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10 What Can the United States Learn from the Canadian Sales Tax Debate?

Charles E. McLure, Jr.

10.1 Introduction

The United States has considered introducing a value-added tax (VAT) since at least 1966, most recently for the purpose of reducing the federal budget deficit. Since the United States currently has no federal sales tax, a VAT would be a net addition to the fiscal arsenal of the federal government.

Canada, by comparison, has had a manufacturers' level sales tax (MST) since 1924, and is scheduled to replace that notoriously defective levy with a VAT on January 1, 1991, provided the Senate approves the legislation passed by the House.[1] However, there is such widespread disapproval of the VAT that the Senate may block the legislation—an action it rarely takes. The proposed Canadian VAT is flawed, so badly that some observers feel perhaps the VAT should not be approved, despite the well-known problems with the existing sales tax and the benefits of a well-designed VAT (See Whalley 1989).

The Canadian debate on sales tax reform—like sales tax debates in other countries—has important lessons for the United States. In some respects the Canadian experience merely confirms that of other countries. Some of the lessons are more novel, reflecting the differences in the Canadian context. The purpose of this paper is to discuss the most important of these lessons. While the focus is on the recent debate about what kind of tax should replace the existing Canadian tax, the defects of the manufacturers' tax are also dis-

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1. On December 14, 1990, the Senate approved the legislation, and Canada joined the ranks of VAT countries, as scheduled. In order to convey the sense of uncertainty that prevailed until then, I have not revised the text to reflect this action. The government employed extraordinary constitutional powers to appoint an additional eight members of the Senate to overcome opposition to the VAT.

cussed, since they are relevant for the U.S. debate. At various points lessons will be drawn from the VAT experience—including implementation—of Europe, Japan, and New Zealand, which has perhaps the world's best VAT. I do not discuss alternatives for the United States, such as increases in income taxes or introduction of a (non–Social Security) payroll tax, since to do so would take me too far afield. Not surprisingly, I draw some conclusions for Canada from the debates in Canada and elsewhere.

The traditional U.S. discussion of introducing a VAT has also considered the pros and cons of introducing a federal retail sales tax (RST) instead of a credit-method VAT of the type found in the European Community.[2] More recently a third horse has been added to the race, a subtraction-method VAT, which has commonly been called a business transfer tax (BTT). Interest in the BTT can only be increased by Japan's recent adoption of a 3 percent subtraction-based VAT. It is sometimes suggested that the BTT should extend only through the wholesale level, to avoid trespassing on the fiscal turf of the states. The BTT was also seriously considered in Canada before being abandoned in favor of a traditional credit-method VAT. Section 10.2 briefly describes the basic mechanics of the three retail-level sales taxes (VAT, RST, and BTT) and the two preretail taxes mentioned above (MST and wholesale-level BTT), practical differences in the actual operation of the three retail-level taxes, and the problems with sales taxes such as the Canadian MST or a wholesale level BTT, which stop short of the retail level.[3] The U.S. and Canadian debates are briefly summarized in section 10.3; the remainder of the paper elaborates on key issues in the debates. The Canadian debate focuses largely on defects identified in section 10.2.

One of the most important issues in both the U.S. and Canadian debates is how to introduce a federal sales tax into a federal system in which lower-level governments (states and provinces) already rely on retail sales taxes and resist the idea of federal intrusion into their fiscal preserve. This question, which has been almost totally absent from the discussion in Europe and New Zealand, helps explain the interest in the BTT in both countries. It is the subject of section 10.4.

Liberals in the United States have generally opposed introduction of the VAT, arguing that it would impose a heavy burden on low-income households and be regressive across income classes. These concerns could be lessened by exempting certain products and levying lower rates on "necessities," or by increasing transfer payments to the poor. An expansion of the refundable earned-income tax credit would be the obvious tool to use in implementing the latter policy in the United States. In Canada the zero-rating of basic gro-

2. The mechanics of these taxes are described in section 10.2, which also provides references to further literature.

3. One could include discussions of a single-stage wholesale tax and a credit-method VAT that stops short of the retail level. Nothing much would be gained from doing so, as fortunately no one has suggested such ill-advised levies.

ceries has been proposed, even though a program of refundable income tax credits has been in place since 1986. See section 10.5.

The VAT—and to a lesser extent any broad-based sales tax—has the potential of raising a large amount of money in a way that does not seriously distort economic decision making. If, however, the tax base is shot through with exemptions and differential rates, neutrality will be lost, and complexity will be increased. Canada appears to be headed down a path that will produce a sales tax far inferior to what it could have achieved. Some of the most important problem areas are discussed in section 10.6.

The preparations required for implementation of a sales tax are discussed in section 10.7, and the coordination of Canadian, Mexican, and U.S. sales taxes in the context of a North American free-trade area is discussed in section 10.8. The lessons from the Canadian debate are summarized in section 10.9.

