar agreements exist with most provinces, even those with RSTs.

⁴² From the perspective of the QST it does not matter if the province in question has no sales tax, an RST or is a member of the HST system: the shipment is zero-rated. However, if a GST registrant in any province, including Quebec, ships to a customer in an HST province, the tax rate applied is of course the HST rate, not the GST rate. For a strong defense of the supposedly ‘transitional’ EU system, see Cnossen (2010).

⁴³ See, for example, the discussions of alternative, more complex ways of dealing with such problems suggested by Varsano (2000), McLure (2000), and Keen and Smith (1996, 2000) as discussed briefly in Section 3 below.

Canada thus demonstrates that with good tax administration it is perfectly feasible to operate a VAT at the subnational level on a destination basis. In principle, it is immaterial whether there are two separate administrations or one; or, if there is one, which level operates it. Clearly, a single central administration and a common base (as with the HST) is likely to be more administratively and economically efficient, but these results may be approximated more or less satisfactorily when there is, as in Canada, a high degree of intergovernmental cooperation e.g. through unified and joint audit, an (almost) uniform VAT registration system and good information exchange. Most importantly, as the second-generation fiscal federalism literature (Weingast 2009; Oates 2008) emphasizes is critical from the perspective of improving accountability, each taxing government is able independently to determine its own VAT rate. VAT is not perfect, but no tax is, and it is clearly better than RST for regional as well as central governments from an economic – if not so clearly a political – perspective (Smart and Bird 2012).

3. VAT in a Common Market

A country is a common market. Canada's experience suggests that regional destination-based VATs should be able to work satisfactorily in a common market without either internal border controls or border adjustments. The principal reason VAT was originally adopted as the required form of general sales taxation in the European Common Market (now the EU) was its advantage in implementing the destination principle with respect to cross-border trade. Only with this form of sales tax could member countries be sure that imports were treated fairly in comparison to domestic products and exports were not subsidized by over-generous rebates at the border. Ironically, how best to apply VAT to cross-border trade *within* the EU has still not been fully resolved. Since the Neumark Report (1963), which recommended the eventual adoption of the origin principle for intra-EU trade, numerous studies and reports have suggested solutions to the perceived problems with the present EU VAT system.

Implementing the Destination Principle

For example, others since Neumark (1963) have favored the origin principle – indeed, as noted above, Brazil has had origin-based VATs for almost 50 years. However, the case for doing so does not seem persuasive.⁴⁴ The conditions of wage and exchange rate flexibility needed to avoid substantial distortions in production efficiency when different jurisdictions levy different rates under the origin principle seem most unlikely to be adequately met within most large countries, let alone in the EU or even the Euro-zone. The destination principle is both more compatible with independent taxation of consumption and, in practice, less likely to result in important economic distortions (Keen and Smith 1996).

⁴⁴ For a useful outline of the various ways in which "destination" and "origin" have been defined over the years in GATT and EU discussions of sales and excise taxes, see Messere (1994). On the long-standing theoretical debate about the relevant merits of origin and destination principles and the effects of switching from one to the other: see, for example, Lockwood (1993); Lockwood, de Meza, and Myles (1994, 1995); Bovenberg (1994); Lopez-Garcia (1996); and Genser (1996).

Deferred Payment

The destination principle is applied in the EU – as in Quebec, Canada - using what is called the ‘deferred-payment’ method (Cnossen and Shoup 1987). Exports by firms in one member country to registered traders in other member countries are zero-rated by the selling country without requiring border clearance. Such sales are thus treated just like sales to non-EU countries. In contrast to imports from non-EU countries, however, imports by registered traders from firms in other EU member countries are *not* taxed at the border. Instead, importers in effect pay the VAT on imports (at their own country's rates) on their own final sales because they have no input tax credits to offset against the tax due. This system works on a self-assessment basis. Importers are supposed to declare their imports from other EU countries, compute the VAT that would be due (at their own country's rates), and claim credit for that VAT, all in one return. The net result is that VAT is collected on imports by registered businesses only when they are resold or incorporated into goods sold by the importing firm. As an aid to enforcement, exporters zero-rating sales to other EU member states are required to quote the VAT registration number of the buyer (Keen and Smith 1996).

The deferred-payment system gives rise to problems and improper claims for credits or refunds when tax rates differ in member states. Some special rules have long been in place within the EU to cope with such problems. For example, vehicles are subject to tax in the country in which they are registered, and firms that would otherwise be exempt from VAT are subject to VAT on the destination basis once their imports exceed a specified threshold (Keen and Smith 1996). Similar provisions apply with respect to provincial VATs in Canada. However, no one has yet found any simple and uniform way to deal with *all* cross-border shopping problems under any destination-based sales tax. In practice, such special provisions appear to have kept serious problems in check so far in both the EU and Canada, although the rules are being increasingly tested with respect to ‘digital’ cross-border sales.⁴⁵ Nonetheless, EU countries have been so concerned in recent years about fraudulent credit claims with respect to cross-border sales that, as discussed below, numerous schemes have been proposed and to some extent adopted in order to check such VAT evasion.

Clearing House

This system for zero-rating intra-EU trade may be contrasted with the ‘clearing-house’ method under which VAT would be charged on exports by the exporting state, with a credit allowed for this VAT by the importing state (as for any other input VAT, but at the tax rate imposed by the *exporting* state).⁴⁶ Revenue accounts would then be balanced between states either on a transaction basis or in accordance with consumption statistics. In practice, the deferred payment system—which in effect puts reliance on private sector accounting subject to VAT audits—appears likely to work as well as or better than the explicit interstate settling of accounts required in the transaction version of the clearing-house approach.

⁴⁵ The issues of taxing digital services is discussed further in e.g. Bird (2005) and Bird and Gendron (2007).

⁴⁶ This is essentially how the ‘common’ system proposed in Commission (1996) would work.

Dealing with Evasion

There are many ways to cheat on any sales tax. In principle—and with good administration in practice also—it is actually *more* difficult to cheat with a VAT than with other forms of (non-cascading) sales taxes (Bird and Gendron 2007). To the extent VAT fraud takes the form of obtaining illicit refunds it may perhaps show up more explicitly in the budget than equivalent fraud with other forms of sales tax simply because it takes the form of explicit refunds rather than lower revenues, but the net impact on the budget is the same in the end. Dealing with VAT refund fraud is no different than dealing with any other form of tax evasion. The correct treatment for VAT refunds is simply to pay legitimate claims promptly and not to pay fraudulent claims at all. The problem, of course, is how to distinguish the good from the bad. The answer is to be found not so much in special treatment of refund claims as in better administration of all aspects of the VAT system.

It is critical to ensure that refunds are justified not only by being related to legitimate business inputs but also in the sense that the taxes for which reimbursement is being claimed have actually been paid. However, even countries with well-established and experienced tax administrations like Germany and the UK have struggled to verify cross-border claims, for example, when a bogus firm supposedly located in another EU country in the value-added chain claims credits for inputs it does not actually buy and then disappears before it can be audited.

