

## International Studies Program

Working Paper #01-4  
April 2001

# VATs in Federal States: International Experience and Emerging Possibilities

Richard Bird  
Pierre-Pascal Gendron



Georgia State  
University

---

Andrew Young  
School of Policy Studies

# VATs in Federal States International Experience And Emerging Possibilities

Working Paper #01-4

Richard M. Bird  
Pierre-Pascal Gendron\*

International Studies  
School of Policy Studies  
Georgia State University  
Atlanta Georgia

Revised; March 2001

---

\* International Tax Program, Rotman School of Management, University of Toronto. Gendron is also with KPMG Meijburg & Co., Amsterdam, The Netherlands. We are grateful to many colleagues around the world for help. Amaresh Bagchi, Raja Chelliah, Ashok Lahiri, Hasheem Nouroz, Mahesh Purohit, and Govinda Rao in India, Jose Roberto Afonso, Rui Affonso, Fernando Rezende, and Ricardo Varsano in Brazil, Jorge Avila, Carola Pessino, Horacio Piffano, and Ricardo Fenochetto in Argentina, Joanne Verkerk, Adrien Venne, and Carmen Blanchette in Canada, and Takehiko Ikegami in Japan supplied helpful materials on their respective countries. Many of those mentioned, as well as Roy Bahl, William Dillinger, Michael Keen, Charles McLure, William McCarten, Sjibren Cnossen, and Satya Poddar, have also provided useful comments and discussed some of these issues with us in various forums in recent years. It must of course be emphasized that we alone are responsible for any errors of fact or interpretation that may have crept into our account of this fast-changing subject.

# VATs IN FEDERAL STATES INTERNATIONAL EXPERIENCE AND EMERGING POSSIBILITIES

## Table of Contents

I.	Introduction.....	1
II.	Problems with Subnational VATs .....	3
III.	Sales Taxes in Federal States.....	5
IV.	Two Paths to Success? The Canadian Experience.....	8
	A. The Quebec Sales Tax.....	11
	B. The Harmonized Sales Tax.....	13
	C. The Canadian Experience: A Recapitulation.....	14
V.	Models for State VATs in Developing Countries .....	15
	A. The Dual VAT Approach.....	15
	B. The CVAT Approach.....	17
	C. CVAT versus Dual VAT .....	18
VI.	Brazil: The Troubled Pioneer.....	19
VII.	Argentina: A New Fiscal Constitution? .....	22
VIII.	India: Reforming Subnational Fiscal Systems .....	24
IX.	Some Unresolved Issues .....	29
X.	What May the Future Hold?.....	31
	References .....	32
	Other Papers in the International Studies.....	40

## Tables

1.	Sales Taxes in Federal Countries.....	6
2.	Features of Alternative “Federal” VAT models .....	16
3.	Comparison of Some Features of Sales Tax Regimes .....	28

## I. INTRODUCTION

The biggest tax story of the last third of the 20<sup>th</sup> century was the value-added tax (VAT). From its tentative beginnings in the reform of the French production tax in the early 1950s,<sup>1</sup> by August 2000 some form of VAT existed in at least 123 countries.<sup>2</sup> Few fiscal innovations have been adopted so widely and so quickly.

Towards the close of the century, another striking trend was the increasing decentralization of the public sector in many countries around the world. In this process, increasing responsibility for delivering such important and expensive public services as education and health has been devolved to sub-national governments, often to regional governments such as states or provinces.<sup>3</sup> Such decentralization may make good sense in many respects, but experience suggests that it is essential to devolve responsibility not only for expenditures but also for some significant revenues if adequate fiscal accountability is to be maintained.<sup>4</sup>

The traditional literature on tax assignment suggests that the best form of taxation for intermediate-level governments is a sales tax. Some form or another of sales tax does in fact constitute the major source of finance for intermediate governments in many countries. Indeed, in developing countries in which income taxes do not play a major role, it is hard to see what other major revenue sources such governments could utilize. The retail sales tax once favored as a regional tax (for example, by Musgrave 1983), and still in place in most U.S. states (and some Canadian provinces) is now an aberration from a worldwide perspective. The only good sales tax is now generally considered to be a VAT.

The dominance of the VAT poses a serious problem for the finance of regional governments, since conventional wisdom has long held that the only good VAT is one levied by the central government. For example, McLure (1993) noted that "...it is not appropriate to assign the VAT to subnational governments." Even in federal countries, in which regional revenue needs are most obvious, most analysts probably agree with Tait (1988) who states that "the simplest way to run a federal-state sales tax system (including VAT) is to adopt a form of revenue sharing...."

Over the last decade, however, such views have begun to change. There appear to be at least three reasons why the question of sub-national consumption VATs needs to be

---

<sup>1</sup> The idea of a VAT goes back much further (Sullivan 1965), but the starting point of the modern VAT was clearly the French sales tax reform of 1954-55 (Due 1957).

<sup>2</sup> Information from the Fiscal Affairs Department of the International Monetary Fund.

<sup>3</sup> See, for example, the discussion in Bird and Vaillancourt (1998) and Litvack, Ahmad, and Bird (1998).

<sup>4</sup> For the rationale behind this statement, see Bird (1993, 2000).

reconsidered, particularly in federal countries with important regional governments.<sup>5</sup> First, there are few other major revenue options open to countries in which, for whatever reason, substantial expenditure responsibilities have been shifted to lower levels of government, if those governments are to behave in a fiscally responsible manner.<sup>6</sup> Second, sub-national VATs have now in fact been successfully operating in Canada for a decade (Bird and Gendron 1998) and have also existed, if to less general acclaim, in Brazil for over 30 years. Finally, several novel proposals have recently been made to overcome certain problems that some see with applying the system used in Canada to other countries in which tax administration is less well developed.<sup>7</sup>

Our aim in this paper is to discuss the current state of play with respect to sub-national consumption VATs in the federal countries in which the issue has been most prominent. By way of background, we first set out briefly in Section 2 the major problems which have generally been seen as making sub-national VATs infeasible or undesirable. Next, we note in Section 3 how these problems are dealt with in the sales tax systems of a number of developed federal states before turning in Section 4 to a brief discussion of the two different forms of sub-national VAT that have been successfully implemented in Canada. In Section 5, we contrast the Canadian experience to an alternative path to sub-national VATs that has been proposed in the literature, but not implemented so far. The next three Sections briefly discuss recent developments in the three developing-country federations in which these issues have been discussed most fully—Brazil, Argentina, and India. We note in Section 9 that there are several important unresolved issues in all discussion. We conclude in Section 10 with a few conjectures about future developments with respect to sub-national VATs in the countries discussed in the paper and such others as, for example, China, Russia, Mexico, and South Africa.<sup>8</sup>

---

<sup>5</sup> We specify “consumption” VATs because we do not consider in this paper the case for “income” VATs as a more desirable form of sub-national business taxation than most possible alternatives: for detailed exploration of this option in the case of Canada, see Bird and Mintz (2000) and, with respect to the United States, see Capehart (2000) and Papke (2000).

<sup>6</sup> For exploration of other possible options for sub-national revenues, see Bird (2000a).

<sup>7</sup> See, in particular, Varsano (1995, 2000), Poddar (1990, 1999), and McLure (1998, 2000). Keen and Smith (1996, 2000) and Keen (2000) have also proposed an interesting system for dealing with some of the problems discussed here, but we shall not discuss their “VIVAT” proposals in detail here principally because, as we argue in Bird and Gendron (2000), they are designed specifically for the case of the European Union (EU), in which there is of course only one level of government – the member states – levying the VAT. The focus of the present paper is on countries – generally large federal countries – in which at least two levels of government (central and regional) levy, or would like to levy, VATs. See, however, Genser (2000) for a proposal for the EU which in effect combines elements of the VIVAT scheme (at the member-state level) and the “dual-VAT” approach discussed later in this paper (at the sub-national level for federal states like Germany and Austria).

<sup>8</sup> In Mexico in 1999, for example, the federal government proposed that the states should be allowed to impose a VAT at a rate of up to 2 percent. Although this proposal was not implemented, the issue of state VATs continues to be a matter of discussion in Mexico (Díaz-Cayeros and McLure, 2000). An interesting feature of the Mexican VAT is that a special, lower rate is applied in the northern states bordering on the U.S. Such special “border” provisions are not unknown in other systems. In Austria, for example, the lower German VAT rate is applied in the Kleine Walsertal region, according to Genser (2000).

## II. PROBLEMS WITH SUBNATIONAL VATs<sup>9</sup>

The reasons why independent VATs applied simultaneously by two different overlapping jurisdictions have widely been considered to be either undesirable or infeasible vary. Some authors emphasize the high administrative and compliance costs of imposing two sales taxes on the same base. Others stress that divided jurisdiction over such an important tax base might unduly limit the scope of central macroeconomic policy. Still others have simply noted that central governments are obviously most reluctant to allow others to share this attractive tax base. The major technical problems that have been emphasized in the literature, however, arise from cross-border trade.

Traditionally, it has been asserted that the only way in which sub-national units can effectively levy a VAT was on an origin basis. Unless they did so at uniform rates, however, the results would be highly distortionary.<sup>10</sup> Sub-national VATs could thus only be achieved by giving up the subnational fiscal autonomy (and accountability) that such taxes should, in principle, help to achieve. On the other hand, it was believed that a destination-basis consumption VAT imposed through the generally used invoice-credit method could not be successfully implemented without physical border controls. In the absence of borders, the only feasible approach was generally thought to 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 settled by interstate payments.<sup>11</sup>

Faced with such difficulties, it is not surprising that until recently most federal countries solved the problem simply by keeping all VAT at the central level. If they wished to share a certain percentage of VAT revenues with sub-national governments, central governments did so either by using a formula (as in Germany) or by using consumption statistics, as has recently been recommended for the European Union (Commission 1996). If, as in the Russian Federation, a nationally uniform VAT is administered by sub-national authorities and the revenues shared on the basis of origin (derivation), much the same undesirable and distortionary incentives would be created as in the case of non-uniform sub-national origin-based VATs (Baer, Summers and Sunley 1996).<sup>12</sup>

The principal reason the VAT was originally adopted as the required form of general sales taxation in the European Common Market (now the EU) was its advantage

---

<sup>9</sup> Much of this section is adapted from Bird and Gendron (1998).

<sup>10</sup> This argument is clearly stated in, for example, Neumark (1963).

<sup>11</sup> See, for example, the discussions of these problems by McLure (1980), Cnossen (1983), OECD (1988), and Poddar (1990). An interesting example of a clearing-house arrangement exists between Israel and the West Bank-Gaza, although the flow of revenues has proved subject at times to political factors.

<sup>12</sup> For later developments in Russia, see Mikesell (1999) and McDonald (2001). The many special problems of tax systems in transitional countries cannot be further discussed here (but see Bird, 1999). See *supra* note 6 for references to the possible case for origin-based taxes on benefit grounds.

in implementing the destination principle with respect to cross-border trade. Only with the value-added form of sales tax could member countries be sure that imports were fairly treated in comparison to domestic products, and that exports were not subsidized by over-generous rebates at the border. It is thus somewhat ironic that the issue of how best to apply VAT to cross-border trade *within* the EU has not yet been resolved. From the Neumark Report (1963), with its recommendation for the eventual adoption of the origin principle for intra-EU trade to the recent proposals of the European Commission (1996), tax experts have put forth a variety of solutions to the perceived problems. As yet, however, no proposal has achieved full acceptance in the European context.

Although some interesting arguments have been made in favor of the origin principle of applying a VAT within a country (or economic union), we think that the destination principle clearly wins the day.<sup>13</sup> The conditions of wage and exchange rate flexibility needed to avoid substantial distortions in production efficiency if different jurisdictions levy different rates under the origin principle seem unlikely to be satisfied in most federal states (let alone in the EU, even after the move to the Euro). The destination principle is both more compatible with independent taxation of consumption and, in practice, seems less likely to result in important economic distortions (Keen and Smith 1996).

At present, the EU applies the destination principle using what is called the "deferred-payment" method (Cnossen and Shoup 1987). Exports by firms in one member country A to *registered traders* in other member countries are zero-rated in A without requiring border clearance. Such sales are therefore treated in the same way as are all sales outside the EU. In contrast to imports from non-EU countries, however, imports by registered traders in A from firms in other EU member countries are *not* taxed at the border. Instead, importers in A in effect pay the VAT on imports (at country A's rates) on their own sales since they have no input tax credits to offset against the tax due. The system works on a self-assessment basis. Importers are supposed to declare their imports, compute the VAT that would be due, and claim credit for that VAT, all in one return. The effect is that VAT is collected on imports only when they are resold or incorporated into goods sold by the importing firm (since imported inputs, unlike domestic inputs, will not generate offsetting input tax credits at that time). As an aid to enforcement, exporters that zero-rate sales to other member countries have been required to quote the VAT registration number of the buyer since 1993 (Keen and Smith 1996).