10.2 Alternative Forms of Sales Tax

10.2.1 Retail-Level Sales Taxes

The Basic Mechanics

To see the difference in the three forms of sales tax that extend through the retail level, consider the following simple example. Suppose that a manufacturer produces a product and sells it to a wholesaler for $300. The wholesaler sells the product for $700 to a retailer, who then sells it to the public for $1,000. Value added—the difference between purchases and sales—is $300 in the manufacturing stage, $400 in wholesaling, and $300 in retailing. These transactions and the calculation of value added are described in the top part of table 10.1; the three sales taxes that extend through the retail level, each levied at a (tax-exclusive) rate of 10 percent, are described in the middle part of the table.[4] (In this simple example, it is assumed that the production-distribution process is linear; thus, neither the manufacturer nor the wholesaler makes sales to consumers and no stage sells to earlier stages. Violation of this simplifying assumption creates important differences in the effects of the three types of sales taxes; these are considered later in this section.)

Both the retail sales tax and the credit-method VAT are levied on individual transactions at the time of sale. The RST applies only to the $1,000 of sales to consumers; thus, in the example, $100 is collected from retailers and none from manufacturers and wholesalers, as shown in lines 4–5 in table 10.1. Value added is not actually calculated under the credit-method VAT; rather, tax is levied on sales, but credit is allowed for tax paid on purchases. Thus, for example, the wholesaler has a tentative liability of $70 (10 percent of sales of $700) and credit of $30, leaving a net liability of $40. Adding to this the

4. The part of this example dealing with retail-level taxes is taken from McLure (1989); such examples are developed in greater detail in McLure (1987).

Table 10.1 Alternative Forms of Sales Taxes

	Manufacturer	Wholesaler	Retailer	Total
Basic Transactions (3 Stages)				
1. Sales	$300	$700	$1,000	$2,000
2. Purchases	-0-	300	700	1,000
3. Value Added	300	400	300	1,000
Taxes Extending through the Retail Level				
10-Percent RST				
4. Retail Sales	-0-	-0-	1,000	1,000
5. Retail Sales Tax	-0-	-0-	100	100
10-Percent Credit/Invoice VAT				
6. Tax on Sales	30	70	100	200
7. Tax on Purchases	0	30	70	100
8. VAT Liability	30	40	30	100
10-Percent Subtraction-Method BTT				
9. Sales	300	700	1,000	2,000
10. Purchases	-0-	300	700	1,000
11. Value Added	300	400	300	1,000
12. Business Transfer Tax	30	40	30	100
Pre-Retail Level Sales Taxes				
33⅓-Percent MST				
13. Manufacturers' Sales	300	-0-	-0-	300
14. Manufacturers' Sales Tax	100	-0-	-0-	100
14.3-Percent Wholesale-Level BTT				
15. Sales	300	700	n.r.[a]	1,000
16. Purchases	-0-	300	n.r.	300
17. Value Added	300	400	n.r.	700
18. Business Transfer Tax	42.9	57.1	n.r.	100

[a]Not relevant

$30 collected from the manufacturer and the $30 collected from the retailer gives a total of $100, as under the RST; see lines 6–8 of table 10.1. Because credit can be taken only for tax shown on invoices, this tax is sometimes also called an invoice-based VAT.

The subtraction-method BTT achieves the same result in a different manner, by applying the tax rate to value added calculated at each stage in the production-distribution process; see lines 9–12 of table 10.1. This tax is not, however, levied on individual transactions; rather, it is based on the accounting records of firms.

Treatment of International Trade

It is important to consider what happens if the retailer in the example exports, rather than sells to domestic consumers. Under virtually all extant VATs, a zero rate is applied to exports; that is, exports are "zero-rated." This means that no tax is collected on exports and the tax collected by the whole-

saler is rebated to the retailer; thus, exports enter world trade unencumbered by VAT.

If imports occur at any stage in the production-distribution process, they are taxed, and, except in the case of imports by households, credit is allowed for the tax collected on import at the time of the first domestic sale. Thus, imports are taxed in the same way as domestic production. Exact "border tax adjustments" (BTAs) are also possible under a BTT with uniform rates applied to all value added, but not under one with rates that do not apply uniformly (see also the discussion below).

In principle the same result is achieved automatically under the RST simply by exempting export sales and including imported goods in the base of the sales tax. In fact, this is not likely to be achieved completely since, as noted below, it is generally impossible to eliminate all tax on capital and intermediate goods.

Some Important Complications

While the simple example presented above is useful in understanding the basic mechanics of the three types of sales taxes, it conceals important differences in the way the taxes actually operate. The remainder of this section examines several differences that are especially important for the discussion that follows.

Problems of RST. Not all retail sales are made to households. To the extent taxable sales are made to businesses, there can be an element of "cascading," as taxes collected by retailers are built into the price charged for business inputs. Instead of being neutral, RSTs impose differential burdens on various products, depending on the nature and extent of cascading. Moreover, it is generally impossible to free exports from RST or to burden imports with the same RST as domestic goods.

Various means have been devised to avoid cascading, notably the exemption of certain products and the registration of businesses, who are then allowed to buy tax-free. No system of exemption can eliminate RST from all business inputs. In principle, registration for tax-free purchases can do so, but only by creating administrative complications and opportunities for abuse.