Various schemes have been proposed to deal with such fraud. For example, Sinn, Gebauer, and Parsche (2004) proposed that banks would remit the tax directly to the government at the time of sale through the device of an intermediate ‘trust’ account, while issuing a receipt to the seller for VAT paid, with this receipt serving as proof of the input tax claim. Other ways of limiting fraud that have been adopted in various countries range from making refunds to new registrants only after a mandatory six-month carry-forward of unused credits or limiting refunds only to firms in certain industries (as in China) or of a certain size (as is done in Québec with respect to credits for capital goods).⁴⁷

Most commonly, perhaps, countries both in the EU and elsewhere have adopted to varying degrees what is called ‘reverse charging’, which places the liability on the buyer rather than on the seller in transactions between registrants (Mirrlees 2011). This system works in the sense that it reduces the likelihood of fraud by eliminating the chance to claim refunds of tax that has not been paid. At the same time, however, this approach is fundamentally contradictory to the very rationale of the VAT as a fractional consumption tax: indeed, at the extreme by turning the crediting system into a suspension system it turns a VAT into a retail sales tax – a tax that is itself of course subject to all sorts of fraudulent practices, practices that the VAT form of sales tax was introduced in part to counter.⁴⁸

⁴⁷ Harrison and Krelove (2005) provide a useful discussion of such methods.

⁴⁸ Analytically, if the base of a retail sales tax is not only exactly equivalent to the base of a well-designed value-added tax but the two are also equally politically acceptable and can be equally well administered, there may be no particular reason to choose the VAT; in reality, however, as Bird and Gendron (2007) emphasize, the conditions required for the two taxes to produce similar outcomes seem most unlikely to be met.

Solving a VAT administrative problem by throwing out the VAT seems like overkill. In the end, the only real solution to VAT fraud in any country is, as Cnossen (2010) suggests, a stronger tax administration and in particular a strong audit program, reinforced by improved international information exchange and cooperation.

Why Canada's Regional VATs Work

How have Canada's regional VATs apparently managed to avoid the problems causing such concern in the EU? One explanation is simply that the two situations are completely different. From some perspectives, for example, the HST might be considered as simply a national tax, the revenues of which are shared according to formula among the federal and participating provincial governments. Although, as Bird and Gendron (2010) argue in detail, the effect is to allocate revenues on a destination basis and the amount of revenues received is ultimately determined by policy decisions on rates and base made by the recipient provinces, this approach is nonetheless quite distinct from the derivation basis for taxation that applies in the EU, where the place of supply rules (in particular, zero-rating of intra-EU exports) have a direct impact on the revenues of national governments – a problem that has, of course, also long been of concern in Brazil even with its basically origin-based state VATs (Longo 1990). In Canada, however, even in the case of Quebec -- in which, as in the EU, the VAT is administered directly by the province (member state), whose efforts (and laws) thus directly determine the revenues received -- with minor exceptions (Ainsworth 2007), there is not the same level of concern about problems such as 'carousel' and 'missing trader' frauds found even in countries like the UK with generally well-run VATs (HMRC 2012).

The more important difference from the EU is simply that Canada has a real central government. Although the EU redistributes substantial funds through its various transfers and support programs, it does not, like Canada, operate an explicit fiscal equalization program under which most provincial governments receive substantial transfers. The existence of an equalization system makes the HST revenue allocation formula less important than it would otherwise be. Under equalization, provinces with below-average fiscal capacity are paid annual federal grants that fill in the gap between their own fiscal capacities and the national average capacity, calculated at average provincial tax rates. Essentially all provincial own-source revenues, including consumption taxes, are included in the formula. Although the calculation of consumption tax capacities under equalization is different than the calculation of revenue shares under the HST, the formulas are not that dissimilar, with the result that the two transfers are largely offsetting. For example, an increase in a province's estimated share of national (taxable) consumption would result in an increase in the revenues allocated to it under the HST allocation formula; at the same time, however, the increase in its measured fiscal capacity for consumption taxes under the equalization formula would result in a decrease in its equalization grant that would more or less offset the additional HST revenues (Smart and Bird 2012).

The provinces agreeing to harmonize their sales taxes have for the most part been equalization-receiving provinces. Quebec and the three original HST provinces in Atlantic Canada are all provinces of below-average per capita income which have received equalization grants in each year since the program's inception in 1957. Ontario negotiated its

accession to HST in 2009, the year after it qualified for equalization grants for the first time in history. British Columbia is the only HST province not to receive equalization; it is also the only province to have pulled out of the HST after implementing it. On the other hand, this is not the whole story since, although Quebec receives equalization grants, it does not benefit from the HST formula. However, like all equalization-receiving provinces Quebec has an incentive to impose tax rates that are higher than they would otherwise be (Smart 1998) because, in addition to increasing sales tax collections (directly for Quebec; indirectly for the HST provinces), a higher tax rate raises the national average rate and hence the size of the equalization pool. This effect is especially important for the larger provinces such as Ontario and Quebec where changes in provincial rates have the greatest impact on the (weighted) national average rate.

These factors are certainly not unimportant. Still, they do not really explain why destination-base sub-central VATs seem to operate so well as in the Canadian ‘common market’ on a deferred payment basis without the problems currently associated with the member state VATs that operate on the same basis in the EU. Unlike Canada, the EU began with a more or less common VAT tax base, which applies in all member states. Over time, as discussed earlier, Canada has managed to establish a similarly more or less common VAT base in some of its component units – but not all. Perhaps the most important reason why the system works in Canada is because Canada, unlike the EU, has an over-riding central VAT that operates in the same way in every province so that the federal tax in effect underpins the provincial tax even when, as in Quebec, both are administered by the province. On balance, what Canada’s experience suggests is that although while a uniform law and a single central administration would in all likelihood be more effective and efficient, the most necessary condition for successful sub-central VATs in a common market is neither the complete convergence of laws or central administration but simply good tax administration (at whichever level) as well as a high degree of intergovernmental cooperation e.g. through unified audit or at least through a uniform VAT registration system and a very high level of information exchange – in other words, more or less the package of administrative reforms that Cnossen (2010) has suggested for the EU.

Alternative Approaches to Two-Level VATs

Both variants of Canada’s dual VAT system seem to work better than the EU’s attempt to (in effect) administer VATs at what in the EU context is the equivalent of the regional (sub-central) level.⁴⁹ Other approaches dealing with this problem have of course also been suggested in the literature, as illustrated in Table 4, which compares some features of five possible approaches to state VATs in ‘two-level’ jurisdictions:

- Two levels of governments have completely independent taxes. This is the EU (and US) case, in which the central authority has no VAT. Brazil also comes close to this situation, although its states do not have complete rate autonomy.
- Each level of government may have an independent VAT—‘dual’ VATs— in which each level sets its rates independently but on similar bases and there is a high level of administrative cooperation. This is Canada’s GST-QST system.

⁴⁹ For an earlier discussion of some of the points in this section, see Bird and Gendron (2000).

- There is a single ‘joint’ VAT—essentially a central VAT with some of the revenue flowing to the states either in accordance with jointly agreed but estimated consumption bases and independently determined rates, as in Canada’s HST system, or with a centrally determined rate and a centrally determined consumption formula (as in Spain), distributive formula (as in Germany) or derivation formula (as in China).
- A theoretical system not yet been applied anywhere (although initially proposed for Brazil by Varsano 1995, 2000) is what McLure (2000) calls a ‘compensating VAT’ (CVAT), under which in effect the central government applies a zero-rate tax to interstate transactions.
- Another theoretical system is the VIVAT (“viable integrated VAT”) proposal put forth for the EU by Keen and Smith (1996) and developed further in Keen (2000), and Keen and Smith (2000), under which all member states of the EU would apply the same VAT rate to B2B (business-to-business) transactions, including cross-border transactions within the common market, while being free to apply higher rates to sales to domestic final consumers.