The deferred-payment system 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

---

<sup>13</sup>. 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). We do not discuss the 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).

rate imposed by the *exporting* state).<sup>14</sup> 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 to work as well as or better than the alternative explicit public sector offsetting of accounts required in the clearing-house approach.

The deferred-payment system is not without problems, of course. This is particularly true with respect to the possible revenue loss from cross-border sales to final users. So far, however, such losses do not seem to be significant, although concern has recently focused on the growing phenomenon of "distance sales" using mail order and especially electronic commerce.<sup>15</sup> Firms engaged in distance-selling (for example, mail-order) must charge VAT on the destination basis once their turnover exceeds a specified threshold. In addition, vehicles (which are subject to high taxes) 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). As we note in Section 4, similar provisions apply with respect to sub-national VATs in Canada and have been recommended recently to deal with problems of interstate trade under the state retail sales taxes in the United States (McLure 1997). No one has yet found any simple and uniform way to deal with *all* cross-border shopping problems under any destination-based sales tax, but such special provisions appear to have helped to keep serious problems in check so far.

### III. SALES TAXES IN FEDERAL STATES

Table 1 summarizes the current situation in ten federal countries.<sup>16</sup> As the Table shows, the current situation with respect to sub-national sales taxation in federal countries

---

<sup>14</sup> As noted below, this is essentially how the Commission's recently proposed "common" system would work (Commission 1996).

<sup>15</sup> The latest problem is, of course, the taxation of electronic commerce. Although how the issues that arise in this context are resolved may have important implications for the subject discussed here, we do not attempt to take these developments into account in the present paper.

<sup>16</sup> Similar systems apply in some non-federal countries, of course. In Japan, for example, there is a "local consumption tax" at the prefectural (regional) level that is 20 percent of the national VAT, or in effect a 1 percent VAT. (See Schenk [1989] for a description of Japan's rather unusual VAT.) This tax is collected by the national tax administration in each prefecture and the local portion is paid to the prefecture (which pays tax collection costs of 0.35 percent of collections for national transactions and 0.55 percent for imported goods to the national government). The total is distributed among the prefectures by the following formula: 75 percent in proportion to retail sales in the prefecture (as shown in official statistics), 12.5 percent according to population, and 12.5 percent by the prefectural share of the number of employees. Any "surplus" or "deficit" is cleared between prefectures by direct payments. In addition, each prefecture transfers half of its VAT revenue to municipalities (50 percent according to population, and 50 percent on number of employees). Obviously, local governments have no autonomy with respect to VAT in this system.



**Table 1**  
**Sales Taxes in Federal Countries**

Country	Federal VAT	State Sales Taxes	Type of State Tax
<i>Developed Federations</i>			
Australia	Yes	No	All VAT revenue goes to states
Canada	Yes	Yes	Some have VATs; some RST
Germany	Yes	No	States share in VAT revenue
Austria			
Switzerland	Yes	No	None
Belgium			
United States	No	Yes	Most have RSTs
<i>Developing Federations</i>			
Argentina	Yes	Yes	Gross receipts taxes*
Brazil	Yes (limited)	Yes	VAT (origin base)*
India	No (so-called CENVAT)	Yes	Most states at producer level (as is central tax)

\*States also receive a share of federal VAT revenues.

is characterized by diversity. Indeed, at first glance, international experience appears to suggest, as one of us noted several years ago, that no one has managed to work out an acceptable system for taxing sales at two levels of government (Bird 1993a). Although at least five possible methods for dealing with the problems potentially arising from two-level sales tax exist -- and each may be found to some extent in one country or another -- none seems entirely satisfactory.

Firstly, sales tax may be collected *only* at the regional level, either as VAT or retail sales tax (RST). Only the United States and a few Canadian provinces currently follow this path (with RSTs).<sup>17</sup> Few central governments are likely to be able or willing to give up the revenue they now collect from VAT without making equally drastic changes on

<sup>17</sup> Even in the United States, in which (as mentioned *supra* note 6) sub-national VATs have usually been considered as replacements for business taxes, rather than sales taxes, some recent authors have suggested that VATs should now be considered also to replace retail sales taxes (Fox, 2000).

the expenditure side. Such complete realignments of governmental responsibilities and revenues are not easy to achieve.

Secondly, sales taxes may be levied only at the central level. This is by far the most common system. Germany, for example, has a single VAT levied at the national level, although a proportion of VAT revenue is shared on the basis of a formula with the states.<sup>18</sup> Similarly, in Austria, the *länder* receive 18.557 percent of VAT revenue (with another 12.373 percent going to municipalities (Genser, 2000). Among other federal countries, Australia (since 2000), Belgium, and Switzerland also have a VAT only at the central level. In Australia, however, all the revenues from the new Australian VAT (called the GST or Goods and Services Tax) go to the states. These funds are distributed in exactly the same way as the long-established equalization system. In fact, since other funding for equalization was cut correspondingly, in effect the central (Commonwealth) government retained some of the VAT revenue for itself. As Greenbaum (1999) puts it, in effect "...all the GST does is to ensure the source for the equalization payments."<sup>19</sup>

Many have argued that the "German" solution of a centralized VAT with some of the revenue shared with states on a formula basis is probably the best approach (Tait 1988). For example, some recent proposals for reform in Brazil (Silvani and dos Santos 1996) and the European Union (Smith 1997) have essentially taken this tack. This approach is clearly feasible and has substantial advantages in terms of administrative and compliance costs. Even if all or some of the proceeds of the tax are to be distributed to the states, either on the basis of estimated consumption or on some formula basis, a single central VAT has substantial advantages and avoids many problems. This approach may be the best way to finance regional governments in the context of many developing countries.<sup>20</sup>

Such so-called "tax sharing" is in reality an alternative form of intergovernmental fiscal transfer. The total to be transferred is determined by the designated share of VAT collections, and the amount to be allocated to each state is determined by a formula established by the central government. Such revenues are not really regional (or local) taxes in the sense that the jurisdictions that receive the revenue are politically responsible for raising that revenue. In federal countries where regional governments are strong, it is

---

<sup>18</sup> Although the state share is supposed to be 50.5 percent, in fact this proportion is applied only after deducting several other earmarked shares from total VAT revenues. In 1999, for example, the states (*länder*) received about 47 percent of VAT revenues. Another 2.2 percent went to local governments, 5.63 percent to the federal public pension fund, and the balance to the federal government (Genser 2000).

<sup>19</sup> As part of the readjustment of federal-state fiscal relations accompanying the GST, it was originally expected that many state taxes, notably stamp duties, would be abolished in exchange for increased transfers, but the reduced base for the GST that finally passed meant that some of these duties will continue (Cooper 2001).

<sup>20</sup> In general, however, it is preferable not to base sub-national transfers on the yield of any one tax, since doing so is likely to bias national tax policy choices: for further discussion, see Bird (2000b).

by no means obvious why either the central or the regional governments would be willing to accept such a system.<sup>21</sup>

There remain three ways by which both levels of government might levy sales taxes. First, although the VAT may be the best of all possible sales taxes in some general sense, there may be something to be said for maintaining two distinct sales tax bases in a federal state in which both levels of government tax sales. Such a solution is obviously untidy and may be costly, but it may be argued that such costs should perhaps be viewed as part of the price paid for a federal system which presumably has offsetting virtues, such as respecting local preferences (Bird 1993a). As shown in Table 1, Canada provides an example of this approach (five provinces have RSTs), as do Brazil, India, and Argentina (as well as the Russian Federation) in all of which there are distinct taxes on sales at both state and federal levels.

Alternatively, both levels of government could maintain independent dual VATs, perhaps reducing compliance and administrative costs by harmonizing bases and to some extent rates. As Poddar (1990) has argued, it should be possible to retain a substantial degree of state fiscal autonomy while still reducing substantially the economic and administrative costs of levying two independent and totally uncoordinated VATs at different levels of government. As discussed in Section 5, the Canadian province of Québec provides an example of such a system. Bird and Gendron (1998) have recently suggested that, with some adaptation, a similar approach may prove workable in the context of the EU. Varsano (1995, 2000) and McLure (2000) have argued that an alternative approach to the same result might be more appropriate for large developing countries with weak tax administrations, as discussed further in Section 6 below.

Finally, the VAT could become in effect a joint or concurrent federal-state tax. Such a tax could be administered by either level of government and apply to a jointly-determined base, but with each government setting its own tax rate. From the point of view of fiscal accountability, this solution seems clearly preferable to the German approach. As discussed in the next section, a variant of this approach is now used in three provinces of Canada.

#### **IV. TWO PATHS TO SUCCESS? THE CANADIAN EXPERIENCE<sup>22</sup>**

As the previous Section suggests, at present Canada is probably the most interesting country in the world for those interested in sales taxes. There is a federal VAT, the Goods and Services Tax (GST), that is imposed throughout the country. In one province (Alberta), the GST is the only sales tax. In four provinces (British Columbia,

---

<sup>21</sup> On the other hand, even in such countries, weaker regions -- those most dependent on central transfers -- might indeed prefer such transfers to the right to tax a base that they do not really have. Asymmetrical regional tax systems, like that now existing in Canada (see below) may thus become a more prominent feature of some countries. We return to this point in Section 9.

<sup>22</sup> Much of this Section is adapted from Bird and Gendron (1998).

Saskatchewan, Manitoba, and Ontario), in addition to the GST there is a separate RST applied to the GST-exclusive tax base. (In one province (Prince Edward Island), the provincial RST is applied to the GST-inclusive tax base.) In three provinces (Newfoundland, Nova Scotia, and New Brunswick), there is a joint federal-provincial VAT, called the Harmonized Sales Tax (HST) and administered by the federal government at a uniform rate. Finally, in one province (Québec) there is a provincial VAT, the Québec Sales Tax (QST), applied to the GST-inclusive tax base. The QST is administered by the government of Québec, which also administers the GST in the province on behalf of the federal government.

Canada thus offers a variety of interesting situations: separate federal and provincial VATs administered provincially, joint federal and provincial VATs administered federally, and separate federal VAT and provincial RSTs administered separately.

This situation emerged as the result of the federal decision in 1991 to replace an archaic federal manufacturers' sales tax with the GST, a fairly standard invoice-credit destination-basis consumption VAT. This sparkling new tax quickly ran into heavy political and popular opposition, however, not least because of its implications for provincial finances, which depended heavily on (uncoordinated) RSTs (Bird 1994).

Such problems were not unexpected. When the GST was first proposed the variant preferred by the federal government was a so-called "National Sales Tax" (NST) that would have been administered federally on a uniform base and at uniform rates, with the proceeds being divided between the federal and provincial governments and among the provincial governments in accordance with some formula. As noted above, this is essentially how the VAT works in Germany.

Such a centralist solution was never likely to be acceptable in Canada, however. Since the base and rates of the NST would have been set federally, the fact that some of the proceeds would have been paid to the provinces has no significance.<sup>23</sup> The same results would be obtained if the NST were entirely federal and then, in a separate step, some or all of the amount thus collected were paid to the provinces in accordance with some formula.<sup>24</sup> If the tax base, the tax rates, and the distributive formula were all to be determined by joint federal-provincial agreement, matters would of course be different, as noted below in the discussion of the HST, which is essentially such a "joint" tax. But such agreements are not easy to reach in Canada, especially not with the larger and richer provinces.

The political cost and difficulty of arriving at such a joint tax design suggested an alternative approach to sales tax reform. Instead of trying to devise some form of "dual" (same base, different rates) or "joint" (same base and rates, with a formula-based distribution) form of NST, why not turn over the entire sales tax area to one level of government or the other? The most obvious way to go, as discussed in the previous

---

<sup>23</sup> In effect, this would be the Japanese system (see *supra* note 17).

<sup>24</sup> This would be the Australian (or German) system (see *supra* note 19).

Section, would be to follow the German model and turn the sales tax over to the federal government. In Canada, however, the Royal Commission on Taxation (1966) had earlier recommended that the federal government should turn over all sales taxes to the provinces. Even after the GST was introduced, Ip and Mintz (1992) argued that the federal GST should be replaced by appropriately augmented provincial (retail) sales and excise taxes both to reduce the administrative and compliance costs of taxation and to give more revenue discretion to provinces and hence make them more responsible for financing more of their own spending on health or education, for example.<sup>25</sup>

Such a change, however, would have required some provinces to apply RST rates as high as 19 percent. No country has ever applied such high RST rates successfully. Moreover, moving from a GST to a provincial RST would in effect shift taxes back on to business inputs, thus reversing the clearest economic gain from moving to a VAT.<sup>26</sup> In effect, when an RST is replaced by a VAT, two things usually happen. First, taxes are removed from intermediate products, and, second, the revenue thus lost is made up by expanding the tax base to include a wide range of services that for the most part were not subject to tax under the RST. The effect of substituting a VAT for an RST, so far as most citizens are concerned, is thus a considerable expansion in the range of consumption subject to taxes, and since in Canada (as in the United States) the strong RST tradition of explicitly adding sales taxes at the retail level prevails, there is no way to hide this outcome.<sup>27</sup> The political effects of this shift are obvious. When the federal government finally moved to a VAT, thus revealing to the public the extent of its previously hidden manufacturers' sales tax, the party in power was destroyed in the next election (and has

---

<sup>25</sup>. Of course, different provinces would gain and lose different amounts through any such shift. Equalization grants could presumably be adjusted as desired to prevent unduly penalizing the poorer regions of the country. The important question of the interdependence of tax assignment and the design of transfer systems cannot, however, be discussed in the present paper.