Under the RST the tax authorities get "one bite at the apple"; that is, any tax not collected at the time of retail sale is lost. By comparison, under the VAT tax is collected in increments as products move through the production-distribution process. For this reason it is often thought that the VAT can be levied at higher rates than the RST. In addition, under the credit method, invoices used to verify eligibility for credits provide a mechanism for cross-checking that the RST lacks. These invoices create a paper trail that facilitates audit of the income tax, as well as the VAT. These administrative advantages should not be overemphasized, because of the possibility of claiming credit

for tax supported by bogus invoices and the difficulty of actually making the requisite cross-checks.[5] No tax is truly self-enforcing. But the invoices do help.

For reasons such as these, Canada opted for the multistage VAT, instead of the RST (see Wilson 1987, pp. 25–27).

Exemptions and Zero-Rating under the VAT. In this simple example, in which it is assumed that all value added is subject to the same uniform tax rate, the ultimate results are the same under the BTT as under the conventional credit-method VAT and the (idealized) RST. In a more realistic setting in which there may be exemptions and differential rates, equivalence quickly evaporates. This is most easily seen by considering what happens under the two types of VAT when there is exemption or zero-rating of the one stage in the above example.

Under certain circumstances either exemption or zero-rating can create potentially severe administrative problems. The easiest case is exemption of the entire activity of a business; the exempt business is simply "out of the system," and thus pays no tax on sales and receives no credit for tax paid on purchases. The situation is significantly more complicated for a business that makes both taxable and exempt sales (and thus is in the system). It is necessary to distinguish between purchases related to taxable and to exempt sales, since credit is allowed only for tax paid on the former; in some cases it is necessary to use formulas to apportion taxes on purchases between taxable and exempt activities. A business making zero-rated sales is "in the system," and must bear the same administrative burden as a fully taxable business. But there is no need to distinguish between purchases related to taxable and zero-rated sales, since credit is allowed for taxes on both.

Exemption of retail sales under the credit-method VAT eliminates the tax on the value added at the retail level, but not that collected at earlier stages. By comparison, zero-rating retail sales eliminates the entire tax on such sales. It is equivalent to exemption under the (ideal) RST.

If the wholesale stage is exempt, aggregate VAT liability actually rises, to $130 in the example. Because the wholesaler is not a taxpayer, no credit is allowed for the $30 tax on purchases; on the other hand, the retailer collects $100 and has paid no tax on purchases for which to take credit. Because of this break in the chain of credits, pre-retail exemptions are not popular under the credit-method VAT.

Zero-rating (or another preferential rate) applied to pre-retail sales, on the other hand, has no effect on ultimate tax liability, since only the rate applied

5. It has been suggested that small-business opposition to the credit-method VAT helps explain why the government of Japan decided *not* to impose such a tax, opting instead for a subtraction-method VAT operating without invoices. Homma (1992) and Noguchi (1992) suggest this interpretation.

at retail actually matters under a credit-method VAT. If pre-retail taxes are lower, credits are lower as well.

Problems of BTT. The results are very different under the BTT.[6] Since tax is levied on "slices" of value added, the exemption or preferential taxation of a given stage reduces aggregate tax liability (but cannot eliminate it unless all stages are exempt) and distorts resource allocation. This produces incentives to lobby for preferential treatment, which in turn means that a subtraction-method VAT is not likely to be neutral. It is also generally impossible to provide accurate BTAs under the BTT if the base is not comprehensive and the rate is not uniform. (Suppose that one slice of value added incorporated into production for exports or competition with imports is taxed at 10 percent, one is exempt, and another is taxed at 4 percent. How is the exporter to calculate the export rebate? What rate should be applied to competing imports? What if the slices differ in size for different production-distribution channels?) Finally, there are important administrative questions of defining just which activities benefit from the exemption or preferential rates.

Some have suggested that the inability of the BTT to accommodate multiple rates and exemptions is one of its advantages—that this form of taxation forces politicians to apply a single rate to all economic activity. Experience, most notably the Canadian elimination of the option patterned after the BTT, which was acknowledged to be workable only with a single rate and a broad base, seems to support my view that one cannot be so optimistic—that politicians will not easily be dissuaded from doing what they want to do simply because it is technically impossible. It will be interesting to see whether Japan can maintain the relative purity and uniformity of its new subtraction-based tax, especially if the rate rises above its present low level of 3 percent. (See Homma 1992, where it is explicitly recognized that virtually all value added must be taxed at one rate under the Japanese tax.)

There remains another area of uncertainty: the treatment of the BTT under article 3 of the General Agreement on Tariffs and Trade, which deals with "national treatment." This provision allows BTAs for indirect taxes, but not for direct taxes. A BTT resembles an indirect tax in some respects; under certain circumstances it is exactly equivalent to a credit-method VAT or an RST, taxes for which BTAs are allowed. But the BTT also has characteristics of a direct tax; in particular, the tax base is calculated as the difference between receipts and purchases. Moreover, the effects of differential rates are felt by taxpayers, rather than washing out, as under the credit method (see Carlson and McLure 1984; McLure 1989). It is not clear how the GATT would react to a BTT, but the new Japanese subtraction-based tax may shed some light on the issue, especially if there is a shift to nonuniform rates.