How one assesses these different approaches to decentralizing VAT hinges largely on the relative weight attached to characteristics such as those listed in Table 4. While the entries in the cells in this table are of course largely subjective, several general comments may be made. First, the best basis for a decentralized VAT system is a well-designed and comprehensive central VAT. Such a system works best when there is an adequate degree of (justified) mutual trust by sub-central and central governments in each other’s competence. Although a single central administration and a common base would be ideal, Canadian experience shows that this degree of convergence appears to be neither essential nor necessarily desirable. What is critical is either a system of joint or unified audits or at least a high level of information exchange to make the system work well, combined with each taxing government independently determining its own VAT rate in order to create the right incentives. That the system works between two such strong political opponents as the government of Canada and the government of Québec suggests that the required level of trust—or, perhaps more appropriately, respect—may not be all that high.⁵⁰ Nonetheless, it may be asking too much to expect an equivalent relationship (or quality of administration) soon either in the EU (at the union level) or in countries like Brazil and India.

⁵⁰ Bird and Vaillancourt (2006) discuss how fiscal relations between Quebec and Canada have evolved over time.

Table 4
Some Characteristics of Alternative Two-Level VAT Systems

	<i>Separate VATs</i>	<i>Dual VATs</i>	<i>Joint VAT</i>	<i>CVAT</i>	<i>VIVAT</i>
Rate autonomy	Yes	Yes	Possible	Some	Some
Collection incentives	Strong	Strong	Good	Unknown	Unknown
Compliance symmetry	No	No	Yes	No	Yes
Need to identify destination state	Yes	No	No	No	Yes
Administrative cost	High	Depends on system	Low	Moderate	Higher?
Need to distinguish types of purchasers (other than exempt)	No	No	No	Yes	Yes
Credit tracking	Yes	No	No	No	Yes
Excess credits	Some	Few	No	Some	Yes
Administrative capacity	High	Less	Lower	Moderate	High
Central administration	No	Some needed	Probable but not necessary	Probably	Probably
Need for single administration	No	Preferable	Yes	No	No
Need for central state cooperation	No	Yes	Yes	Yes	High
Revenue distribution	Independent	Independent	Formula	Essentially independent	Yes
Need for clearing of some credits	No	No	No	Yes	Yes
Potential for interstate evasion	High	Restricted	No	Restricted	Restricted
Cross-border shopping a problem	Yes	Yes	No	Yes	Yes

VIVAT

As Keen (2000) emphasizes, the VIVAT is explicitly designed for a situation like the EU in which there is no central VAT. However, if much importance is attached to state rate autonomy and administrative feasibility, of the five possibilities shown in Table 4 only the second (dual VAT) and fourth (CVAT) seem worth further consideration. How taxes are perceived to be levied and by whom may play a critical role in establishing the needed “Wicksellian connection” (Breton 1996) between revenues and expenditures at each level needed for good fiscal management in a multi-tiered government structure, and this link is more transparent with the dual VAT system. As McLure (2000) notes, permitting state governments to set their own tax rates is critical to providing an appropriate incentive structure for efficient and effective sub-central government in large federal states, and the CVAT proposal is definitely superior to the VIVAT alternative from this perspective. The one aspect in which the VIVAT proposal is clearly superior to both CVAT and the dual VAT is what is called “compliance symmetry,” or the application of the same tax rate to all sales to registered traders within the EU. While the VIVAT approach has recently been revived to some extent by Mirrlees (2011) as preferable to other ‘patchwork’ approaches to dealing with export-related fraud – such as those mentioned briefly below - it appears to require at least as much agreement among all member states as the dual VAT or CVAT while reducing state fiscal autonomy more.

CVAT

In developing countries with little realistic prospect of good tax administration at the sub-central level, a potentially promising approach may be to impose what is in effect a supplemental central VAT—the compensating VAT or CVAT. This proposal reduces the risk that households (and unregistered traders) in any state can dodge that state’s VAT by pretending to be registered traders located in other states.⁵¹ Assuming that states can levy independent VAT rates—a key requirement for accountability—a CVAT might be imposed by the central government on sales between states at some appropriate rate such as the weighted average of state rates (McLure 2000). States would zero-rate both international and interstate sales but the latter would be subject to the central CVAT (as well as any central VAT, of course). Domestic sales would thus be subject to central VAT and either state VAT or central CVAT. There would be no need for any state to deal explicitly with any other state nor, generally, would there be any need for interstate clearing of tax credits.⁵² Registered purchasers in the other state would be able to credit CVAT against central VAT. Since the central government, which first levies CVAT and then credits it, would gain no net revenue the effective rate of CVAT is zero.⁵³ Since the state VAT applied to the resale by the purchaser would be that of the destination state, the results are exactly the same as in the

⁵¹ A good tax administration could curb such abuse by issuing VAT refunds only for taxes actually collected by VAT registrants and only when exports are legitimate. But few developing countries have such an administration.

⁵² This assumes that the state VAT rates are lower than the central rate. If, as in Brazil, state rates are higher, there might be some residual need for a clearing-house—though on an aggregate, not transaction basis. This would not be a problem if there is a unified administration of state VATs, although there are of course also arguments favoring separate administrations (see Mikesell 2007; Martinez-Vazquez and Timofeev 2005).

⁵³ As in Canada, the central government might receive an agreed fee for its services and, again as in Canada, some subsequent adjustments might be needed in subsequent periods (Bird and Gendron 2010).

Quebec VAT discussed earlier, with the CVAT serving to protect state revenues to some extent from fraud.

Dual VAT

The CVAT approach is more centralizing than the dual VAT. In the dual VAT system in Canada the only VAT rate set centrally is that of the central government itself. There is no need for any central edict with respect to state taxes applied to interstate trade since no such taxes are applied. However, as Bird and Gendron (1998) emphasize, to function properly such a system appears to require both administrative competence and intergovernmental trust.

Comparing Approaches

Under VIVAT, a common rate is imposed by all states on sales to registered traders within the EU – that is, on B2B sales potentially giving rise to credits -- with member states being free to levy their own rates on B2C sales to consumers (or unregistered traders). Not only does this proposal reduce state autonomy but it also requires precisely the sort of clearing mechanism to reconcile credits on imports and exports between member states that has often been proposed in the EU but has so far not come to fruition. Under CVAT, the clearing mechanism may perhaps be less problematical because it would be done at the EU level. However, this presupposes that there is an EU level – that is, that not only do all states impose a common VAT rate on all sales to other EU member states but that the EU is responsible for collecting and accounting for this tax, with member states being responsible for setting the tax rates on final sales within each member state and administering that part of the tax system.

Neither CVAT nor the dual VAT requires traders to identify the state of destination.⁵⁴ In addition, neither requires any procedures to track and clear individual tax credits. While even a dual VAT system may conceivably produce ‘excess’ credits, it seems less likely to do so than the CVAT because of the over-arching central VAT (McLure 2000). In addition, unlike CVAT (which is a final tax for unregistered purchasers but a creditable tax for traders), the dual VAT does not require any distinction to be made between purchasers other than determining whether they are non-residents or not.⁵⁵ Since CVAT is charged on all sales, a state’s revenue is less at risk than under the dual VAT approach, which places a heavier burden on the tax administration to ensure that those who should pay actually do so.