<sup>26</sup>. Kuo, McGirr and Poddar (1988), for example, estimated that from one-third to one-half of provincial RST revenues came from business inputs. (A more recent study by Ring [1999] presents a comparable estimate of 40 percent for state RSTs in the United States.)

<sup>27</sup> RSTs in Canada have always been levied explicitly on sales at the cash register (in part because of certain constitutional restrictions on provincial taxation and in part perhaps because this is also the universal practice in the U.S.). Although the GST legislation provided for "tax-inclusive" pricing, as is common practice in the EU, and indeed the current GST/HST law indicates that this is the preferred approach, the almost universal practice in Canada is to add the GST/HST (or QST/GST, or the GST and RST, as the case may be) separately on retail sales. The VAT, like other sales taxes, is thus very visible in Canada. A recent editorial in the *VAT Monitor* (Sherman, 2000) drew the lesson from Canadian experience that other countries would be well-advised to "keep the VAT hidden, and allow prices to be VAT-included." In Australia, for example, the effects of the VAT on the public (as opposed to the vociferous complaints from small business) has been muted because the tax is not very visible. One may wonder, however, if it is really such a bad thing for the public to be constantly reminded of (at least part of) the cost of government.

not since recovered). It is not surprising that no province was willing to shift explicit taxes onto its citizens to this extent.<sup>28</sup>

In the end, as noted earlier, variants of almost all the systems that have been proposed now operate in one province or another. The systems of most interest are those in the province of Québec – the Québec Sales Tax (QST) -- and in several of the small Atlantic provinces – the Harmonized Sales Tax (HST).

#### *A. The Québec Sales Tax.*

Both the QST and the federal GST are broad-based taxes on consumption. There are, however, some differences. The GST is imposed at a single rate of 7 percent which applies to most taxable goods and services consumed in Canada. The QST rate of 7.5 percent applies to the price of the good or service including the GST, so that the combined rate is 15.025 percent.

Although the QST initially imposed different rates for goods and services and had several differences in base from the GST, most differences between the two tax bases have now vanished (Gendron, Mintz, and Wilson 1996). Some differences remain, however. For instance, the QST on books is eliminated by giving an instant rebate following payment of the tax. While the administration of this rebate clearly adds some complexity, this approach permits the preservation of a uniform VAT base for both federal and provincial taxes while allowing (in effect) differential treatment at the final consumer level.

A more important, and troublesome, issue arises with respect to input tax credits. Under the QST, input tax credits were at first not provided for certain goods and services (such as fuel, electricity, and automobiles). In 1996, however, although there remained minor differences with respect to a few matters such as the tax treatment of financial services and certain tour packages and, as mentioned above, books, on the whole the QST incorporated the same rules as the GST regarding input tax credit claims. Nonetheless, some restrictions on input tax credits for large firms remain in effect under the QST, apparently for revenue reasons. Such base differences are not desirable in principle, but the Canadian example shows that, for better or worse, they may nonetheless be tolerable within a dual VAT system.

On the whole, however, the QST and GST as they now exist constitute an operational “dual” or “concurrent” VAT system -- with essentially none of the problems usually associated with such systems. The rates of the two taxes are set quite independently by the respective governments. The tax bases are also determined

---

<sup>28</sup> The degree to which the QST initially diverged from the GST, for example -- see Mintz, Wilson and Gendron (1994) -- was probably explicable on these grounds. The QST levied a lower tax on services than on goods and made up for the loss of revenue by disallowing input tax credits on a variety of items. Although this policy was subsequently reversed in part, there still remain some restrictions on crediting, as noted below.

independently, although they are essentially the same.<sup>29</sup> From the beginning, both taxes have been collected in Québec by the Ministère du Revenu du Québec (MRQ), with the GST being applied in accordance with the rules defined by the federal government.<sup>30</sup>

Taxes on inter-provincial sales from one business to another are basically handled by a deferred-payment system similar to that now applied in the EU. Exports from Québec, whether to another province or another country, are zero-rated for QST (although subject to GST). Imports into the province from other provinces, or from abroad, are taxable, but the tax is assessed on inter-provincial imports only when there is a sale by a registered trader to an unregistered trader or consumer in the province.<sup>31</sup> Although, as in the EU, special regimes apply to automobiles and a few other cases (Canada 1996), in general no attempt is made to collect tax on inter-provincial purchases made directly by final consumers.<sup>32</sup>

The main difference between the GST-QST system and that now applied in the EU is the existence of the overriding federal GST as an enforcement mechanism. Audit priorities for the GST are of course established by the federal government, but a final audit plan is agreed with the Québec government, with the latter actually carrying out the

---

<sup>29</sup>It is perhaps not unimportant that a precedent existed for this under the long-standing Québec personal income tax, the base for which is also almost identical to the federal personal income tax (PIT) -- although in this case, unlike the QST/GST case, the two taxes are collected independently.

<sup>30</sup>The federal share is turned over to the federal government after deducting an agreed administrative cost. (The details of these agreements are not public knowledge.) No problems have arisen from such intergovernmental collection arrangements, which are quite common in Canada (although the revenue flow has invariably been the other way in the past, that is, from the federal to the provincial governments.)

<sup>31</sup>The federal government collects QST on non-commercial imports (that is, goods not imported for sale or commercial use) at the international border (again for an agreed administrative charge). Unlike the case of the HST, discussed below, it does not impose QST on commercial imports, however. Instead, commercial importers pay QST on the "deferred" basis, as in the EU system. Incidentally, the federal government has in recent years also agreed to collect the RST on non-commercial imports for a number of provinces at the border together with the GST.

<sup>32</sup>Canadian provinces have traditionally not worried too much about this problem since geography ensures that most major population centres are not close to borders with other provinces. The major exception is in the capital region (Ottawa- Hull) on the Ontario-Québec border, so it is probably not a coincidence that the sales tax rates in these provinces have always been close. At present, the rates are 8 percent for the RST in Ontario, and 7.5 percent (on the GST-inclusive base) for the QST in Québec). As elsewhere, the advent of electronic commerce is likely to lead to more concern with this issue in the future (McLure 1997).

audit and reporting the results to the Canada Customs and Revenue Agency (CCRA).<sup>33</sup> Obviously, since the QST is applied to a GST-inclusive base, Québec has some direct incentive to monitor the GST as well as the QST. On the other hand, although Québec cannot directly monitor the other end of inter-provincial sales, the normal process of GST audit (carried out inter-provincially by CCRA) serves as a cross-check to ensure that QST has not been evaded. In effect, the existence of a federal sales tax on a more or less uniform base provides some control over inter-jurisdictional sales for purposes of both provincial and federal taxes. Reportedly, the system is working quite well at the technical level, despite the well-known political differences between the governments in Quebec and Ottawa.

### ***B. The Harmonized Sales Tax.***

A totally different approach was adopted by the federal government in pursuit of its aim to develop a more uniform sales tax system. In 1997 the federal government and several small eastern provinces (Newfoundland, Nova Scotia and New Brunswick) introduced the so-called Harmonized Sales Tax (HST). The key elements of the HST included the replacement of the previous federal and provincial sales tax systems with one harmonized VAT base; a combined federal-provincial rate of 15 percent in the three participating provinces; and federal administration of both federal and provincial sales taxes. The new combined rate consists of the 7 percent GST and an 8 percent provincial tax (applicable to a base that excludes the GST). The combined rate was significantly lower than the previous combined rates of 19.84 percent in Newfoundland and 18.77 percent in the other two provinces.

The federal government compensated the participating provinces by assuming some of the costs incurred in restructuring the sales tax systems. To be eligible for such assistance, a province had to experience a revenue shortfall in excess of 5 percent of its current provincial sales tax collections. For qualifying provinces -- which retrospectively excluded Québec and prospectively exclude the large rich provinces of Ontario and British Columbia -- the adjustment assistance offset 100 percent of the revenue shortfall in excess of 5 percent of current retail sales taxes collections in years one and two, 50 percent of this amount in year three, and 25 percent in year four. The total cost of adjustment assistance for the three participating provinces is estimated at close to one billion dollars.

---

<sup>33</sup> Interestingly, it appears that, although there is considerable information exchange between CCRA and MRQ, and each can, by agreement, access the other's audit files with regard to income taxes, they cannot do so with respect to GST and QST. Although MRQ administers the GST in Québec, it is the federal government that decides whether there is a dispute or not. If CCRA wants an audit in Québec, it asks MRQ, which carries out the audit. Both agencies have input into audit criteria. On a reciprocal basis, CCRA may, on request from MRQ, audit registrants elsewhere in Canada with activities in Québec. MRQ may also conduct such audits outside Québec of non-resident QST registrants. Special agreements may also be reached. For example, automobile dealers near the Québec-Ontario border must, by agreement, register for QST as well as GST, and must collect QST from Québec residents who purchase cars from them.



As in the European Commission (1996) proposal, HST revenues are shared on the basis of province-specific consumption patterns, in accordance with allocation formulae developed jointly by the federal government and the provinces.<sup>34</sup> Inter-provincial trade is handled in the same manner as under the QST – that is, exports are zero-rated and imports are not subject to the provincial portion of the HST-- with the important exception that the (higher) HST rate must be applied to sales to HST provinces and not just the GST rate. A registrant in Nova Scotia selling to a firm in New Brunswick would therefore apply the same 15 percent rate as it would on a sale to a firm in Nova Scotia. On other hand, only the basic GST rate of 7 percent would apply to a sale to a firm in Ontario or Québec. Similarly, while a registrant in Ontario applies only the 7 percent GST to sales to firms in Ontario or Québec, it must apply the HST rate of 15 percent to sales to firms in Nova Scotia or New Brunswick.

The harmonization agreement with Québec respects provincial autonomy but initially failed to achieve a simple and uniform base. In contrast, the HST agreement achieved the latter aim but clearly limits provincial autonomy. At the same time, it is important to note that the HST agreement also ties the federal government's hands since it cannot change either the base or the rate of the tax without the unanimous agreement of the provinces. In this sense, the HST is thus really a "joint" federal-provincial tax.

The federal government's apparent objective in the HST system was to reduce compliance costs for business and administration costs for governments. Even if one accepts that such potential savings may be significant, the economic rationale for requiring uniform rates across provinces seems weak. The revised QST arrangement thus seems closer to an ideal solution. It is characterized by a single administration, basic conformity on all important aspects of the dual VATs that might affect compliance costs; and complete autonomy in rate setting (and, to a limited extent, autonomy in granting exemptions to final consumers, if desired).<sup>35</sup>

### ***C. The Canadian Experience: A Recapitulation***

Canada's present system, with some provinces harmonized and others not, is of course far from perfect. There is, for example, some opportunity for tax arbitrage. There are also administrative and compliance costs for businesses that engage in cross-border trade. The same is true of shopping and trade between provinces with different regimes (such as Québec and New Brunswick). Between 80 percent to 90 percent of taxable trade in most countries takes place between registered firms, however, and Canadian experience does demonstrate that a sub-national jurisdiction can effectively impose a destination-basis VAT on this trade. In addition, as the Canadian case demonstrates,

---

<sup>34</sup>The data are gathered by Statistics Canada, a federal agency, but possible "game-playing" with the data is apparently considered so remote a prospect that no one in Canada has even bothered to raise the possibility.

<sup>35</sup>Moreover, as the 1999 Québec budget demonstrated by maintaining restrictions on input credits for large businesses, there is even room for bad but politically popular tax policy without damaging the general system. This may not be good news for tax experts but it will be, no doubt, welcomed by governments.

while it may not always be tidy or cheap to do so, it is demonstrably possible to operate a two-level sales tax system in several different ways within the same country.