6. This discussion is necessarily incomplete. See McLure (1987, ch. 6) for a more complete indictment of the BTT.

Both the credit-method VAT and the RST have a further advantage not shared by the BTT. Whereas the VAT is almost inherently visible, because of the need for separate quotation on invoices, and the RST is commonly quoted separately, the account-based BTT is invisible. Thus, consumers are much less likely to know the tax content of goods and services subject to BTT than that of goods and services subject to RST or VAT.

10.2.2 Pre-retail Sales Taxes

The Mechanics

The Canadian MST is applied to sales by manufacturers. In the example in table 10.1, a rate of 33 1/3/ percent would be required to produce the same revenue as the 10 percent rate applied to retail sales (see table 10.1, lines 13–14).

A BTT limited to the wholesale level would be a truncated version of the BTT illustrated in the top part of table 10.1; thus, it would apply only to value added at the manufacturing and wholesale stages (see lines 15–18). To raise the same revenue as the 10 percent retail-level tax, a rate of 14.3 percent would be required.

Problems

Any tax that does not extend to the retail level inevitably raises difficult definitional problems: What is manufacturing, or wholesaling, and what is not? In addition, pre-retail taxes discriminate against those activities in which the value is added early in the production-distribution process; discrimination in favor of services is especially severe. Pre-retail taxes encourage the artificial shifting of functions from the taxable (manufacturing or wholesale) stage to nontaxable stages. In the case of vertically integrated activities extending beyond the last taxable point, transfer prices must be employed to determine tax liability, absorbing resources and opening the way for evasion. Since there is no way for businesses beyond the last taxable point to recover tax paid on business inputs, cascading occurs. This distorts resource allocation and prevents accurate BTAs, causing discrimination against domestic manufacturers in international markets. Efforts to prevent cascading produce the same problems as are produced under the RST. Moreover, whereas the rate applied to business imports under the credit-method VAT makes no ultimate difference, this is not true under pre-retail taxes. It is for reasons such as these that the U.S. Treasury Department (1984, vol. 3, p. 217), concluded: "The retail sales tax and a value-added tax extending through the retail level are the only types of sales tax that should be considered. . . . The United States should categorically reject: a single stage tax levied before the retail level, such as a manufacturers or wholesale tax; a value-added tax that does not include the retail stage. . . ."

10.3 Some History

10.3.1 United States

In 1966 a conservative business group, the Committee for Economic Development, proposed that the United States replace its corporate income tax with a value-added tax (see Committee for Economic Development 1966; see also McLure 1973 and 1987, ch. 1). Much of the impetus for the proposal was the belief that such a substitution would improve the U.S. balance of payments. To some extent this belief was a misunderstanding of the purpose and effect of the BTAs allowed for the newly enacted European VATs; BTAs were seen by some as export subsidies and import tariffs. In any event there was interest in replacing a tax for which BTAs are not allowed under the GATT (the corporate tax) with one for which BTAs are allowed (the VAT).[7]

Nothing much came of this idea, and the idea of a U.S. VAT lay dormant until 1972. It was revived when President Richard Nixon suggested that a federal VAT be used to replace revenues from local property taxes, which were under judicial attack. Although a blue-ribbon committee appointed by the president issued a report on the topic, the report was largely ignored as the president and the public became preoccupied with Watergate.

The idea of a U.S. VAT surfaced again in 1979, when Al Ullman, then Chairman of the House Ways and Means Committee, proposed the Revenue Act of 1979. Since Ullman's electoral defeat in 1980, members of Congress have been chary about supporting a VAT. Nonetheless, in 1986 Senator Roth (R-Delaware) proposed the introduction of a Business Transfer Tax.

During the 1980s the BTT has been advocated especially by the American Council for Capital Formation, as a means of reducing the federal budget deficit and thus increasing total (private plus public) saving. The wholesale-level BTT was chosen over the conventional credit-method VAT in large part to avoid appearing to step on the fiscal toes of state and local governments. The accounts-based BTT is also said to be simpler to implement than the credit-method VAT.

Neither the U.S. Treasury Department nor the Internal Revenue Service participated in the debate, even though the latter would presumably be responsible for implementation of any federal sales tax.[8] To remedy this, examination of a value-added tax was included in the Treasury Department's tax reform project that eventually led to the Tax Reform Act of 1986.[9] Nothing

7. The discussion at the conference revealed a new twist to this old issue. Some in the Canadian government fear that the United States might use a VAT or another form of sales tax to reduce its corporate tax rates. Capital and tax base might then be attracted from Canada, in the absence of matching rate reductions by Canada. See also the papers by Gordon and by Boadway and Bruce (chs. 2 and 1 in this volume).

8. Carlson (1980) was written while its author was an employee of the Treasury Department, but it was not an official departmental study.