⁵⁴ All approaches do of course require a distinction between ‘out-of-state’ and ‘in-state’ sales (under VIVAT, in effect the ‘state’ is redefined as the EU with respect to sales between registrants). Although Bird and Gendron (1998) mentioned approvingly both the EU practice of requiring that the registration number of registered purchasers be quoted on the invoice and the possible desirability of including in this number some indication of the location of the purchaser, neither feature is strictly essential to the functioning of a dual VAT, as Canadian practice demonstrates. Given the weaker tax administrations in most developing countries, however, such additional features might make sub-central VATs more feasible.

⁵⁵ Although CVAT can do without this distinction if taxes on sales to unregistered traders are divided among jurisdictions in accordance with some formula, this approach would move the system closer to a revenue-sharing scheme.

In addition, while purists may not like it, the dual VAT's greater tolerance for variation and the fact that it requires less agreement amongst the various governments concerned more readily accommodates the political compromises so often needed in intergovernmental finance.

Two ways to achieve such cooperation in the EU are perhaps possible. First, the EU already has at least as uniform a VAT structure for its member states as Canada does for its provinces. What it does not have, however, is an overriding administrative structure that ensures that every member state has sufficient access to the information in the hands of other states to be able to prevent intra-community 'missing trader' and 'carousel' frauds in check. Substantial progress has already been made in this direction with uniform statistical reporting and increasingly also 'real-time' access enabling the verification of VAT registration status across borders, but more can obviously be done along these lines. Of course, moving the EU closer to a true 'federation' would, in addition to making it easier to solve the VAT administration issue, have the additional advantage in the eyes of some of making a coherent fiscal policy and something like equalization transfers more feasible. But such a move would, it seems, be a 'bridge too far' for many Europeans.

Second, as Bird and Gendron (1998) suggested, a 'virtual' EU VAT structure could be created. Such a levy could be administered by the existing national administrations as a way of 'backstopping' the national VATs, more or less as the Quebec VAT is supported by Canada's national GST. The tax might be imposed at a zero rate (as in the CVAT proposal) or, say, at a 1 percent or other low rate to replace the present 'EuroVAT' levies used to support the EU. Alternatively, it might be run by the European Commission or – perhaps more promising - by a special coordinating body established by participating member states which might also oversee a sort of EU revenue allocation system along the lines of the Canadian HST approach to sharing VAT revenues on a (statistically determined) destination basis.

Whether further efforts in this direction are pushed or led from Brussels or come about through explicit inter-state agreements between different member state VAT administrations is an important, but secondary, question. As Mochida, Horiba, and Mochizuki (2012) show in a recent detailed comparison of the dual VAT model with the present EU system, VIVAT and CVAT, on the whole it appears that that the Canadian approach is the most flexible, workable and efficient way yet developed to apply a sub-national VAT on a destination basis without border adjustment.

Much the same can be said with respect to regional VATs in other settings. In Brazil, for example, as in the EU, some (but not all) states have good tax administrations. In addition, Brazil has both less commonality between the federal and state VATs and more variation among state VATs than either the EU or Canada. When one adds to this mix the inadequate information exchange between state VAT administrations and between the federal and state administrations, many Brazilians seem to have concluded that it is probably easier to restructure the VAT system in the direction of an integrated federal-state VAT than to improve the administration of the existing VATs. Although the CVAT approach was initially proposed in this setting, in the end, as Ter-Minassian (2012) has recently suggested,

it might prove both simpler and better to adopt a ‘dual VAT’ system on Canadian lines in Brazil as in the EU.

4. Local Business VATs

Local business taxes are found in many different forms are found around the world (Bird 2003). Such taxes are common not only because they produce substantial revenues for local governments but also because revenues from this source are generally more buoyant than those from the other main source of local tax revenue, the property tax. Many local business taxes are essentially presumptive levies – under a variety of names, such as patente, professional tax, industry and commerce tax, single business fee – that distort production and allocative decisions. Some such as octroi (domestic trade taxes) and gross receipts taxes that cascade down the production-distribution chain are particularly unpalatable in terms of their distorting effects. Others, like business (corporate) income taxes are both difficult for local (and even state) governments to administer and may reduce the level of economic activity (McLure 1980).

In some countries, as in Brazil and China, the major local revenue source is a tax on services which is not integrated with the national (or, in the case of Brazil, state) VAT: that is, it is a tax on gross receipts (sales revenue), not on value added. Brazil’s 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 percent as well as maximum rates that differ by the type of service, with the usual maximum being 5 percent 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 (Afonso and Araujo 2006).

Since on the whole the ISS is poorly exploited by local governments, it has been argued 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 2008). Presumably, national transfers to municipalities would be adjusted to offset their revenue loss. A somewhat similar proposal in China to replace the existing percent local business tax by extending the national VAT to incorporate incorporating services is further advanced, having recently been adopted on a ‘pilot’ basis in Shanghai and several other provinces.⁵⁶

A Local Business “VAT”

On the other hand, some countries that have recently examined their local business tax systems in depth have chosen to follow a quite different path by adopting what may be called a local business “VAT” – called here a “business value tax” (BVT) in order to distinguish it

⁵⁶ This tax is imposed at a standard rate of 5 percent, with a lower rate of 3 percent on construction, transportation and some other services, and rates up to 20 percent on some entertainment activities (China 2012).

more clearly from the destination-based consumption VATs discussed earlier in this paper.⁵⁷ The BVT is a flat-rate tax imposed on an accounts basis on the costs of the factors of production employed by a business, that is, on the difference between sales receipts and purchases from other businesses, that is, on value-added. Phrased differently, a BVT is in effect a local VAT that is imposed on production within a particular jurisdiction in contrast to the regional VATs discussed above which are (in principle, though not always in practice) imposed on the basis of consumption within the jurisdiction. Table 5 provides a brief overview of some of the ‘VAT-like’ local business taxes currently in operation in a number of countries. Similar taxes have been proposed at various times in other countries such as Canada (Alberta 2000) and South Africa (Hunter van Ryneveld 2008), but not yet adopted.

Local business taxes are invariably disliked by business but popular with both politicians and the general public. Although such taxes are obviously most likely to be important in the largest cities where business activities are concentrated since these are also the local governments that most need revenues to accommodate growth and development it makes sense to give them business taxes that will grow with the city but are at the same time a more stable revenue source – and simpler to administer – than profits taxes. Moreover, since businesses benefit, directly and indirectly, from many public expenditures an ideal business tax should also serve as a way of recapturing some of these benefits, most of which are more related to the size of business activities than to their profitability. For these and other reasons, as Bird (2006) and Gandullia (2012) argue, there is much to be said for a local BVT. Over the years, such arguments have led a number of countries to follow this path to varying extents, as shown in Table 5.

Germany

The grandfather of all “value-added” local business taxes is the German trade tax, or *gewerbesteuer*. As originally conceived, this tax was levied on the income of all factors of production, although it was not imposed in a very coherent fashion. As often happens, however, over the years the scope of the tax base was substantially eroded so that its value-added nature has now essentially been lost. The payroll component of the base was abolished in 1980 and, since 1984, 50 percent of interest on “long-term” debts has been deducted from the base, thus not only creating an incentive to use more debt financing that varies across localities but also reducing the logical coherence of the tax. In 1997, the imputed value of buildings and equipment was also excluded from the tax base. Moreover, Germany has, in practice, essentially removed the tax from all but larger enterprises.