## V. MODELS FOR STATE VATs IN DEVELOPING COUNTRIES<sup>36</sup>

Table 2 sets out a number of the characteristics of four possible approaches to state VATs in federal countries. Firstly, the two levels of governments could have completely independent VATs. Brazil comes close to this, although its states do not have rate autonomy since the rate is set by central legislation. Secondly, each level of government could have what we call “dual” VATs, in which each level sets its rates independently but on similar bases and there is a high level of administrative cooperation (as in the GST-QST case). Thirdly, there could be a single “joint” VAT—essentially a central VAT with some of the revenue flowing to the states either in accordance with estimated consumption (as in Canada’s HST) or with a distributive formula (as in Germany). And finally, there could be what McLure (2000) has called a “compensating VAT” or CVAT, as described below. Of these four possibilities, only the second (dual VAT) and fourth (CVAT) seem worth further consideration if any importance is attached to state rate autonomy and administrative feasibility. Basically, as Table 2 suggests, the dual VAT approach appears to rate higher in terms of autonomy but lower in terms of administrative feasibility.

### A. *The Dual VAT Approach.*

What lessons might Canadian experience with the GST-QST system offer for developing federal countries such as Brazil, Argentina, and India? One lesson appears to be that the best base for a sub-national VAT system is a well-designed and comprehensive national VAT. In this respect, as we note below, Argentina seems better positioned than either Brazil or India. Both of the latter countries would clearly need to make considerable improvements their existing central government sales tax before attempting to reform their sub-national sales tax regimes.<sup>37</sup>

A second key to the Canadian solution appears to be the existence of an adequate degree of (justified) trust in each other’s competence by the sub-national and central governments. That the system works between two such bitter political opponents as the federal government of Canada and the current provincial government of Québec suggests that the level of trust required may not be all that high. Nonetheless, it is probably asking

---

<sup>36</sup> Part of this Section are adapted from Bird and Gendron (1998, 2000). See also Schenk and Oldman (2001) for another recent review of some of the issues discussed here. It should be noted that many important questions—for example, the treatment of exempt sellers—are not discussed here. Varsano (2000) discusses some of these matters.

<sup>37</sup> For clear recognition of this point in India, see Bagchi (1996). As noted in Section 8 below, Poddar (1999) has recently proposed an interesting approach to cross-border issues which might prove of more general applicability although we shall discuss it here in only in the Indian context.

**Table 2**  
**Features of Alternative “Federal” VAT Models**

<b>Feature</b>	<b>Independent VATs</b>	<b>Dual VATS</b>	<b>Joint VATs</b>	<b>CVAT</b>
Rate autonomy	Yes	Yes	No	Some
Collection incentive	Strong	Strong	Unknown	Unknown
Administrative requirements	High	High	Lower	Moderate
Administrative costs	High	Depends on how done	Low	Moderate to high
Need for central administration	No	No, but lower cost	No, but probable	Probably
Need for single administration	No	No	Yes	No
Need for interstate administrative cooperation	High	Limited	No	No
Need for central-state cooperation	No	Yes	Complete	Yes
Revenue distribution	Independent	Independent	Formula	Essentially independent
Need for clearing of some credits	No	No	No	Yes
Potential for interstate evasion	High	Restricted	No	Restricted
Cross-border shopping a problem	Yes	Yes	No	Yes

too much to expect an equivalent relationship (or quality of administration) to exist soon in most developing countries.

Clearly, a single central administration and a common base (as in Canada's personal income tax system) would also be ideal, but this degree of convergence is not, in our opinion, essential. What Canadian experience does suggest *is* more critical is either unified audit or 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.

## ***B. The CVAT Approach.***

What can be done when there is no realistic prospect of “good” tax administration in the near future, especially at the sub-national level? As Varsano (1995, 2000) and McLure (2000) have shown, a promising approach is to impose what is in effect a supplemental central VAT, which McLure has called the “compensating” VAT or CVAT. This simple proposal has the major virtue of protecting the revenue when tax administration (at all levels of government) is far from well-developed. Specifically, it reduces the risk that households (and unregistered traders) in any state can dodge state VAT by pretending to be registered traders located in other states.<sup>38</sup>

How might such a CVAT work? Briefly, assuming that states can levy their own independent VAT rates -- a central objective of the system -- CVAT would 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 not only international but interstate sales, but the latter would be subject to the central CVAT (as well as the 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.<sup>39</sup> Registered purchasers in the other state would of course be able to credit CVAT against central VAT. The results of this procedure are twofold. First, the central government, which first levies CVAT and then credits it, would gain no net revenue from it.<sup>40</sup> Second, the state VAT applied to resale by the purchaser would be that of the destination state. In other words, the results are exactly the same as in the GST-QST case described above -- a destination sub-national VAT is applied -- but the CVAT now acts to protect state revenues from some obvious frauds.

This simple system seems to make sub-national VATs quite feasible and potentially attractive -- at least in large federal countries in which states have major expenditure roles, the VAT is the principal source of actual and potential revenue, and tax

---

<sup>38</sup> Keen (2000) recently elaborated the alternative VIVAT (“viable integrated VAT”) proposal originally put forward by Keen and Smith (1996) for the special circumstances of the European Union (EU), and Keen and Smith (2000) restate the merits of this approach, as they see them, for this case. For the reasons stated in note 8 *supra*, however, we do not discuss the VIVAT proposal further here. (See also Genser [2000] for further discussion.)

<sup>39</sup>This assumes that the state VAT rates are lower than the central rate. If, as in Brazil, the state rates are substantially higher, there might be some residual need for a “clearing house” -- though on an aggregate, not transaction basis -- but this would not seem to be a very difficult problem if, as would seem generally advisable, there is central administration of state VATs.

<sup>40</sup>Presumably, as in Canada, the central government might receive an agreed fee for its services.

administration is not up to Canadian standards.<sup>41</sup> As with the introduction of income tax withholding and indeed the VAT form of sales taxation itself, this new idea in fiscal technology may prove to be one of the key innovations in tax thought of the century. Not only does it appear to provide a sounder fiscal base for decentralization than would otherwise be possible in many developing (and transitional) countries, but it also may offer a promising approach to maintenance of not only of sub-national but of national sales taxes in the era of electronic commerce, although this is obviously not a topic that we can elaborate further on here.<sup>42</sup>

### *C. CVAT versus Dual VAT.*

CVAT is, of course, inherently more centralizing than the dual VAT though this may be a price that has to be paid to implement successful regional VATs in countries in which the qualities of administrative competence and intergovernmental trust emphasized in Bird and Gendron (1998) are inadequately developed. In the dual VAT system epitomized by the GST-QST system in Canada, unlike in the CVAT system, the only VAT rate set centrally is that of the central government itself. There is no need for any ‘central’ edict with respect to either the range or level of state taxes applied to interstate trade since no such taxes are applied.

The dual VAT system may in some instances be superior to the CVAT proposal in terms of administrative simplicity and cost (as a share of revenue). Neither CVAT nor the dual VAT requires traders to identify the state of destination.<sup>43</sup> In addition, neither requires any procedures to track and clear individual tax credits. In this connection, while even a dual VAT system may conceivably produce “excess” credits, it seems much less likely to do so than the CVAT, precisely because of the over-arching central VAT, as McLure (2000) explicitly recognizes.<sup>44</sup> 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

---

<sup>41</sup> As noted earlier, more homogeneous or smaller countries might be better advised on the whole to follow the “German” (or HST) approach to sharing VAT revenues rather than attempt to introduce any more complex system of sub-national VATs. A question that requires further exploration is whether there is a minimal size of government that can levy an independent VAT surcharge. While cross-border shopping would obviously limit rate variability in metropolitan areas, this question is important in less developed countries – for example, some in Africa – in which expenditure functions such as education are being decentralized even to quite small rural governments which have no access to significant local revenues.

<sup>42</sup> McLure (2000) notes this prospect in passing; he has elsewhere discussed in more detail the problems posed for sales taxes by the advent of electronic commerce (see McLure 1997).

<sup>43</sup> Although Bird and Gendron (1998) mentioned approvingly both the EU practice of requiring that the registration number of registered purchases 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 any sub-national VAT more feasible.

<sup>44</sup> See *supra* note 40.

they are non-residents or not.<sup>45</sup> Another important feature of the dual VAT system as applied in Canada is that the inclusion of the central VAT in the tax base of the sub-national VAT provides at least some direct financial incentive for even sub-national administrators of such a system like the MRQ to pay close attention to the proper application of the central tax.

Finally, the CVAT may not provide sufficient room for the various compromises that will likely be needed in order to move from the low-level equilibrium (poorly designed and poorly run tax systems) that now prevails in many countries to a workable system that will deliver the goods in the sense of both generating adequate revenues and 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. As Canadian experience demonstrates, the dual VAT system can easily accommodate even states that do not levy VAT (such as the province of Alberta) as well as some degree of difference in VAT bases with respect both to zero-rating final services and crediting input taxes (as in Québec). Conceptual purists may not like the effects on efficiency of such policy flexibility, but real-world politics, we suggest, may often require such flexibility if major policy reforms such as the introduction of sub-national VATs are to be implemented. On the whole, the dual VAT approach seems most able to accommodate such compromises because of its greater tolerance for variation and less-than-perfect agreement amongst the various governments concerned, as real-world experience in Canada eloquently demonstrates.

Against this background, we now turn to consider the current situation with respect to state sales taxation in three large developing federations – Brazil, Argentina, and India.

## **VI. BRAZIL: THE TROUBLED PIONEER<sup>46</sup>**

The first country to introduce a full-fledged VAT was not France (which had indeed pioneered with this form of taxation but did not initially carry it through the retail stage). Perhaps surprisingly, that country was Brazil (Guérard 1973). Indeed, Brazil liked the idea of a VAT so much that it introduced not one VAT but several—one for the

---

<sup>45</sup> Of course, CVAT can do without this distinction also if taxes on sales to unregistered traders are divided among jurisdictions in accordance with some formula. While the treatment of such sales is not discussed further here, such treatment would move the system closer to one of “revenue-sharing” – like the HST discussed earlier.

<sup>46</sup> Earlier versions of some of the material in this and the next two sections may be found in Bird and Gendron (1997) and Bird (2000).

federal government (the IPI) and one for each of the state governments (the ICMS).<sup>47</sup> The federal IPI was essentially a rather selective tax applied at various rates to manufactured goods. In 2000, the legislated standard rate of IPI was (in tax-inclusive terms) 17 percent, or 20.48 percent in tax-exclusive terms. The ICMS, although it too excluded many services, had a broader base and applied through the retail stage, but still fell far short of anyone's idea of a "good" VAT – for example, credits were severely limited and there was much cascading.

States can set their own rates on intrastate trade, subject to federally-determined floors and ceilings (and some interstate agreements). In 2000, for example, state VAT rates (tax-inclusive) varied from the "standard" (floor) rate of 17 percent to 25 percent. The federal government establishes the rates for interstate trade, designing them to reduce tax exporting. In 2000, these rates were set at 9 percent and 11 percent (tax-inclusive) depending on the region, with the lower rate applying to sales to poorer states. Since the state of import offsets the tax paid to the state of origin against its own tax, imports are subject to additional tax equal to the difference between the interstate rate applied and the rate of the importing state. However, importing states from which goods are subsequently exported overseas (and hence zero-rated) clearly lost through this system since they had to refund taxes that had in fact been paid to other states (Longo, 1990).

It soon became clear that Brazil's enthusiastic adoption of VATs at two levels had resulted in a series of complex technical and administrative problems as to how to apply different VATs in different states in addition to a federal VAT.<sup>48</sup> Over the years, these problems were in part resolved in various (and ultimately unsatisfactory) ways. For example, the overlap in taxes was reduced by confining the federal IPI essentially to the manufacturing stage. In part, the problems were simply ignored, perhaps because the resulting distortions in resource allocation seemed unimportant compared to those resulting from inflation. And in part, issues were avoided by various unsatisfactory administrative fixes such as the introduction of some border controls between states.<sup>49</sup>

Eventually, however, the resulting patchwork quilt—perhaps a better analogy would be a blimp with a lot of chewing gum patches—became so unsatisfactory that sales tax reform has again risen high on the fiscal agenda in Brazil in recent years. Concern over "fiscal wars" between states and rampant evasion through such colorful practices as

---

<sup>47</sup> IPI (Imposto sobre Produtos Industrializados) is levied by the federal government on industry, and ICMS (Imposto sobre operacoes relativas a Circulacao de Mercadorias e Servicos) is levied by the states on agriculture, industry, and some services. In addition, another tax, the ISS (Imposto Sobre Servicos) is levied on a gross receipts basis by municipalities on a variety of industrial, commercial, and professional services, and there are also a number of other taxes on financial transactions, retail sales of fuel and so on that are not discussed here.

<sup>48</sup> A large share of federal VAT revenues (57 percent) must be shared with state and municipal governments under constitutionally-mandated revenue-sharing measures that transfer relatively more to the poorer states (Afonso and de Mello 2000).

<sup>49</sup> For discussion, see Purohit (1994) and Shome and Spahn (1996).