9. See U.S. Department of the Treasury (1984 especially vol. 3).

came of this effort, since President Reagan had decreed that tax reform would be revenue-neutral, and no one would have seriously—or at least credibly—suggested that a VAT be introduced except as part of an effort to reduce the deficit.

10.3.2 Canada

Canada's manufacturers' sales tax has long been widely recognized as one of the worst sales taxes levied by any advanced country.[10] After an effort to eliminate the tax was rendered ineffective by the revenue needs of the Great Depression, the tax was gradually accepted as a permanent part of the Canadian fiscal landscape. The defects of the tax have been documented and changes have been suggested by several high-level commissions: the Rowell-Sirois Commission on Dominion-Provincial Relations in 1940, the Royal Commission on Taxation (the Carter Commission) in 1966, and the Federal Sales Tax Review Committee (the Goodman Committee) in 1983.[11]

In June 1987, Finance Minister Michael Wilson proposed replacing the existing sales tax, which he described as "seriously flawed," with a value-added tax. Wilson's indictment of the MST was similar to the criticisms I presented in the last part of section 10.2. He argued that switching to a VAT would help Canadian industry compete in foreign and domestic markets and improve the balance of revenue sources (Wilson 1987, p. 1).[12]

The base of the manufacturers' tax is extremely limited; only about one-third of consumption is directly affected by the tax, and five items (tobacco, alcoholic beverages, automobiles, automobile parts, and motor fuels) account for 40 percent of revenues.[13] "Complexity arises because the tax is not applied to all products and because the distinction between taxable and exempt items is often difficult to define and to sustain," according to Wilson (1987, p. 19).[14]

10. For example, Due (1959), a textbook I used as an undergraduate student almost thirty years ago, catalogs the defects of the tax, as well as efforts made through 1955 to replace it with a more rational alternative.

11. Gillis (1985) and Whalley (1989) provide modern surveys of the defects of the existing MST, which have led Gillis to quip that "Canada is a civilized country, except for its sales tax". It might be noted that the defects of the MST have assumed even greater importance in recent years, as the rate has risen to 13.5 percent from 9 percent as recently as 1984. I appreciate Jon Kesselman's pointing this out to me.

12. Wilson (1989a, p. 5) stated, with only slight exaggeration, "The existing tax is the only consumption tax in the industrialized world known to favor imports over domestically produced goods."

13. Perhaps it should be noted that no VAT reaches all consumption spending; because of exemptions and zero rates a figure of one-half to three-fourths of consumption would be more typical.

14. Wilson cites the following examples of line-drawing: athletic headbands are exempt as clothing, while athletic wrist bands are taxable as sporting equipment; the ripening of green bananas and the blasting of rock into rubble are both classified as manufacturing (to the benefit of taxpayers). He also mentions the following questions raised by court cases: If heating fuels are exempt, should candles be exempt because they produce heat? If electricity is not taxed, should batteries be exempt as boxed electricity? Should facial tissues be taxed as a cosmetic or exempt as a health good?

Because the tax is levied at the manufacturing level, almost half of it falls on business inputs in the first instance. The tax is hidden from the consumers who ultimately pay it, but cascades into highly differentiated taxation of various products and even the same product made by different manufacturers in the same industry. As Wilson noted, the existing system "taxes goods capriciously, scattering and compounding its impact through the distribution chain in a frequently unpredictable manner" (Wilson 1989a, p. 4). There are estimates that these distortions cause a loss of efficiency of $9 billion annually, the equivalent of the value added by Canada's manufacturers of steel, aluminum, and other primary metals.

The tax also distorts choices of distribution channels. In the effort to prevent distortions of trading patterns, "notional values" (or transfer prices) are used to approximate values at the manufacturing level, creating further complexity. One measure of the complexity of the system is the fact that 22,000 special provisions and administrative interpretations have been issued for a system with only 75,000 taxpayers (Wilson 1987, pp. 10–11, 23).

Wilson proposed replacing the manufacturers' sales tax with a value-added tax, rather than with a retail sales tax, citing the difficulty of removing all tax on business inputs under the RST and the greater susceptibility to noncompliance (Wilson 1987, pp. 25–27; Wilson 1989a, p. 14). (Though not mentioned explicitly by Wilson, the potential for strong opposition from the provinces, which levy retail sales taxes, almost certainly also motivated the decision to recommend a VAT.) He offered three alternatives for further debate: a credit-method VAT that would absorb provincial sales taxes, a uniform-rate comprehensive federal tax that would closely resemble a BTT and operate without invoices, and a conventional credit-method federal VAT. (These are described in greater detail in the next section.)

By April 1989, the menu had been pared down to only one alternative, the credit-method VAT, which is now being called the Goods and Services Tax (GST). Interestingly enough, deficit reduction was added to the listed virtues of the VAT. This addition has caused some (e.g., Whalley 1989) to wonder whether the true reason for the proposed VAT substitution for the MST is long-run revenue enhancement, rather than simply structural improvement. Though the initial proposal was for a rate of 9 percent, it has since been reduced to 7 percent.