From time to time, proposals have been made to restore something closer to the original conception of the trade tax in Germany. Most local governments appear to have supported a federal proposal in 1982 to introduce an explicit local VAT, at an estimated rate of about 3 percent, on top of the federal VAT. In contrast to the federal VAT, however, which is a

⁵⁷ This terminology was introduced by Bird and Mintz (2000). Subsequently, Bird and McKenzie (2001) suggested that such a tax might replace the provincial corporate income tax in Canada, as did a later study in California, though again without success (Cline and Neubig 2010).

‘normal’ invoice-credit consumption-based tax, the proposed local tax was to be imposed on a net income

Table 5
VAT-Like Local Business Taxes

Country	Name of Tax	Year introduced	Rate	Base	Comments
Italy	IRAP (<i>imposta regional a sulle attivita produttive</i>)	1998	3.9%	Subtraction method; capital investment depreciated.	Tax base is apportioned on the basis of labor costs.
France	Territorial economic contribution (<i>contribution économique territoriale</i>)	2010	Up to 1.5% depending on size of turnover; no local discretion	Subtraction method; equipment expensed, real estate depreciated	Tax base is apportioned according to number of employees.
Hungary	HIPA	1990	Up to 2%, at local discretion	Subtraction method but only costs of goods sold, material costs, and repackaged services deductible	Tax base is apportioned (for larger taxpayers) by a weighted average of payroll or net assets.
Japan	Enterprise Tax	2004	0.48%, with some local discretion (e.g. rate in Tokyo is 0.504%)	Sum of wages, net interest paid, net rents paid, and taxable profits	Applies to corporations with capital of more than 100 million yen.
US: Michigan	Modified Gross Receipts Tax	1953	1%	This tax is applied by the subtraction method. Since exports are exempt and imports taxed, it is in effect on a destination basis. Most business purchases of goods (but not services) are effectively free of tax.	A state rather than local tax. Originally introduced as BAT in 1953; abolished in 1967; re-introduced as SBT in 1975; replaced in 2007 by present tax. Tax base is apportioned on the basis of sales.
US: New Hampshire	Business Enterprise Tax	1993	0.5%	This tax is origin-based, being calculated in effect by the addition method through the apportionment process.	Tax base is apportioned by the state’s share of the taxpayer’s nationwide labor compensation, interest, and dividends. It is creditable against the state corporate income tax
US: Texas	Margin Tax	2007	Up to 1% depending on size of turnover.	Applied on the least of three bases, ranging from 70 percent of gross receipts to a quasi-VAT base of revenue less than cost of goods sold	Base is apportioned for multistate businesses on basis of sales.

Sources: Bird (2003), Gilbert (2010a), Luna, Murray, and Yang (2012), Japan Ministry of Finance (2010), and Neubig, Cline and Dauchy (2010).

origin basis and, preferably, to be collected by the addition method (that is, on the sum of payroll, interest, rents, and net profits). In the end, however, that proposal was not accepted, owing largely to business opposition to paying taxes when firms had no profits.

In part precisely because the tax was overly sensitive to economic cycles, a later federal Commission for Reform of Municipal Finances again considered possible revisions of the trade tax. Local governments prefer a more ‘input-oriented’ tax (like an income VAT) because it yields more stable revenues. On the other hand, businesses prefer a more profit-oriented levy as reflecting more their ‘true income.’ To date, no changes have been made in either direction, and the largely unreformed ‘trade tax’ continues to be not only a mainstay of local finance in Germany but “the undisputed dominant corporate tax in Germany” because of the substantial revenue it produces, even when few or no corporate income taxes are paid (Kessler and Eicke 2007, 283).

The United States

Michigan. After Germany, it appears that the next sub-central ‘business’ VAT was that introduced in the state of Michigan in 1953 under the name of the Business Activities Tax (BAT). This state (not local) tax was imposed on the difference between a firm’s gross receipts and its payments to other firms: in effect, it was a source-based, subtraction-method, income VAT (Hines 2003). Although the initial tax rate was only 0.4 percent, it rose to 0.75 percent before the tax was abolished in 1967 and replaced by a corporate income tax (CIT).

In 1975, however, Michigan again returned to the VAT model replacing the CIT by a new Single Business Tax (SBT) initially at a rate of 2.35 percent. The SBT was again essentially a modified VAT, although this time computed through the addition method and measured on the income side as the sum of payments to labor and capital.⁵⁸ All persons engaged in business activity were subject to SBT if gross receipts exceed \$350,000. The tax was computed annually on the basis of net income as reported for federal tax purposes, adjusted by adding such items as compensation, depreciation, and partnership losses and then deducting such items as dividends, interest and royalty income, and partnership income. SBT was payable on an estimated quarterly basis. Business investments in real property were fully deductible from the SBT tax base as were investments in other property (equipment) considered located in Michigan. The tax base of multistate enterprises was apportioned on the basis of a formula that weighted the location of business property and payrolls equally.

The SBT stabilized state revenues compared to the notoriously volatile corporate income tax. It also reduced the distortionary effect of state business taxes by extending the tax base to encompass business organized in other than the corporate form. Moreover, it was easier to

⁵⁸ Kleine (2008) suggests that the additive approach was one reason for the unpopularity of the SBT because it led to claims that companies were penalized for increasing employment; on the other hand, Arnold and Ardinger (2004) assert that the additive approach adopted in New Hampshire is one of the main strengths of that state’s BET (discussed below) owing to the simplicity with which it could be computed and administered on the basis of the same information used for the state corporate income tax.

administer than the CIT. Although political pressures complicated the design of the SBT, Hines (2003) concluded that the tax was essentially sound in its design from an economic perspective. Since most new investments essentially escaped tax, much of the tax burden fell on economic rent such as “the excess profitability of local manufacturing, high-tech and other firms, the value of Michigan land, and the extent to which Michigan wages exceed competitive levels” (Hines 2003).

However, there was considerable business opposition to the tax largely because many businesses, particularly smaller ones, did not see why they should have to pay tax when they had no profits. As a result, over time more and more concessions of various sorts were introduced, making the tax more complex. Since the ‘benefit’ argument for the SBT was never prominent in Michigan, as the base of the SBT became more eroded – in part in an attempt to offset the declining auto sector -- the tax came to be both excessively complex and unpopular. In 1999 its rate was reduced to 2.2 percent, with further annual decreases of 0.1 percent scheduled to take place until the tax was eliminated in 2020. Subsequent state revenue problems altered this schedule, however, and in 2002 it was decided that the then rate of 1.9 percent would be maintained until 2009, when the tax would be eliminated.

In reality, however, what happened was that a new tax called the “modified gross receipts tax” (MGRT) was imposed (with some other taxes) to replace the SBT in 2007. As McIntyre and Pomp (2009) accurately note, this new tax is not all that different from its predecessor(s) since it too is essentially an “apportioned” value-added tax, that is, one based on the factor costs (value-added) ‘apportioned’ to Michigan firms. In contrast to the SBT, however, this latest incarnation of Michigan’s long-standing VAT is imposed on a destination and not an origin basis – that is, on imports but not exports – at a rate of 1 percent.