“tax tourism” (cross-border shopping) and “invoice sightseeing” (false interstate sales) has led to a number of proposals for reform of the present system.<sup>50</sup>

As Shome and Spahn (1996) stress, at present in Brazil the origin principle applies with respect to interstate trade. Moreover, there is no meaningful conceptual or administrative integration between the federal and state versions of the VAT. Brazil in a sense thus has the worst of both worlds. It has all the problems of dealing with cross-border trade that have, for example, bedeviled the EU.<sup>51</sup> In addition, it also has excessive compliance and administrative costs, tax exporting and tax competition -- problems that are often alleged to be inevitable byproducts of such “dual” VAT systems. As mentioned, some attempt has been made to alleviate the distortionary effect of the origin principle by imposing a standard rate on interregional trade with a lower rate on shipments to the poorer states), but it is unclear that the poorer states actually benefit from this provision, and it is all too clear that there are significant administrative, revenue, and economic complications arising from the present system (Longo 1990).

To replace this system, the federal government initially proposed to replace the IPI by a new federal ICMS which would be collected together with a revised state ICMS on the same base as a unified VAT at a uniform national rate consisting of a federal rate (set by the federal government) and a uniform state rate with the revenues to be distributed on a destination basis (Silvani and dos Santos 1996). The allocation of the “state” part of the VAT collections was left open to the decision of the National Senate (in which state interests are strongly represented), which could decide to allocate the revenue to the producer state (origin), the consumer state (destination), or to divide it between the two on some basis. After considerable debate, the state ICMS was substantially revised to eliminate significant elements of taxation on exports and investment in the existing system (Amorim 1996), with the federal government guaranteeing that no state would lose revenue as a result of the change. Nonetheless, there still remain substantial elements of cascading in the ICMS.

Although the two key questions of integrating the IPI and ICMS systems (vertical coordination) and developing a system for dealing with interstate transactions (horizontal coordination) were left open, on the whole it is probably not misleading to compare this federal proposal to the “common” VAT system recently proposed by the European Commission (Smith 1997) or the “harmonized” VAT (HST) in some Canadian provinces. The so-called CVAT (see Section 5) as originally proposed by Varsano (1995) – see also Varsano (2000) – was also seriously discussed in the Congress and appeared to many to offer a more promising method of dealing with the problems posed by state VATs by moving them to a destination basis while leaving the key political responsibility for the tax more clearly at the state level. In the end, however, neither proposal for change was accepted, and the sales tax problem in Brazil remains essentially unresolved.

---

<sup>50</sup> Some recent proposed reforms are discussed in Afonso (1996), Shome and Spahn (1996), Silvani and dos Santos (1996), Serra and Afonso (1999), Varsano (2000), and Afonso and de Mello (2000).

<sup>51</sup> See, for example, Cnossen (1983) and Cnossen and Shoup (1987).



## VII. ARGENTINA: A NEW FISCAL CONSTITUTION?

Fear of difficulties similar to Brazil's has perhaps been one reason for delaying desirable sales tax reforms in two other developing federal countries, India and Argentina. In Argentina, which, unlike Brazil, already has a fairly satisfactory federal VAT, a 1993 federal-provincial agreement (the Pacto Fiscal) required the abolition of the provincial gross receipts taxes and their replacement by a retail sales tax by 1996.<sup>52</sup> Although in the end the completion of this process was postponed, the ensuing discussion led to proposals from the most important province (Buenos Aires) for a provincial-level VAT and to considerable discussion on the merits and disadvantages of this approach.<sup>53</sup>

Most taxes in Argentina are collected by the central government, although a substantial share of these collections flow through to the provinces through the so-called "coparticipación" (revenue-sharing) system. The tax on gross receipts is by far the most important tax collected by the provinces themselves. Sixty percent of all revenues from this source are collected in the province and (the separate) municipality of Buenos Aires, with most of the remainder being collected in a few other large provinces. This antiquated tax is levied at various rates on different activities. The rates are set by the provincial governments. As a first step in the process of changing the gross receipts tax to a "retail" sales tax, most provinces abolished or reduced their taxes on primary and some industrial activities. As of 1995, for example, the tax on primary production had been eliminated completely in six provinces and reduced to rates of 1 percent or less in 20 of the 24 provinces, while the tax on industry had generally been lowered to 1.5 percent, compared to the general rates of 2.5 percent on wholesale trade, and 3.5 percent on retail trade and services.<sup>54</sup>

This change is obviously desirable in principle since it reduces economic distortions. From the point of view of strengthening provincial revenues, however, the effects of replacing the existing gross receipts tax were less clearly desirable. The national government estimated that a 3.5 percent rate on retail sales would produce the same revenue as the existing tax, but other estimates suggested that the required replacement rate on the feasible tax base may be as high as 7 percent on average, with the Municipality of Buenos Aires and some provinces requiring rates as high as 10 percent (Gaggero et al. 1994; Rezk 2000). Clearly, adding a provincial retail tax of this level to a

---

<sup>52</sup>. This Section relies heavily on World Bank (1996), as updated by subsequent discussions with Argentine experts.

<sup>53</sup> Many different proposals have been under discussion in Argentina: see, for example, Gaggero et al. (1994), Gomez Sabaini and Gaggero (1997), Fenochietto (1998), McLure (1998), Poder Ejecutivo Nacional (1999), Schenone (1999), Consejo Empresario (2000), Rezk (2000), and, especially, Piffano (1999, 2000). As in the case of the other countries touched on in this paper, space does not permit a detailed evaluation of the many interesting ideas that have been raised in this on-going discussion.

<sup>54</sup>. The gross receipts tax, even simplified to the point it was in 1995, is not a simple tax: laying out the rates and exemptions for the 24 provinces took 20 pages of small type!

federal VAT of 21 percent is not something that is either desirable or likely to be politically or administratively feasible in Argentina.<sup>55</sup>

Nonetheless, in principle the provinces as a group should be able to implement the proposed new tax at relatively little revenue risk. Since in practice most of the revenue in any new provincial sales tax system, whether the tax takes the form of an RST or a VAT, will continue to be collected from established larger pre-retail firms (as is currently the case), there seems little reason to expect a dramatic change in either tax evasion or tax revenues as a result of this change.<sup>56</sup> Nonetheless, Gómez Sabaini and Gaggero (1997) argued that it would be more sensible from the point of view of reducing administrative and compliance costs to replace the independent federal (VAT) and provincial (quasi-RST) taxes by either independent provincial VATs or a more uniform joint federal-provincial VAT along the lines proposed in Brazil. They further suggest that any such sub-national VATs should be on a destination basis, with the problem of inter-provincial sales dealt with by allocating revenues in accordance with some macro-level consumption indicators. Any such solution would clearly be more feasible with the joint version of the tax and would require a high degree of agreement between the federal and various provincial governments.

Although the CVAT proposal set out briefly in Section 5 above both requires less such agreement and affords more provincial revenue autonomy, it is still clear that the main “producing” provinces (for example, Buenos Aires) would lose revenue if the provincial sales tax were shifted from an origin to a destination basis. Any change that could command majority support would thus seem to require a creditable “revenue guarantee” presumably from the federal government.<sup>57</sup> Given the current situation in Argentina, however, it seems unlikely either that the federal government would be in a position to give such a guarantee or that, if it did, its offer would be viewed as credible by many of the provinces. Similar conflicts between provinces and between the federal and

---

<sup>55</sup>. For example, Gómez Sabaini and Gaggero (1997) recommended that the maximum combined federal and provincial sales tax rate should be less than 20 percent, although they recognized that revenue needs may make this a medium rather than a short-term goal.

<sup>56</sup>. Most Argentine sales taxes are collected at the pre-retail stage. Under the so-called “percepción” system, this is true even of that part of the VAT nominally levied on retail sales. A manufacturer or wholesaler whose ex-tax price to a retailer is, say, 100 pesos is required to charge not only the normal 21 peso VAT on sales but also an additional amount, say, 3 pesos. The additional 3 pesos is then remitted to the government as a sort of “withholding” against the tax the retailer is in principle supposed to charge with respect to his mark-up when he sells to a final consumer. For example, if the ex-tax retail sales price is 120, and the ex-tax cost of inputs is 100, the net tax due on the retail sale at a rate of 21 percent is  $0.21(20) = 4.2$  pesos. The retailer is supposed to remit to the government 4.2 pesos less the 3 pesos already withheld, or 1.2 pesos. If, as is all too likely, the retail sale does not come to the notice of the authorities, at least they have the 3 pesos. The mechanics of this system are similar to a VAT, and as with the VAT in comparison to an RST, one rationale for it is to avoid losing revenue on hard-to-control retail sales.

<sup>57</sup>. Revenue gains (or losses) to particular jurisdictions from tax substitutions are unlikely to have the same magnitude--and may even have different signs--than real economic changes, but it is clearly the visible revenue effects that dominate discussion of these issues even in developed countries (see, for example, Keen and Smith, 1996) although this important question is not discussed in detail here.

provincial governments appear to hamper most other proposals for major sales tax reform in Argentina. Indeed, the most detailed recent analysis of the Argentine situation concludes that it would be preferable to attempt to replace the provincial gross receipts taxes by a variety of other taxes rather than by any form of VAT (Piffano 2000). It seems unlikely, however, that the last has been heard of this subject in Argentina.

## VIII. INDIA: REFORMING SUBNATIONAL FISCAL SYSTEMS

Discussions along somewhat similar lines have been going on in India for years.<sup>58</sup> In 1992 a Tax Reforms Committee (TRC) concluded that the ideal solution to India's sales tax problems would be a single VAT to replace not only the present federal sales tax (the Union excise) but also the state sales taxes (which are, for the most part, imposed at the production level), with the revenue being shared between the levels of government.<sup>59</sup> As an intermediate stage, the TRC (1992) suggested extension of the (proposed) central VAT forward to the wholesale stage, with the "wholesale" component of the VAT being administered by the state governments. The idea was apparently both to extend the central VAT forward to encompass at least the wholesale (basically, large trader) margin and to have this new extension of the VAT administered by the state sales tax administrations, with the state governments keeping the revenue. The main reason the TRC report suggested state administration of the tax on the wholesale margin was owing to a Constitutional provision limiting the power of the central government to go beyond the production stage in levying excise taxes.

In addition to central and state sales taxes, India has a special tax—somewhat confusingly called the "Central Sales Tax" (CST) -- that is levied by exporting states on interstate exports at a uniform 4 percent rate set by central law.<sup>60</sup> In some states, the corresponding rate on "local" sales was as high as 10 percent, so the incentive for fraudulent cross-border transactions is high. The TRC suggested a clearing-house arrangement under which the CST collected would be paid into a central fund and then shared—apparently 50:50, although this was not entirely clear—between importing and exporting states, combined with the extension by importing states of credits for the tax levied by exporting states. Since even the EU has not been able to set up such a clearing-house arrangement so far, the TRC's fall-back position of cutting the CST rate back to its original 1 percent level would seem a more promising approach to reduce the cascading

---

<sup>58</sup> See Khadka and Shukla (1999) for a recent detailed review of the situation in India.

<sup>59</sup> Actually, the proposal included the replacement of the municipal transactions tax (the octroi) and the sharing of the revenues between all three levels of government, but (as in the Brazilian case) the local sales tax is not discussed in the present paper, nor is the peculiar legal nature of the "sales tax" at the central level in India (Purohit 1997). The TRC report was of course concerned primarily with central taxes and dealt only superficially with intergovernmental issues. This and the next few paragraphs are in part based on an early assessment by Bird (1993b).

<sup>60</sup> An important distinction from the superficially somewhat similar system in Brazil is that there is no provision in India for rebating the CST in the importing state.

of the present system.<sup>61</sup> As in Argentina, however, any reduction in the role played by origin-based taxes would obviously not be popular with “producing” states, which gain considerable revenue from the present CST.<sup>62</sup>

More generally, while there is obviously much to be said in favor of the TRC report’s “ideal” solution of a comprehensive VAT with the proceeds shared between all levels of government, it seems most unlikely that such an ideal will be soon attained. Any solution that requires, in effect, a complete restructuring of the intergovernmental finance system would be hard to achieve in most countries. Moreover, without considerable and protracted efforts of analysis and persuasion, it is difficult to envisage any formula distributing the VAT proceeds that would likely prove acceptable in the absence of a much greater degree of homogeneity than prevails, or seems likely to prevail for decades, in India. India is not Germany, and a neat “German solution” of the sort recommended by the TRC report seems unlikely.

Subsequent to the TRC report, discussion on these issues has continued in India.<sup>63</sup> One outcome of this discussion was a recommendation (National Institute 1994) for a system of independent dual VATs. State VATS were to be restricted to the retail stage, with the central VAT being levied only on manufacturers.<sup>64</sup> Subsequent discussions between the states on replacing their sales taxes by VATs centered to a considerable extent on the issue of what to do with the CST as part of a move to a destination-based sales tax.<sup>65</sup> Bagchi (1996), for example, suggested the CST be reduced to 2 percent, with the exporting state keeping half the revenue and the remainder being pooled and

---

<sup>61</sup> Rao and Sen (1996) estimate that tax exportation may be over 40 percent in some states, although this estimate is perhaps on the high side.