It is worth noting that simply eliminating the MST and replacing its revenue with revenue from the individual and corporate income taxes seems to have been ruled out because of the implied change in the "tax mix" from indirect taxation to direct taxation.[15]

15. This point is noted in Whalley (1989) and in Dodge and Sargent (1988, p. 53). See Kesselman (1986) for this "tax mix" argument in the Australian context.

10.4 Intergovernmental Issues

10.4.1 The U.S. Issues

The states have long been uneasy about the prospect of a federal value-added tax.[16] Concerns about "federal preemption" may often have been poorly articulated; they have to do with the amount of room that exists for two jurisdictions to tax the same base. In fact, it appears that there is something very real behind these concerns.

First, and most obviously, if federal and state rates were added together, the total rate applied to any one sale might be so high that evasion would become extremely attractive and thus very difficult to control. At the very least, it might be necessary to rely on the techniques of the VAT, which leaves more of a paper trail for auditors than the RST. This might be disconcerting to states, who have an RST tradition.

Second, it is clearly more trouble for businesses to comply with two sales taxes than with one. Difficulties would be maximized, all else equal, if the states and the federal government chose different forms of transactions-based sales tax (e.g., state RST and federal VAT). Difficulties would be compounded if the taxes levied by the two levels of government involved different patterns of exemptions and rate differentiation. Sales personnel would have to know the rules for both taxes.[17] In order to avoid maddening complexity for business, a high degree of intergovernmental cooperation and uniformity would be needed. In the extreme case, states would be allowed to choose no more than rates, the base having been chosen by the federal government. But this solution involves a loss of state fiscal sovereignty.

By comparison, if the federal government employed the accounts-based BTT, intergovernmental problems would be minimized. Salespersons would need to be concerned only with the rules for the state RST, leaving the complexity of the BTT to the accountants to worry about. There is also much less need for uniformity and cooperation, and thus less concern about loss of state fiscal sovereignty. The fly in this ointment is, of course, the basic difficulties posed by a BTT that is not levied at a single rate on all value added. There is little reason to believe that the Congress would resist the temptation to levy multiple rates.

10.4.2 The Canadian Debate

The concerns identified above also existed in Canada, though perhaps to a lesser degree. As a result, the April 1987 proposal (Wilson 1987) contained

16. This discussion is based on McLure (1987, ch. 9) and McLure (1988). See U.S. General Accounting Office (1990) for the results of a survey of views of state policy makers and tax administrators.

17. Modern technology (bar codes and holography) reduces the importance of this problem, but does not eliminate it, especially for small business.

not one but three alternatives for consideration. The first of these was called a "national sales tax"; it was a credit-method value-added tax administered by the federal government with rates that could vary by province. It would, at the option of the individual provinces, replace both the federal and provincial sales taxes (see Wilson 1987, pp. 54).

Taxes on interprovincial trade would be handled through a central collection agency acting as a clearing house. Each invoice issued for sales to businesses would show the province of origin and the province of destination of the sale; tax would be charged at the rate prevailing in the province of destination (plus the federal rate). The central agency would then credit provincial accounts for tax at destination and debit them for tax at origin of business sales.[18] The federal and provincial tax bases would need to be identical for this scheme to work.

An approach such as this has been considered by the European Community as part of its "1992 scheme" to "complete the internal market." There has, however, been a reluctance to adopt such a scheme, which would require mutual honesty and trust, as well as considerable sacrifice of national fiscal sovereignty. It appears that there is reluctance to trust either the taxpayers or the fiscal authorities of other member nations (see Tait 1988, pp. 158–61; Culp 1989).

The second alternative was essentially a federal BTT, "which would be levied at a single rate on virtually all goods and services in Canada, with minimal exceptions."[19] It was anticipated that "this system could operate without invoices." (The mechanics were those of the credit method. But credit was calculated as the product of the tax rate and taxable inputs. Of course, it could operate without invoices only if, indeed, virtually all sales were subject to tax.) For reasons indicated above, such a tax could operate in parallel with existing provincial RSTs (see Wilson 1987, pp. 54–57).

The third alternative was a federal credit-method VAT similar to those found in Europe. This tax would have the advantage of allowing exemptions (and differential rates, something not mentioned by Wilson), but the disadvantage of posing greater administrative burdens on retailers. It was recognized that some retailers would find it necessary to replace their cash registers with newer, more sophisticated ones capable of recording sales in four categories.[20]

18. This is based on Poddar (1990) and Cnossen (1983, 1990). It is summarized in Whalley and Fretz (1990, p. 83). Note that this technique avoids the need to employ the "restricted origin principle" of the Neumark Committee, in which all provinces would be required to levy VAT at a uniform rate (see Cnossen 1983, 1990).

19. This option was called the Goods and Services Tax, or GST. Since this name was later given to the credit-method VAT proposed in 1989, it is not used in this paper, in order to avoid confusion.