New Hampshire. Michigan’s long experience with various state VAT-like taxes has been emulated to a limited extent by a few other states. In particular, New Hampshire’s Business Enterprise Tax (BET) is also an ‘apportioned’ VAT like that now in place in Michigan, although its base is determined by a more complex formula than the simple sales apportionment rule used in Michigan. Like the Michigan SBT the base of the BET is determined additively as the state’s share of the taxpayer’s nation-wide labor compensation, interest, and dividends and is hence origin-based. Since BET is imposed at a low rate (0.5 percent) it is thought unlikely to create any significant disincentives for business use of capital and labor in the state. Indeed, like Michigan’s current MGRT, it is probably lower than a real ‘business benefit’ tax to pay for the cost of public services provided to business, which on average in the US appears to be closer to 2 percent (Oakland and Testa 2000). Although several studies have argued that New Hampshire’s BET provides at least a useful supplement to state corporate income taxes (Kenyon 1996) and perhaps a useful replacement for such taxes (Arnold and Ardinger 2004) as yet no other state has followed this model. A recent report in California, however, recommended that the California state corporate income tax should be replaced by a “business net receipts tax” which is in effect a VAT levied on an entity basis (Cline and Neubig 2010). Unlike the other VATs discussed here, however, the California proposal would have allowed some deductions for imports and taxed some exports and hence been a mixed (origin-destination) based tax.

A few other states have also introduced some elements of a local business VAT into their tax systems in recent years. Notably, Texas introduced a new ‘margin tax’ in 2006 that imposes a tax at a maximum rate of 1 percent on a base determined as the least of three calculations – total sales revenue minus cost of goods sold; total revenue minus compensation; or 70 percent of total revenue (Sullivan 2008).⁵⁹ Although the first of these bases allows the deduction of labor costs in the production of goods (not for service delivery) and does not allow deduction for the purchases of services from other firms, this tax is, like that in Michigan, a modified gross receipts tax that approaches a subtraction-based VAT. As in Michigan, for multistate businesses the base is apportioned by sales. Kentucky and New Jersey use a somewhat similar gross margin approach (revenue less cost of goods sold) as an alternative minimum tax to the corporate income tax. Most recently, Oklahoma in 2010 introduced a Business Activity Tax which again combines elements of a gross receipts tax with a subtraction method VAT (Luna, Murray and Yang 2012). However, this tax was repealed in 2012.

Hungary

In Hungary the local business tax (HIPA) is levied at a locally determined rate of up to a maximum of 2 percent on a VAT-like base (sales revenue, excluding VAT, less the cost of goods sold, costs of materials, and cost of subcontractors). The tax has been criticized both for favoring in-house production and because there are many discretionary exemptions.⁶⁰ The obvious reality that any local business tax is going to be more productive in richer than in poorer regions has also given rise to criticism. Moreover, because the tax base is calculated on a very different basis than the corporate income tax, it is expensive to administer (Szalai and Tassonyi 2004). Nonetheless, HIPA remains the most important single source of local government revenue and, like Italy’s IRAP (see below), its legality has recently been reaffirmed by the European Court of Justice (Erdos 2009).

Italy

Perhaps the most important modern move to a local VAT took place in Italy in 1998, when a new business tax -- the *imposta regional a sulle attivita produttive* (IRAP) -- replaced an existing regional income tax levied on business income as well as some other small taxes. The IRAP is essentially a net income-type VAT on an origin basis. IRAP’s base is calculated annually as the difference between gross receipts (sales revenues) and the cost of intermediate goods and services (purchases from other firms plus depreciation). There are specific rules for different types of financial institutions. Neither wages and salaries, nor interest payments, are deductible from the tax base. Outlays for capital goods are deducted in accordance with normal income tax depreciation schedules. Revenues are allocated among regions in proportion to labor costs incurred in each region. Most firms, including all types of business and self-employed activities, were initially subjected to IRAP at 4.25 percent,

⁵⁹ Businesses with revenue below \$300,000 are exempt, and the rate then increases in steps from 0.2 percent on those between \$300,000 and \$400,000 to 1 percent for those with revenues over \$900,000 (except for retail and wholesale trade, where the maximum rate is only 0.5 percent, with a similar graduated system).

⁶⁰ Until 2003, local governments could give such exemptions although this is no longer the case.

although regional governments may choose to levy an additional percentage point. This tax finances about one-quarter of all regional spending in Italy.

In principle, IRAP is neutral with respect both to the choice of organizational form and between equity and debt financing. In practice, however, an early study found that, on balance, it favored capital over labor because tax depreciation exceeded economic depreciation (Bordignon, Gianni, and Panteghini 2001).⁶¹ One motivation for the initial adoption of IRAP was to bring Italian profit taxes closer to those in other European Union countries. For the same reason, in 2003 the national government decided to eliminate the tax, following the old German model of ‘salami tactics’ (slice by slice) by beginning with the exclusion of 20 percent of labor costs from the base. However, it was left unclear how this essential source of regional finance would be replaced (Keen 2003). Despite several subsequent moves by the central government to go further in the direction of abolishing the tax, however, as yet the IRAP continues to exist, perhaps largely because no similarly productive source of regional finance has been suggested as a substitute. Although a 2008 law allowed regions to set the rate and even to some extent to alter the base, it was never implemented (Longobardi 2013). Similarly, a 2011 law both gave regions more discretion in setting IRAP rates and provided that IRAP revenues should be distributed on a destination basis beginning in 2013, on the basis of the information on the location of final consumers that is required on existing IRAP returns. In addition, regional revenue was to be distributed to municipalities on a per capita basis, although as yet these changes have not been implemented.

Several decisions by Advocates-General of the European Court of Justice (ECJ) determined that the IRAP was not acceptable under EU rules because its ‘VAT-like’ characteristics mean that it is in fact a VAT and hence precluded under the Sixth VAT Directive. These decisions were strongly criticized, however (Cnossen 2006), and in 2007 the ECJ unusually decided not to accept the decisions of its Advocates-General, ruling that the IRAP was sufficiently distinct from the VAT to be acceptable. Despite this legal victory, the then Italian government again said it intended to abolish the tax and began this time by reducing the basic IRAP rate from 4.25 to 3.9 percent. Although taxpayers dislike the tax because it has to be paid even by non-profitable businesses and most political parties seem to want to abolish or at least reform it (Longobardi 2013), the IRAP continues to survive.

Japan

Although Japan is in most ways a highly unified country, it has a complex system of local government and a long tradition of local autonomy. Japan has 47 regional governments, or prefectures, with populations ranging from 12 million (Tokyo) to a little over 600,000. In addition, it has about 2,500 municipalities (cities, towns, villages). Both levels of local government have a broad range of functions (including education) and independently levy and collect many different taxes.

⁶¹ An interesting recent comparison between IRAP and CBIT, a comprehensive business tax originally proposed in US Treasury (1992) which essentially taxes the same base but allows the deduction of labor cost found that IRAP was more contractionary (see also Joumard and Yokahama (2005) on Japan) but that CBIT was more regressive (Manza and Monteduro 2010).