<sup>62</sup> It should perhaps be noted that the usual assumption in Indian discussion that exporting states always gain from being able to tax their exports seems a bit odd in the context of proposals for a VAT, one key argument for which is that it “un-taxes” exports. If removing taxes from (international) exports is good, can taxing (interstate) exports also always be good? Although this is not the place to discuss the point in detail, the complete forward shifting assumed in the usual discussion of cross-border taxation seems unlikely to occur in practice whether within a country or between countries. Presumably, the degree of shifting of commodity taxes depends upon market conditions. If, for example, the demand for exports is somewhat elastic, part of the export tax will actually be paid by the residents of the exporting state in one way or another. Indeed, in the polar case of a small open price-taking economy), all of the revenue nominally collected from exports actually comes from the residents of the taxing jurisdiction in one way or another. For example, Indian states with surplus cereals sell mostly to the Food Corporation of India, a semi-monopolistic purchaser, at a fixed purchase price. Export taxes imposed on such sales would appear to fall fully on farmers. Even if some taxes are shifted forward, depending upon the elasticity of demand the state as a whole may be worse off, although its government budget may be better off. On the whole, although some central control is needed to ensure that states do not levy discriminatory taxes on imports, there may be less need to restrict state power to tax exports than is commonly argued.

<sup>63</sup> See for example, Burgess, Howes and Stern (1995), National Institute (1994), Purohit and Purohit (1996), Bagchi (1996, 1997), and Shome (1997).

<sup>64</sup> As mentioned earlier, there are constitutional restrictions on central taxation of retail trade (as well as services and agriculture).

<sup>65</sup> For a review of some of this discussion, see Purohit (1995).

distributed “on an equitable basis” basically to finance a full rebate of the exporter’s tax by the importing states.

More broadly, Burgess, Howes, and Stern (1995) proposed a “dual VAT” as an intermediate option, on a base that is as harmonized as possible. They were quite unclear, however, on the critical issue of whether a deferred payment system, a clearing house system, or (in effect) a revised CST was the best way to deal with interstate trade. In the long run, they suggested that the VAT should become purely a state tax, thus in effect replicating the EU situation.

In 1997, along the lines earlier suggested by Bagchi (1996), a committee of state finance secretaries recommended that the CST should be reduced from 4 percent to 2 percent, with half the revenues going to the exporting state and the other half pooled and shared on the basis of consumption (Poddar 1999). In another discussion, Bagchi (1997) suggested that the long-run solution should instead be a concurrent or dual VAT with a nationally-determined base but independently-set federal and state rates. Again, however, he was uncertain as to how to handle interstate trade, suggesting three possible variants: (1) the deferred payment system; (2) a reduced and pooled CST distributed by formula (in effect, a variant of the clearing-house system; and (3) zero-rating (for state VAT only) on interstate sales. In practical terms, he argued that the second of these solutions is most likely to prove workable.

While all this was going on, several states went ahead on their own and adopted some form of “state VAT.” None of these systems had much success, however, in the absence of an adequate framework, and the leading “VAT” state, Maharashtra, subsequently abolished its much too complex VAT (which was essentially a “subtraction method” VAT for wholesale and retail value added).<sup>66</sup> Over the last few years, much work has been done on how best to implement state VATs. For example, a “model” state VAT law was drafted, although unfortunately it did not resolve the interstate trade problem. In 1999, the “Union excise” – the central sales tax – although still essentially levied only on production, was changed to a form of VAT (CENVAT) at a basic rate of 16 percent, with credits on capital goods to be spread over two years.

More importantly, in the same year all state governments agreed that they would introduce a VAT system to replace their existing sales tax systems. The principal motivating factor appears to have been concern over an escalating “fiscal war” between states for tax base through competitive sales tax exemptions and the consequent erosion of revenues (Poddar 1999). Following a scheme suggested by Poddar (1999), an official workshop on VAT suggested a so-called “prepayment system” under which exporters could “prepay” the tax due in the importing state and, on production of the prepayment certificate, the exporting state would zero-rate the sale (Rao and Aggarwal, 1999). This scheme, which may perhaps be called a “prepaid VAT” or PVAT, is an interesting alternative to the CVAT system discussed in Section 5 above. Essentially, all registered sellers in any state would have to apply the tax applicable in that state to all sales (except

---

<sup>66</sup> Kerala introduced a limited VAT in 1993, followed by Maharashtra in 1995. Both subsequently dropped the VAT features of their taxes, however. Partial state VATs of various sorts were also introduced in Andhra Pradesh and Madhya Pradesh (Purohit 2000).

exports abroad) whether within or outside the state *unless* the buyer provides a certificate showing that he has already paid the applicable tax in another state. Firms wishing to import goods from another state would thus in effect have to make two payments in order for the goods to be shipped by the out-of-state firm – one to the firm for the ex-tax price of the goods and one to the state of residence for the tax applicable to such sales if made within the state.

The PVAT system appears to have several important advantages in the Indian system. First, it does not require either state to enforce the taxes of other states or to provide credits for such taxes. Second, it does not require any exchange of information with the central government. Third, it applies a destination-base sales tax. Fourth, it fits in well with the existing payment system, under which payments are commonly made by bank-issued documents (challahs). All that would be needed to implement a PVAT would be to require purchasers to supply two documents instead of one. One would be the present challah (payment order to the firm) and the other would be a copy of the payment order to the state for the sales tax. States already require documentation of both the origin of production and the location of consumption in order to verify inter-state trade. The PVAT system simply adds to this the requirement of proof of payment of tax in the consumption state. Finally, and importantly, this system would create incentives for both the exporting and importing states to police transactions. Exporters would clearly be interested in verifying that in fact importing states did receive the tax, and importers would equally be interested in ensuring that they were being paid the correct amounts of tax.

Although this system has not been definitively accepted, it appears that India is well on the way to introducing state VATS. Initially, all states were to move to a VAT by 2000, but administrative problems and concern over the revenue implications of the change delayed the scheduled implementation, first to 2001, and some further delays may perhaps be expected. Most states have begun to implement some of the agreed preliminary measures, such as the uniformity of “floor rates” on particular classes of goods, but as yet there still does not seem to be any clear consensus on how best to deal with the problems of interstate trade.<sup>67</sup> In 2000, the central government accepted a proposal by the National Institute of Public Finance and Policy and announced that the CST would be reduced from 4 percent to 1 percent by 2003. More recently, it has been stated that the CST would be reduced to 3 percent by 2003 and to 1 percent by 2004, and then subsequently zero-rating would be introduced. It appears that the Union government will compensate states that lose as a result of these changes, although the details are not yet clear.

In addition, a VAT Council of States, consisting of all state finance ministers and chaired by the Union finance minister was established to coordinate all policy issues related to the introduction of state VATs. A similar council was set up to deal the implementation issues. There may still be some distance to go, and some important

---

<sup>67</sup> Useful recent discussions of this and other issues may be found in Khadka and Shukla (1999), Rao and Aggarwal (1999), and Poddar (1999). Again, it should be emphasized that the present brief account cannot do justice to the richness and complexity of the on-going debate on these issues in India.

issues in relation to interstate trade still remain to be resolved, but India, it seems, may at last be on the way to resolving its long-standing sales tax problems at least to some extent.<sup>68</sup> Even those states (net interstate exporters) that gain from the present system of origin taxation through the CST seem sufficiently concerned with the threat of international competition in India's recently opened economy to be willing to accept a move to a full destination-based sales tax system.

**Table 3**  
**Comparison of Some Features of Sales Tax Regimes**

	<b>Canada – GST-QST</b>	<b>Canada – HST</b>	<b>Brazil</b>	<b>Argentina</b>	<b>India</b>
Good federal VAT	Yes	Yes	No	Yes	No
Federal VAT revenue to states	No	No	Yes by revenue-sharing formula	Yes as part of general revenue-sharing	No
State taxes on destination basis	Yes	Yes	No	No	No
State rate setting autonomous	Yes	No	Yes (except for interstate trade)	Yes	Yes (except for CST)
Good administration	Yes	Yes	No	No	No
Good cooperation between central and state governments	Yes	Yes	No	No	No

To further sum up the brief review in the last few sections of recent developments in some major federal developing countries, Table 3 summarizes what appears to be the current situation in India, Brazil, and Argentina, contrasting these countries with the GST-QST system in Canada on one hand and the HST system on the other. On the whole, in India, as in Brazil and Argentina, any move to a decent VAT system with two levels of government applying independent VATs appears to require two preconditions. The first is a way to implement the destination principle on interstate trade. This problem has already been discussed. It appears to be technically resolvable when there is a high enough degree of intergovernmental trust and cooperation and relatively competent administration. The difficulty is that these conditions are hard to satisfy in most developing countries. The second precondition is some means of compensating "losing" states for revenue losses implied by the transition. Interestingly, neither of these

<sup>68</sup> For a recent review of both central and state VAT issues in India, see Purohit (2000).

problems had a very high profile in the case of Canada, the only developed country with a two-tier sales tax system. We shall turn in the next section to discuss the second of these problems and some other unresolved issues with respect to state VATs.

## IX. SOME UNRESOLVED ISSUES

As the discussion of the Brazilian, Argentine, and Indian cases suggests, several important questions appear to remain open in this debate, including the compatibility of different systems within one country and the possibility of imposing a “virtual VAT” in situations in which no central VAT is in place. Four such critical issues that seem central to further development in this area are mentioned here.<sup>69</sup>

First, no one has a good way to deal adequately with the problem of interstate purchases by final consumers. In assessing these proposals in any particular setting, it is therefore critically important to have a clear idea of the share of trade that takes place between registered (or potentially registered) firms *and* that is subject to VAT. In principle, this share will be affected by such factors as tax thresholds, administrative efficiency, the level of development of the economy, and the proximity of large cities to jurisdictional borders. On the whole, it seems likely that this share will be higher in more developed countries such as Canada, the United States, and the European Union. *All* these schemes might therefore work best--like almost everything else--in such countries. (including, interestingly, the United States, the last major hold-out against even a central VAT). What this suggests is that the dual VAT may therefore be preferable to CVAT in developed countries, with the reverse holding for developing countries.

Second, all the academic participants in this discussion appear to agree that a single sales tax administration is preferable to dual administrations, and that, while it might even be feasible (as is in fact done in Canada) for that administration to be at the regional level, a single central administration would be best. Unfortunately, policy-makers in most jurisdictions, and particularly in developing and transitional countries, seem less ready to agree to give up the ability to control jobs. While a single administration should definitely be cheaper and more efficient, it should thus perhaps be emphasized that it does *not* seem to be necessary. Nor, for that matter, is an absolutely identical tax base necessary, though it too would undoubtedly be desirable (and more so in the CVAT than in the dual VAT scheme). As in Canada’s GST-QST system, a country might well be willing to pay the price of some degree of base variation--like that of maintaining two different administrations--in the interests of achieving political agreement.<sup>70</sup>

Another important administrative issue that needs to be further explored is whether it might be possible to achieve the desired administrative effects with respect to interstate

---

<sup>69</sup> This Section is based largely on Bird and Gendron (2000).

<sup>70</sup> Even in Canada, of course, there are still five provinces in which there are separate provincial and federal sales tax administrations.



audit trails and so on through an agreement between states without the over-riding presence of a central VAT? In principle, as McLure (2000) suggests, an interstate consortium could operate a CVAT system--or for that matter, as in the present EU system, a deferred-payment system--without either the additional revenue security provided by the CVAT mechanism or the additional enforcement possibilities provided by a parallel central VAT. In practice, however, it is far from clear that states would have adequate incentives to participate in such a consortium. Experience with interstate co-operation in tax matters without the guiding hand of some overarching authority is not very encouraging.<sup>71</sup>

The dual VAT approach obviously requires a central VAT--although perhaps one that collects no revenue--and some degree of information exchange and co-operation amongst tax authorities. The CVAT requires more substantial agreement among participating states, some central (or agreed) limits on rates, and probably central (or consortium-based) operation of CVAT itself. It also seems more dependent on rate and base uniformity than the dual VAT.