20. See Wilson (1987, pp. 57–58). It is worth noting that on August 8, 1989, in conjunction with release of the Technical Paper on the GST, Wilson proposed immediate write-off for equipment for scanning electronic bar codes and for cash registers capable of calculating and recording sales taxes imposed by more than one jurisdiction. See "Changes to Capital Cost Allowance Rate Announced For Electronic Point-of-Sale Equipment" (1989).

The government ultimately settled on the federal credit-method VAT, which it is now calling the Goods and Services Tax (GST). It is worth commenting briefly on two alternatives that did not appear on this list. First, there was no federal RST, presumably because of the expectation of severe opposition from the provinces, as well as the problems identified above. Second, there was no proposal for a joint federal-provincial BTT. Given existing differences in provincial sales tax rates, there would seem to be little hope for a uniform rate, without which the BTT cannot operate (see Whalley and Fretz 1990, p. 83).

At the end of August 1990, after the presentation and penultimate revision of this paper, another important development occurred. The governments of Canada and Quebec signed an agreement for the joint collection of federal and provincial sales taxes. While appearing on the surface to be a promising development, this action left some important questions unanswered.[21]

First, it is far from obvious what the Memorandum of Understanding means when it speaks of Quebec making "a change from a retail sales tax to a tax harmonized with the GST." In particular, there is no indication how interprovincial trade will be treated. Second, it is anomalous—if understandable in the unique Canadian situation involving relations with Quebec—that the provincial government is given responsibility for administration of the federal tax. One would ordinarily prefer federal administration of provincial taxes in order to assure uniformity and prevent provincial favoritism to local business.

10.5 Low-Income Relief

10.5.1 The U.S. Debate

The discussion of the VAT prepared by the U.S. Treasury Department in 1984 considered three ways of dealing with the distributional problem posed by sales tax burdens on low-income households and regressivity.[22] It noted that exemptions of food and other necessities are extremely blunt and inefficient instruments to use for this purpose. First, most food is not consumed by the poor, and tax rates must be substantially higher to make up for the loss in tax base. Second, exempting food distorts consumer choices. Third, exemptions pose troublesome administrative problems. It concluded that other ways should be found to deal with the problem.

To the extent that transfer payments are indexed for inflation or are made in kind, recipients of transfers would not be harmed by the introduction of a federal VAT. But not all the poor receive transfers. Thus, it was concluded

21. This discussion is based on "Wilson Announces Sales Tax Reform Agreement with Quebec" (1990), a news release that also includes the Memorandum of Understanding, exchange of letters, Wilson's statement on the Memorandum of Understanding, and background information.

22. For an analysis extending that found in U.S. Department of the Treasury (1984), see Brashares et al. (1988).

that it would be necessary to accompany introduction of a VAT with a comprehensive program of direct transfers, such as a negative income tax, if the poor were to be insulated from the effects of the VAT. Expansion of the existing earned-income tax credit under the individual income tax would be one way to implement such a program.

10.5.2 The Canadian Resolution

The report of a conference held at the Brookings Institution in 1980 concluded that:

> The central technical lesson of the European experience is that multiple rates can be used to eliminate the regressivity of the value-added tax, but that the penalties in administrative complexity, increased compliance costs, and distortions in consumption decisions have been high and probably unjustified. Most conference participants agreed . . . that it would be preferable to use other taxes and transfer payments to alleviate the undesirable distributional consequences generated by a value added tax imposed at uniform rates. (Aaron 1981, p. 16)

Yet the conference participants did not hold out much hope that the United States would resist the temptation to impose preferential rates on such necessities as food, housing, and medicine.

Canadian experience certainly does not provide reason for optimism on this score. The 1989 Canadian proposal would zero-rate basic groceries, even though there exists a refundable sales tax credit for the poor, first enacted in 1986 and subsequently made much more generous.[23] This approach, said to be necessary to gain provincial acceptance of the federal tax base, promises to create the problems identified above, which were explicitly recognized by Wilson (1989a, p. 21).

The zero-rating of groceries doomed any prospect of using the BTT approach. Moreover, as European experience with zero-rating, multiple rates, and exemptions makes clear, it creates substantial difficulties of compliance and administration. This is especially sad, since the existence of the refundable credit mechanism should have made the zero-rating of groceries unnecessary. This problem is discussed further in the next section.

23. At the time of the initial Wilson proposal in 1987, refundable credits of $50 per adult and $25 per child were allowed families with incomes below $15,000, with the credit being reduced by 5 percent of the excess of income over $15,000. Under the initial 1987 proposal, the credit would be increased by $20 for adults and $10 for children and the ceiling increased to $16,000. See Wilson (1987, p. 7). The figures for 1990 were increased to $140 for adults and $70 for children, with a ceiling of $18,000. In the August 1989 proposal, the figures were $275 for adults and $100 for children, with a ceiling of about $25,000. See Wilson (1989b, pp. 3, 15–16).

During the conference it was noted that the New Zealand GST, which applies to food, was introduced by a socialist government. Whereas it might be possible for a Democratic administration in the United States to propose such a tax successfully, it would be much more difficult for a Republican administration to do so.