The main local tax on business is called the Enterprise Tax.⁶² It is imposed on both corporations and on individuals engaged in a wide range of specified activities (including professional activities), although many primary sector (farming, forestry, mining, etc.) activities are exempted even if carried on by corporations. Japan's regional governments (prefectures) have long imposed Enterprise Tax on most non-agricultural businesses, generally on the basis of income as computed for the national corporation tax (CIT). The base attributable to the prefectures in which any taxpayer had places of operation was determined by prorating the total tax base (for example, as reported for national CIT) usually on the basis of the number of employees. Even when the Enterprise Tax was based on income, the local tax base was not identical to that of the CIT, being more narrowly defined in some respects and more broadly defined in others in an attempt to link the tax burden more closely to the benefits provided business by local governments. The standard local Enterprise Tax rate was set nationally with rates varying with taxable income up to a maximum of 9.6 percent applicable to enterprises with offices in more than three prefectures and capital of more than 10 million, regardless of its taxable income. Prefectural governments collect the tax and may, if they wish to do so, impose rates up to 120 percent of the standard rates.⁶³

An alternative gross receipts tax of 1.3 percent was long used for electricity, gas and insurance companies, and prefectures were free to use such other bases such as the number of employees or the amount of capital if they wished to do so. Owing to Japan's prolonged recession in recent decades, an increasing number of companies on the taxable income basis reported persistent losses and hence paid no Enterprise Tax. To offset the loss of local revenue a new form of local business tax was introduced in 2005 for corporations with capital greater than 100 million yen. The principal reason for this change was to make the local business tax base less sensitive to economic fluctuations. In addition, it was argued that the new tax would better reflect the intended purpose of local benefit taxation by ensuring that every company using local public services paid taxes whether it made profits or not. This new tax base for larger enterprises has three components: income, value added, and capital, but the key element in the new tax base is value added, defined as the sum of salaries, net interest paid, net rent paid, plus (or minus) profit (or loss) in the year. However, if wage compensation in a year exceeds 70 percent of the total, the excess is deducted. This tax base is subject to a flat tax of 0.48 percent. In addition, a Capital Tax is levied on paid-up capital (amounts invested and capital surplus) at a rate of 0.20 percent. The rates of the income tax component were lowered for enterprises subject to these new levies, with a maximum rate of 7.2 percent. As before, prefectures are allowed, if they wish, to impose rates up to 120 percent of the standard rates: a few, such as Tokyo, do so. As with all local taxes on business these taxes are deductible from taxable income for purposes of calculating national corporate income tax.

⁶² Most of the information in this section is based on Bird (2006) updated by Local Autonomy College (2008) and to the extent possible by information available as of January 2013 on webpages of Japan Ministry of Finance, Ministry of Internal Affairs and Communications and other sources.

⁶³ Although an official study proposed that, apart from the property tax, all other local taxes should be administered by the National Tax Administration (Japan Research Institute 2006), the system has not been changed.

In sharp contrast to most of the other cases discussed here, in Japan the principle of local ‘benefit’ taxation of local business is formally acknowledged as the key argument shaping the form of local business taxation. Since businesses make use of such services as roads, ports, health services, pollution control, etc. it is argued that they should make a contribution to cover the cost of services and that the appropriate base for this contribution should be related to the scale of their business activities. The VAT component of the local Enterprise Tax is considered to be the best approximation to a benefit-related charge. A second virtue, as noted also in other countries, is that this approach makes local revenues more stable. However, no tax is perfect, and Joumard and Yokoyama (2005) note, first, although excluding small businesses reduces the potential burden on newly-created companies with few or no profits this exclusion breaches the rationale of benefit taxation and, second, that although VAT reduces the volatility of local revenues, it does so by shifting some cyclical risk to firms and hence may exacerbate business failures during downturns.

France

France has long had a local business tax in the form of the *taxe professionnelle*. The base of this tax was essentially the rental value of a company’s equipment plus its wage bill. In response to the argument that this base adversely affected employment, the payroll tax component was first reduced and then, in 2003, abolished, with the loss of local revenues being offset by increased central government transfers. The Fouquet Commission (2004) recommended that a new local business tax should be gradually implemented to replace the *taxe professionnelle*. After considering a wide range of alternatives, the Commission favored a form of value-added tax as the most economically effective, balanced, and equitable form of local business taxation. Business income taxes were felt to be too volatile a revenue source and to be insufficiently closely related to the costs borne by local authorities owing to business activities in their jurisdiction. Value added was said to provide both a more stable base and one that taxed all factors of production more evenly.

Although some technical problems were noted, particularly with respect to the financial sector, the Commission argued that they were no greater than those with other forms of taxation and were not insurmountable. In fact, they favored the value-added basis in part on administrative grounds because in practice it had been used for several decades in calculating the *taxe professionnelle*. For taxpayers whose turnover exceeded 7.6 million Euros for whom the ‘normal’ tax base was less than 1.5 percent of value added, a minimal contribution was imposed to bring the tax to this level, and for those whose calculated taxes exceeded a certain share of value-added (3.5 - 4 percent, depending on turnover), taxes were limited to this level, so that in reality in 2003 over half the tax was actually calculated on a value-added basis. The major technical problem relates to the allocation to different jurisdictions, and the Commission suggested that the number of employees, the wage bill, and the rental value of land were the sorts of factors that should be considered in this connection. With respect to rates, the Commission favored some, but not unrestricted, local freedom to set rates within limits.

In reality, however, the only reform introduced in the *taxe professionnelle* in 2006 was to create a single ceiling of 3.5 percent of a firm’s declared value added beginning in 2007.

One reason why so little was done was reportedly because of the then recent adverse decisions of the European Court of Justice with respect to the Italian IRAP, mentioned above. A few years later, however, France proceeded to introduce a new local business tax with a pronounced VAT flavor in 2010 when the *taxe professionnelle* was replaced by the ‘economic territorial contribution’ (Gilbert 2010). This new tax has two components -- one based on the annual rental value of real property used for business purposes and the other on value added, defined as the difference between turnover (gross receipts) and the cost of goods and services used in the business. A tax of 1.5 percent is imposed on this value added, although those with turnover less than EUR 50 million benefit progressively from partial relief until the tax vanishes at the EUR 500,000 level. Half of the proceeds of the local VAT go to the departments, and the remainder is divided, roughly equally, between the regions and municipalities (Beltrame 2011).⁶⁴

BVTs and VATs

Another way of looking at the local business VAT is to consider how it relates to the central (or regional VAT). While there are, as discussed above, many possible varieties of such taxes, in general BVTs differ from VATs in a number of important ways:

- BVT is imposed within a clearly-defined territorial area that is also subject to the ‘normal’ VAT.
- BVT is calculated on the basis of accounts (through addition or subtraction) and not based by the transaction-based invoice-credit method.
- BVT is clearly a tax on business activities and not a form of sales tax.
- BVT taxes production rather than consumption and is hence based on origin not destination.
- BVT is imposed on a gross or net income basis rather than on consumption.
- BVT is usually applied to all business activities with no thresholds or exemptions.

Although the base of the BVT is territorially limited, it is thus inherently wider than the base of the VAT in a number of respects. In fact, viewed from the perspective of the VAT, the BVT may be seen as one of a number of local taxes that may play a useful role in offsetting some VAT exclusions. Just as local property taxes may offset some of the potentially distorting effects of the relatively favorable treatment of housing in most VATs, local BVTs may offset some of the effects of the limited extent to which most VATs reach small business activities especially in the service sector. Indeed, some local business taxes, like Brazil’s ISS and China’s Business Tax, are explicitly intended to tax services that are not subject to the VAT.