This comment leads immediately to a third question, namely, the importance of revenue. In the end, from a government perspective, revenue is what matters most insofar as taxes are concerned. As Keen and Smith (2000) have properly emphasized, the fate in any real-world situation of any of the possible redesigns of central-state or interstate taxation discussed here is thus likely to turn on who gains and who loses, and by how much. In the case of Canada, for example, the adoption of the centralized HST in three small provinces was made possible only by the agreement of the federal government to make a substantial revenue transfer to those provinces. In Brazil and India, to mention only two prominent examples, one of the most difficult problems in designing and implementing a better sales tax system arises from the substantial revenue transfers involved.<sup>72</sup> Obviously, the importance of this factor and its impact upon policy outcomes will depend upon such factors as the pre-reform and post-reform rate levels and the general fiscal positions of the various actors involved. Nonetheless, it may not be too far-fetched to suggest that as a rule when fiscal circumstances permit some compensatory transfers to be made to losers, as was done in Canada, the medicine of a more rational tax system seems likely to slide down more easily. Again, as is so often true, the life of fiscal reformers seems likely to be much more difficult in developing countries than in such developed regions as Western Europe or North America.

Finally, recall that one of the major lessons of the Canadian experience is simply that not everyone has to follow the same path. In the end, something like the dual VAT approach, broadly interpreted, may turn out to be a viable compromise solution even in countries with relatively poor administrations. It is, we think, important not to let the

---

<sup>71</sup> The example of the United States comes to mind: see Duncan and McLure (1999) and Bucks (1999).

<sup>72</sup> See the earlier discussion of these countries in Sections 6 and 8. This problem did not come up in the case of the QST in Canada in part because of the level of the previous provincial sales tax rate and perhaps in part because the (newly-taxed) service sector was much more important in Québec.

tendency and preference of tax specialists to devise conceptually neat schemes to obscure the importance in the real world of tax policy of being able to accommodate different solutions in different regions--solutions that can be better tuned to the different circumstances of different states.

As the example of Canada shows, for instance, one can have both a dual VAT (as in Québec) and a “harmonized” (or “common”) VAT (as in several Atlantic provinces). Indeed, one can even have member states such as Alberta with no VAT at all, or other members (the other five provinces) with quite independent forms of sales taxation. The Canadian system is complicated. It lacks conceptual purity, and no doubt, violates some efficiency and administrative criteria, but it works. Could the same be said for the CVAT approach? Would CVAT work as advertised unless all the relevant jurisdictions took part? Although the question needs closer study, at first glance the answer appears to be negative. Even countries with relatively poor administrations like those for which the CVAT proposal was developed might therefore in the end wish to consider the dual VAT approach of essentially independent VATs in some states, perhaps combined with “shared” VATs in others as a possible alternative. Although the acceptability of such asymmetric proposals will obviously vary from country to country, depending upon the extent to which such regional differentiation is acceptable, at the very least this important issue calls for further study and investigation.

## **X. WHAT MAY THE FUTURE HOLD?**

The debate on how best to design and implement a sub-national VAT is far from settled. The final answer may turn out to be—not too surprisingly—that different contexts call for different solutions. What a country can, should, and will do obviously depends on many factors. Trade patterns, the location and size of the country and its subnational jurisdictions, the relative importance of “Business to Business” (B2B) versus “Business to Consumer” (B2C) transactions in the tax base, the quality of administration, the degree of trust and feasible coordination, the desire for local autonomy, the tolerance for asymmetry, the offsetting nature of equalization, the extent and nature of revenue shifts, and, not least, the existing sales tax structure—all these things will determine what happens. The road to feasible subnational VATs may be long and winding in many countries. But, as has often been noted, the longest journey starts with a single step and, with respect to subnational VATs, the countries discussed here are already much further down this path than a few steps.

In striking contrast to how the fiscal world saw matters until very recently, the question of sub-national VATs is now definitely on the policy table around the world. We still have much to learn about this subject, but we have already learned much over the last decade—not least that the answers are more likely to lie in systems carefully “customized” for local circumstances rather than in any one uniform system.

## REFERENCES

- Afonso, J. (1996) "Reform of the State VAT in Brazil," Fundacao de Assistencia e Previdencia Social do BNDES, Rio de Janeiro.
- Afonso, J. and L. de Mello (2000) "Brazil: An Evolving Federation," Paper presented to IMF Seminar on Decentralization, Washington.
- Amorim, R. (1996) "Impacts of ICMS Exemption on Primary and Semi-Finished Goods Exports and Machinery, Equipment and Production Input Purchases on the Brazilian Economy," Banco Fenicia, Rio de Janeiro.
- Baer, K., V. P. Summers, and E.M. Sunley (1996) "A Destination VAT for CIS Trade," *MOCT-MOST, Economic Policy in Transitional Countries*, 6: 87-106.
- Bagchi, A. (1996) "Harmonizing Sales Taxes in a Federation - Case Studies: India and Canada," Working Paper No. 9, National Institute for Public Finance and Policy, New Delhi.
- Bagchi, A. (1997) "Tax Assignment in the Indian Federation: A Critique," National Institute for Public Finance and Policy, New Delhi.
- Bird, R.M. (1993a) "Threading the Fiscal Labyrinth: Some Issues in Fiscal Decentralization," *National Tax Journal*, 46: 207-27.
- Bird, R.M. (1993a) "Federal-Provincial Taxation in Turbulent Times," *Canadian Public Administration*, 36: 479-96.
- Bird, R.M. (1993b) "Tax Reform in India," *Economic and Political Weekly*, 28: 2721-26.
- Bird, R.M. (1994) *Where Do We Go from Here? Alternatives to the GST* (Toronto: KPMG Centre for Government).
- Bird, R.M. (1999) "Tax Policy and Tax Administration in Transitional Countries," in G. Lindencrona, S-O Lodin, and B. Wiman, eds., *International Studies in Taxation: Law and Economics* (London: Kluwer Law International).
- Bird, R. M. (2000) "Rethinking Subnational Taxes: A New Look at Tax Assignment" *Tax Notes International*, 20: 2069-96.
- Bird, R.M. (2000a) "Subnational Taxes: Potentials and Problems," in S.J. Burki and G. Perry, eds., *Decentralization and Accountability of the Public Sector*, Annual World Bank Conference on Development in Latin America and the Caribbean 1999 (Washington: World Bank).

- Bird, R.M. (2000b ) “Transfers and Incentives in Intergovernmental Relations,” in S.J. Burki and G. Perry, eds., *Decentralization and Accountability of the Public Sector*, Annual World Bank Conference on Development in Latin America and the Caribbean 1999 (Washington: World Bank).
- Bird, R. and P.-P. Gendron (1997) “Dual VATs and Cross-Border Trade: A Review of International Experience,” Discussion Paper No. 13, International Centre for Tax Studies, University of Toronto.
- Bird, R. M. and P.-P. Gendron (1998) “Dual VATs and Cross-border Trade: Two Problems, One Solution?” *International Tax and Public Finance*, 5: 429-42.
- Bird, R.M. and P.-P. Gendron (2000) “CVAT, VIVAT and Dual VAT; Vertical ‘Sharing’ and Interstate Trade,” *International Tax and Public Finance*, 7: 753-61.
- Bird, R.M. and J.M. Mintz (2000) “Tax Assignment in Canada: A Modest Proposal,” in H. Lazar, ed., *The State of the Federation, 2000-01: Toward a New Mission Statement for Canadian Fiscal Federalism* (Montreal: McGill-Queens University Press).
- Bird, R.M. and F. Vaillancourt (1998) *Fiscal Decentralization in Developing Countries* (Cambridge: Cambridge University Press).
- Bovenberg, L. (1994) “Destination- and Origin-Based Taxation Under International Capital Mobility,” *International Tax and Public Finance*, 1: 247-73.
- Breton, A. (1996) *Competitive Governments* (Cambridge: Cambridge University Press).
- Bucks, D. R. (1999) “Multistate Tax Commission,” in J. Cordes, R. Ebel, and J. Gravelle, eds., *The Encyclopedia of Taxation and Tax Policy* (Washington: Urban Institute Press), pp. 245-47.
- Burgess, R., S. Howes and N. Stern (1995) “Value-Added Tax Options for India,” *International Tax and Public Finance*, 2: 109-41.
- Canada (1996) *Harmonized Sales Tax*. Technical Paper. Issued jointly by Governments of Canada, Nova Scotia, New Brunswick, Newfoundland and Labrador (Ottawa: Government of Canada).
- Capehart, R. (2000) “Proposing a State VAT: The Political Experience in West Virginia,” in D. Kenyon, ed., *Proceedings 92<sup>nd</sup> Annual Conference on Taxation* (Washington: National Tax Association).
- Cnossen, S. (1983) “Harmonization of Indirect Taxes in the EEC,” in C. McLure, ed., *Tax Assignment in Federal Countries* (Canberra: Centre for Research on Federal Financial Relations, Australian National University).

- Cnossen, S. and C. Shoup (1987) "Coordination of Value-Added Taxes," in S. Cnossen, ed., *Tax Coordination in the European Community* (Deventer: Kluwer).
- Commission of the European Communities (1996) *A Common System of VAT: A Programme for the Single Market* (Brussels).
- Consejo Empresario Argentino (2000) *Propuesto de federalismo fiscal* (Buenos Aires: Consejo Empresario Argentino).
- Cooper, G.S. (2001) "Tax Year in Review – Australia," *Tax Notes International*, 22: 8-11.
- Díaz-Cayeros, A. and C.E. McLure (2000) "Tax Assignment," in M.M. Giugale and S.B. Webb, eds., *Achievements and Challenges of Fiscal Decentralization: Lessons from Mexico* (Washington: The World Bank).
- Due, J.F. (1957) *Sales Taxation* (Urbana: University of Illinois Press).
- Duncan, H. and C. McLure (1999) "Tax Administration: Private and Public Cooperation in State Tax Administration and Promoting Best Policies," in J. Cordes, R. Ebel, and J. Gravelle, eds., *The Encyclopedia of Taxation and Tax Policy* (Washington: Urban Institute Press), pp. 356-57.
- Fenochietto, R. (1998) "El IVA 'compartido'," Paper presented to Secretaría de Equidad Fiscal de la Jefatura de Gabinete de Ministros, Buenos Aires.
- Fox, W.F. (2000) "Subnational VAT or Retail Sales Tax: What is Tax Policy's Panacea?" in D. Kenyon, ed., *Proceedings 92<sup>nd</sup> Annual Conference on Taxation* (Washington: National Tax Association).
- Gaggero, J. et al. (1994) "Sustitución del Impuesto sobre los Ingresos Brutos; una propuesta para la transición," *27as Jornadas de Finanzas Públicas* (Córdoba: Universidad Nacional de Córdoba).
- Gendron, P.-P., J. Mintz, and T. Wilson (1996) "VAT Harmonization in Canada: Recent Developments and the Need for Flexibility," *International VAT Monitor*, 7: 332-42.
- Genser, B. (1996) "A Generalized Equivalence Property of Mixed International VAT Regimes," *Scandinavian Journal of Economics*, 98: 253-62.
- Genser, B. (2000) "VAT Reform in Federal States," in H.-G. Petersen and P. Gallagher, eds., *Tax and Transfer Reform in Australia and Germany* (Berlin: Berliner Debatte Wissenschaftsverlag).

- Gómez Sabaini, J. and J. Gaggero (1997) "Lineamientos para una Reforma del Sistema Tributario Argentino," CITAF No. T-37, Centro Interamericano de Tributación y Administración Financiero, Buenos Aires.
- Guérard, M. (1973) "The Brazilian State Value-Added Tax," *International Monetary Fund Staff Papers*, 20: 118-69.
- Greenbaum, A. (1999) "The Australian GST – A 'Brave New World' for Both Consumers and Business," *Tax Notes International*, 19: 1743-52.
- Ip, I. and J. Mintz (1992) *Dividing the Spoils: The Federal-Provincial Allocation of Taxing Powers* (Toronto: C.D. Howe Institute).
- Keen, M. (2000) "VIVAT, CVAT and All Than: New Forms of Value-added Tax for Federal Systems," *Canadian Tax Journal*, 48: 409-24.
- Keen, M. and S. Smith (1996) "The Future of Value-added Tax in the European Union," *Economic Policy*, 23: 375-411.
- Keen, M. and S. Smith (2000) "Viva VIVAT!" *International Tax and Public Finance*, 7: 741-51.
- Khadka, R. and G.P. Shukla (1999) "Domestic Indirect Taxes in India: Present Status and Future Prospects," *VAT Monitor*, 10: 107-16.
- Kuo, C-Y, T. McGirr, and S. Poddar (1988) "Measuring the Non-neutralities of Sales and Excise Tax in Canada," *Canadian Tax Journal*, 36: 655-70.
- Litvack, J., J. Ahmad, and R. Bird (1998) *Rethinking Decentralization* (Washington: World Bank).
- Lockwood, B. (1993) "Commodity Tax Competition Under Destination and Origin Principles," *Journal of Public Economics*, 52: 141-67.
- Lockwood, B., D. de Meza, and G. Myles (1994) "The Equivalence between the Destination and Non-reciprocal Restricted Origin Tax Regimes," *Scandinavian Journal of Economics*, 96: 311-28.
- Lockwood, B., D. de Meza, and G. Myles (1995) "On the European Union VAT Proposals: The Superiority of Origin over Destination Taxation," *Fiscal Studies*, 16: 1-17.
- Longo, C. (1990) "The VAT in Brazil," in M. Gillis, C.S. Shoup, and G.P. Sicat, eds., *Value Added Taxation in Developing Countries* (Washington: The World Bank).
- López-García, M. (1996) "The Origin Principle and the Welfare Gains from Indirect Tax Harmonization," *International Tax and Public Finance*, 3: 83-93.

- McDonald, J. (2001) "Sales Tax in Russia Ruled Unconstitutional," *Tax Notes International*, 22: 1115-16.
- McLure, C.E. (1980) "State and Federal Relations in the Taxation of Value Added," *Journal of Corporation Law*, 6: 127-39.
- McLure, C.E. (1993) "The Brazilian Tax Assignment Problem: Ends, Means, and Constraints," in *A Reforma Fiscal no Brasil* (Sao Paulo: Fundação Instituto de Pesquisas Econômicas).
- McLure, C.E. (1997) "Electronic Commerce, State Sales Taxation, and Intergovernmental Fiscal Relations," *National Tax Journal*, 50: 731-49.
- McLure, C.E. (1998) "Tax Assignment in Argentina: Conceptual and Practical Issues," Paper prepared for World Bank.
- McLure, C. E. (2000) "Implementing Subnational VATs on Internal Trade: The Compensating VAT (CVAT)," *International Tax and Public Finance*, 7: 723-40.
- Messere, K. (1994) "Consumption Tax Rules," *Bulletin for International Fiscal Documentation*, 48: 665-81.
- Mikesell, J. (1999) "Structure of the Russian Federation's New Regional Sales Taxes," *Tax Notes International*, 18: 1059-68.
- Mintz, J., T. Wilson, and P.-P. Gendron (1994) "Canada's GST: Sales Tax Harmonization is the Key to Simplification," *Tax Notes International*, 8: 661-78.
- Musgrave, R. (1983) "Who Should Tax, Where and What?" in C. McLure, ed., *Tax Assignment in Federal Countries* (Canberra: Centre for Research on Federal Financial Relations, Australian National University).
- National Institute of Public Finance and Policy (1994) *Reform of Domestic Trade Taxes in India: Issues and Options* (New Delhi).
- Neumark Report (1963) "Report of the Fiscal and Financial Committee," in *The EEC Reports on Tax Harmonization* (Amsterdam: International Bureau of Fiscal Documentation).
- OECD (Organisation for Economic Co-operation and Development) (1988) *Taxing Consumption* (Paris: OECD).

- Papke, J.A. (2000) "Rethinking Local Business Taxation: Substituting a State Value Added Tax for the Local Ad Valorem Tax on Business Personal Property," in D. Kenyon, ed., *Proceedings 92<sup>nd</sup> Annual Conference on Taxation* (Washington: National Tax Association).
- Piffano, H. (1999) "Descentralización fiscal y reforma tributaria federal en Argentina," Documento 27, Serie Documentos de Trabajo, CEDI, Fundación Gobierno y Sociedad, Buenos Aires.
- Piffano, H. (2000) "Distorsiones, fraude y otros problemas del IVA subnacional," Universidad Nacional de La Plata.
- Poddar, S. (1990) "Options for a VAT at the State Level," in M. Gillis, C.S. Shoup, and G. Sicat, eds., *Value Added Taxation in Developing Countries* (Washington: World Bank).
- Poddar, S. (1999) "Considerations in the Design of a VAT at the State Level in India," Paper prepared for VAT Seminar for Senior Officials from the Centre and the States, July 1999.
- Poder Ejecutiva Nacional (1999) "Propuesta de Reforma del Regimen de Coparticipación Federal de Impuestos," Buenos Aires.
- Purohit, M. (1994) "Value Added Tax in Brazil," National Institute of Public Finance and Policy, New Delhi.
- Purohit, M. (1995) *Structure and Administration of Sales Taxation in India*, 2nd ed. (Delhi: Gayatri Publications),
- Purohit, M. (1997) "Central Excise Duty and Modified VAT in India," *Tax Notes International*, 14: 1709-1713.
- Purohit, M. (2000) "Road Map for National and Sub-National VATs in India," New Delhi.
- Purohit, M. and V. Purohit, eds. (1996) *Commodity Taxes in India: Directions for Reforms* (New Delhi: Gayatri Publications).
- Rao, R.K. and P.K. Aggarwal (1999) *Report on the Workshop on Value Added Tax* (New Delhi: National Institute of Public Finance and Policy).
- Rao, M. G. and T. Sen (1996) *Fiscal Federalism in India* (Delhi: Macmillan India).
- Rezk, E. (2000) "Federalism and Decentralization Under Convertibility: Lessons from the Argentine Experience," Paper for IMF Seminar on Decentralization, Washington.



- Ring, R.J. (1999) "Consumers' Share and Producers' Share in the General Sales Tax," *National Tax Journal*, 52: 79-90.
- Royal Commission on Taxation (1966) *Report* (Ottawa: Queen's Printer).
- Schenk, A. (1989) "Japanese Consumption Tax: The Japanese Brand VAT," *Tax Notes*, 42: 1625-.
- Schenk, A. and O. Oldman (2001) *Value Added Tax: A Comparative Approach, with Materials and Cases* (Ardley NY: Transnational Publishers).
- Schenone, O.H. (1999) "El IVA provincial," Universidad de San Andres, Argentina.
- Serra, J. and J. Afonso (1999) "Fiscal Federalism Brazilian Style: Some Reflections," Paper presented to Forum of Federations, Mont Tremblant, Canada, October 1999.
- Sherman, D.M (2000) "To Include or Not to Include?" *VAT Monitor*, 11: 101-02.
- Shome, P., ed. (1997) *Value Added Tax in India: A Progress Report* (New Delhi: Centax Publications).
- Shome, P. and B. Spahn (1996) "Brazil: Fiscal Federalism and Value Added Tax Reform," Working Paper No. 11, National Institute of Public Finance and Policy, New Delhi
- Silvani, C. and P. dos Santos (1996) "Administrative Aspects of Brazil's Consumption Tax Reform," *International VAT Monitor*, 7: 123-32.
- Smith, S. (1997) *The Definitive Regime for VAT* (London: Institute for Fiscal Studies).
- Sullivan, C. (1965) *The Tax on Value Added* (New York: Columbia University Press).
- Tait, A.A. (1988) *Value Added Tax: International Practice and Problems* (Washington: International Monetary Fund).
- TRC (Tax Reforms Committee) (1992) *Final Report-Part I* (New Delhi; Ministry of Finance, Department of Revenue).
- Varsano, R. (1995) "A tributacao de Comercio interstadual: ICMS versus ICMS partilhado," Texto par Discussao No. 382, Instituto de Pesquisa Economica Aplicada, Brasilia.

Varsano, R. (2000) "Subnational Taxation and Treatment of Interstate Trade in Brazil: Problems and a Proposed Solution," in S.J. Burki and G. Perry, eds., *Decentralization and Accountability of the Public Sector*, Annual World Bank Conference on Development in Latin America and the Caribbean 1999 (Washington: The World Bank).

World Bank (1996) *Argentina: Provincial Finances* (Washington: The World Bank).

## **Other Papers in the International Studies Program Series\***

### **2001**

*Working Paper Number 01-4* “VATs in Federal States International Experience and Emerging Possibilities,” Richard M. Bird and Pierre-Pascal Gendron, March 2001.

*Working Paper Number 01-3* “Cross Cultural Comparisons of Tax Compliance Behavior,” Ronald G. Cummings, Jorge Martinez-Vazquez, and Michael McKee, March 2001

*Working Paper Number 01-2* “Fiscal Decentralization and Economic Growth,” Jorge Martinez-Vazquez, and Robert McNab, January 2001

*Working Paper Number 01-1* “NAFTA and Mexico’s Tax Policy Reform,” Jorge Martinez-Vazquez, and Duanje Chen, January 2001

### **2000**

*Working Paper Number 00-9* “Making Decentralization Work: The Case of Russia, Ukraine, and Kazakhstan,” Jorge Martinez-Vazquez, John Norregaard, and Era Diablo-Norris, October 2000

*Working Paper Number 00-8* “Municipal Affairs in India: A Critical Appraisal of Selected Issues,” S. Rama Rao, September 2000

*Working Paper Number 00-7* “Incentive Targeting, Influence Peddling, and Foreign Direct Investment,” Kelly Edmiston, Shannon Mudd and Neven Valev, September 2000

*Working Paper Number 00-6* “Budgeting and Fiscal Management in Transitional Economies,” Jorge Martinez-Vazquez and Jameson Boex, September 2000

*Working Paper Number 00-5* “Fostering Subnational Autonomy and Accountability in Decentralized Developing Countries: Lessons from the Papua New Guinea Experience,” Kelly Edmiston, August 2000

*Working Paper Number 00-4* “User Charge Financing of Urban Public Services in Africa,” William Fox and Kelly Edmiston, July 2000

*Working Paper Number 00-3* “IMF Conditionality and Objections: The Russian Case,” Jorge Martinez-Vazquez, Felix Rioja, Samuel Skogstad and Neven Valev, June 2000

*Working Paper Number 00-2* “Intergovernmental Fiscal Relations: Universal Principles, Local Applications,” Richard M. Bird, April 2000

**Working Paper Number 00-1.** “The Tax Reform Experiment in Transitional Countries,”\_Jorge Martinez-Vazquez and Robert McNab, January 2000

## **1999**

**Book:** Fiscal Policy in China: Taxation and Intergovernmental Fiscal Relations, Roy W. Bahl, Jr., 1999

**Working Paper Number 99-3** “Fiscal Decentralization in the Russian Federation during the Transition,” Jorge Martinez-Vazquez and L.F. Jameson Boex, July 1999

**Book:** Fiscal Transition in Kazakstan, Charles McLure, Jorge Martinez and Sally Wallace,1999

**Working Paper Number 99-2** “Intergovernmental Fiscal Relations in Leningrad Region,”\_Roy Bahl and the Intergovernmental Fiscal Relations Team, March 1999

**Working Paper Number 99-1** “Implementation Rules for Fiscal Decentralization,” Roy Bahl January 1999

## **1998**

**Working Paper Number 98-6** “Tax Policy Analysis: The Introduction of a Russian Tax Amnesty,” James Alm, October 1998

**Working Paper Number 98-5** “Modernization of the Tax Administration of the Russian Federation,” Allan Firestone and GSU Tax Administration Team, December 1998

**Working Paper Number 98-4** “Multi-Year Budgeting: A Review of International Practices and Lessons for Developing and Transitional Economies,” L.F. Jameson Boex, Jorge Martinez-Vazquez, and Robert McNab, November 1998

**Working Paper Number 98-3** “Why Levy Discriminatory Excises on Soft Drinks?” Roy Bahl, August 1998

**Working Paper Number 98-2** “Intergovernmental Fiscal Relations in Vietnam,” Charles E. McLure, Jr. and Jorge Martinez-Vazquez, February 1998

**Working Paper Number 98-1** “Discriminatory Taxation of Carbonated Beverages: The Case of Ireland,” Roy Bahl and Mary Beth Walker, February 1998

## 1997

**Working Paper Number 97-8** “Estonia: Fiscal Management and the Budget Process,” Jorge Martinez-Vazquez, January 1997

**Working Paper Number 97-7** “Fiscal Decentralization, Economic Growth, and Democratic Governance,” Jorge Martinez-Vazquez and Robert McNab, October 1997

**Working Paper Number 97-6** “Tax Reform in Transition Economies: Experiences and Lessons,” Jorge Martinez-Vazquez and Robert McNab, July 1997

**Working Paper Number 97-5** “Principios Para Una Estrategia De Descentralizaciòn Fiscal En Nicaragua,” Jorge Martinez-Vazquez, June 1997

**Working Paper Number 97-4** “An Analysis of Alternative Measures of Fiscal Capacity for Regions of the Russian Federation,” Jorge Martinez-Vazquez and L.F. Jameson Boex, June 1997

**Working Paper Number 97-3** “Fiscal Capacity: An Overview of Concepts and Measurements Issues and Their Applicability in the Russian Federation,” Jorge Martinez-Vazquez and L.F. Jameson Boex, June 1997

**Working Paper Number 97-2** “A Methodological Note on the Reform of Equalization Transfers in the Russian Federation,” Jorge Martinez-Vazquez and L.F. Jameson Boex, June 1997

**Working Paper Number 97-1**, “Tax Systems in Transition Economies,” Jorge Martinez-Vazquez and Robert McNab, March, 1997

\*Reprints can be ordered from Paul Benson at 404-651-1144 or [prcpdb@langate.gsu.edu](mailto:prcpdb@langate.gsu.edu).