⁶⁴ The French system is considerably more complex than this brief summary indicates. For example, there is a limit on the combined effective rate with respect to value-added of 3 percent for the total of the two components of the LBT (the BVT and the locally-determined business property tax) and there is also a convergence process that both limits changes in the business tax rate and ensures that the rates within the new ‘federative’ inter-municipal structures become uniform over time in order to reduce local tax competition (Gilbert 2012). For enterprises operating in more than one locality, the VAT tax base as calculated from the company accounts is allocated among localities essentially on the basis of employment (Gilbert 2010a).

Given the poor design and operation of many local business taxes (LBT), it may be possible to improve both VAT and LBT by combining the two. This can be done in a number of very different ways. The simplest way is to abolish LBT, include all services in VAT base, and then presumably provide an offsetting transfer to make up the revenue loss to local governments. However, this solution obviously both reduces local fiscal autonomy and makes local governments even more reliant on continued transfers from higher-level authorities. Particularly in developing countries – as India’s experience with replacing the local octroi by grants illustrates -- such transfers have not always provided adequate or timely compensation for the loss of what is usually the most elastic local revenue source (Bird 2006).

Another approach might be to abolish LBT and include all services in the central VAT, but to allow local governments to impose (perhaps within some range of rates) a uniform local surcharge on the national (or regional) VAT tax or, more directly, a uniform local supplementary rate to be collected by the higher level tax agency on behalf of the local government.⁶⁵ Local authorities may be enthusiastic about this approach which promises to give them access to an important source of revenue at relatively little political or administrative cost. Such a system exists in Japan, where the ‘local consumption tax’ (25 percent of the collections of the central VAT) is allocated to prefectures (the higher level of local government in Japan) 75 percent on the basis of estimated territorial consumption, 12.5 percent on the number of employees and 12.5 percent on population. Prefectures in turn are then required to allocate 50 percent of their share to their municipalities, giving equal weight in doing so to the last two of these factors (Mochida, Horiba, and Mochizuki 2012). Although this study concludes that a better way to distribute the revenues would be by following what they call the ‘Canadian model’ of macro-revenue allocation (as described briefly in Section 2 above), they do not consider the other key feature of that model – provincial rate discretion – which would make little sense in the context of Japanese local government and should indeed likely be ruled out completely at the local level in any country because of the very considerable complexity, costs and distortions that might be incurred if hundreds or even thousands of local governments got into the VAT act.⁶⁶

Of course, as already discussed, Japan also has a local (origin-based) business VAT, which appears to work well despite the existence of the local (destination-based) consumption tax. A similar approach might perhaps be used in countries such as China and Brazil, both of which are currently attempting (or considering attempting) to incorporate all local taxes on business services into the VAT, if they wish to retain and strengthen local fiscal autonomy and responsibility. Local governments might, for instance, impose a local BVT making use of some of the information collected in the process of normal VAT administration as the basis for such a tax, which could then be administered either locally or nationally as was recently suggested for South Africa (Hunter and Van Reyneveld 2008).

⁶⁵ Any such local tax should likely be at a uniform rate both for administrative feasibility and in order to restrain attempts through differential rates to attract tax base or to export tax burdens.

⁶⁶The problem of how to deal with the thousands of existing local sales taxes in the United States has been a major concern in considering the possible introduction of a consumption VAT in that country: for discussions, see Duncan (2010) and McLure (2010).

5. Conclusion

The various country stories told in this paper are diverse and heavily influenced by their particular context and timing. Nonetheless, three conclusions emerge from this complex tale of what has been going on ‘below the salt’ with respect to value-added taxation.

First, regional VATs can and do work, and in the right circumstances, work well. In particular, Canada’s ‘dual VAT’ experience with a broad-based central VAT and provincial VATs administered together – whether at the central or the regional level – shows that a destination-based sub-central VAT which handles interjurisdictional trade essentially by the deferred payment method long in force in the EU can work well, at least in a developed country with a good central tax, good administration and good cooperation between governments.

Secondly, if Quebec and Canada with their long and turbulent history over the years (Bird and Vaillancourt 2006) can work together in their mutual interest to develop a workable regional VAT system perhaps it may be possible for common markets and specifically the EU to find some similar cooperative way to develop an integrated VAT administrative system while permitting member states to retain significant control over both their tax rates and their tax collections.

Thirdly, although the evidence is less convincing, experience in Italy, Japan and France demonstrates that a local tax based essentially on value-added on an origin basis may not only be a sensible way of charging business for benefits obtained from local public spending but may also be administered adequately at the local level with no serious economic costs and some benefits in terms of improving the stability of local revenues. Given the apparently increasing dependence of countries on urban-based ‘engines of growth’ more countries should perhaps consider allowing some access by at least larger cities (and perhaps regions) to the value-added tax base through the parallel track of local business VATs.

As yet no country other than Japan has imposed both a regional (destination) ‘consumption VAT’ and a local (origin) ‘business VAT’, although the Brazilian system may perhaps also evolve in this direction. Nor has any country yet used the national VAT (and payroll tax) administration to provide the basic administrative data for a local BVT as was recently suggested in South Africa (Hunter and Van Ryneveld 2008). Again, however, it is perhaps possible that the on-going Chinese experiment may perhaps evolve in this direction. Whether it does or not, it is clear that – as indeed the Meade report (IFS 1998) implicitly noted long ago in a different context – there is nothing inherently illogical or inconsistent about imposing VAT on one basis (origin) as a local business tax and on another basis (destination) as a national (and/or regional) consumption tax.

Since VAT is now the key to sound national finance in many countries central governments have understandably been reluctant to give up control over this tax. However, if sub-central governments have important expenditure responsibilities, both experience and theory suggest that they are more likely to exercise those responsibilities sensibly if they are also responsible for raising a significant amount of their own revenues, especially at the margin (Bird 2011).

At the sub-central level, as at the central level, the VAT option may in some circumstances be attractive. Indeed, as already discussed such subnational VATs are already critically important to subnational finance in countries as diverse as Brazil, Canada and India. It can be done. It has been done.

The question is thus not whether it is possible to run a two-level VAT but rather what lessons have been learned from these experiences about how any country that decides to pursue this option can best do it. When applied to the common market setting (as in the EU) the question is whether member states are willing to work together administratively closely enough to close the gaps that have been opened by the absence of an overriding common market VAT. Moreover, since theory and to some extent experience suggests that a quite different kind of VAT may provide a more economically sensible form of local business taxation than those now found in most countries, some countries may in the future even end up with three VATs – a destination-based consumption VAT at both the central and regional levels and an origin-based business VAT at the local level -- although as yet no country has yet reached this point.

In conclusion, it is important to emphasize that this paper does *not* argue that sub-central VAT of either the destination or origin variety are always or necessarily a good choice even in federal countries with important sub-central governments. Indeed, a better case may often be made even in such countries for following the Swiss pattern and leaving the VAT entirely to the central government while perhaps allowing sub-central governments (on the Scandinavian model) to levy a personal income tax, preferably on a uniform national base. What this paper *does* argue, however, is simply that, if some countries choose to introduce such sub-central VATs (of either variety), not only are there are no serious technical reasons why they cannot do so but there may be economic gains from introducing less distorting sub-central sales and business taxes than now exist. Moreover, there may be some useful lessons that the European Union (or other common markets) can learn from the varied experiences in the subterranean world of sub-central VATs that have been discussed in this paper.

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