10.6 Neutrality

The proposed Canadian VAT falls far short of neutrality. In addition to zero-rating basic groceries, prescription drugs, and medical devices, it would exempt residential rents, most health and dental services, day care services, legal aid services, and most educational services. In addition, public sector institutions (hospitals, local governments, libraries, colleges, and universities) would receive rebates for a percentage of the taxes paid on their purchases, in order to avoid an increase in the sales taxes they pay. Sales by farmers and fishermen would be zero-rated in order to facilitate zero-rating of groceries. Financial institutions would be tax-exempt, except on specific services. Finally, businesses with turnover below $30,000 per year would have the option of being exempt. This section examines several of these key issues in greater detail.

10.6.1 Food

Under the proposed legislation, basic groceries will be zero-rated throughout the production-distribution process. Rather than defining basic groceries, the law specifies that the following categories of food will be taxable: candy and confectioneries, snack food, soft drinks, prepared food sold in a grocery store, and all food sold in eating establishments, except those not suitable for immediate consumption (e.g., coffee beans). This list is essentially the same as the list of goods that are taxable under the existing MST. In addition, meals offered by schools, universities, charities, nursing homes, and other such institutions will be exempt. Two streamlined methods of accounting are provided to facilitate small-business compliance with the law.

The approach chosen in Canada has little to recommend it. As noted above, there is little reason to exempt groceries, given the existence of the system of refundable credits; doing so creates unnecessary complexity. Even the Consumers Association of Canada favored taxing food, with a compensating reduction in rates (noted in Whalley and Fretz 1990, p. 70).

Beyond that, if a food exemption is to be provided, it makes little sense to limit the exemption to basic groceries; it is hard to see what this achieves, and it creates serious problems of compliance and administration.[24] Certainly Wilson's statement does not offer adequate justification: "Consistent with their treatment under the existing federal sales tax, soft drinks , candies and confections, and snack foods will continue to be taxable" (Wilson 1989b, p. 11). It would have been much simpler to exempt all food, and the implied loss of revenue probably would not have been great.

10.6.2 Housing

The 1987 proposals called for a tax on new residential construction and on the sale or rental of real estate for commercial use; residential rentals and the

24. Wilson (1990, p. 12) acknowledges, "There are some food products that are not easily placed in one or the other broad categories of basic groceries and prepared foods."

resale of residential real estate would be exempt (Wilson 1987, p. 113). The 1989 legislation is similar to the 1987 proposal, but contains rebates intended to soften the blow to low-income home buyers from the increase in taxation of housing caused by the switch from the MST to the GST. It provides a rebate of 36 percent of GST (just over 2.5 percent of the purchase price), up to a maximum of $8,750, on a new house with a price of up to $350,000. The rebate is phased out on a proportionate basis over the range of housing prices to $450,000.[25]

This proposal raises several questions for the United States. First, the approach proposed for Canada would create capital gains for owners of existing residential real estate, to the extent the GST on housing exceeds the tax included in the value of housing under the MST. An alternative that would avoid these windfall gains would include in the tax base the first sale of any home. Such an approach would also substantially increase the tax base and allow lower rates. It is not without problems, however. It would be necessary for homeowners to keep track of the cost of improvements incurred after the introduction of the VAT—and to distinguish them from nondeductible maintenance—in order to avoid double taxation (Whalley and Fretz 1990, pp. 79–82). And, of course, it would be politically unpopular with homeowners. Second, the inclusion of land in the value of new houses subject to GST creates some distortions or inequities. Tax would be saved by buying an existing house, demolishing it, and contracting for the construction of a new house.

The rebate scheme proposed for Canada is also problematic. It would impose an effective marginal tax rate of 15.75 percent (7 percent GST, plus the phaseout rate of 8.75 percent) on new housing with purchase prices falling in the phaseout range of $350,000–450,000.[26] Rates of this magnitude, besides creating obvious distortions of economic decisions, would almost certainly give rise to evasion.[27] The preferential rate on housing included in Ullman's 1979 proposal might be preferable, if relief must be offered.

10.6.3 Financial Services

The financial sector poses difficult problems under any credit-method VAT.[28] Value added in this sector is measured by the sum of the spread between interest received and interest paid and charges for nonfinancial services,

25. The 1989 proposals called for a rebate of 4.5 percent of the purchase price up to $310,000, phased out on homes valued between $350,000 and $400,000; see Wilson (1989b, pp. 17–20).

26. Under the 1987 proposal, the implicit tax would have been a staggering 36.9 percent (9 percent GST, plus the phaseout rate of 27.9 percent).

27. One would expect, for example, that the purchaser of a home valued in the phaseout range would conspire with the seller to pay only $350,000 for the home and pay the rest of the true purchase price for something else in order to maximize the rebate. One commentator thought this type of gimmick would not work, because land prices and building costs are well established in Canada.

28. For an excellent discussion of various approaches to the taxation of financial services and their problems, see Hoffman, Poddar, and Whalley (1987). Similar problems are encountered in the case of insurance. They are not discussed here, for lack of space. See, however, Barham, Poddar, and Whalley (1987).

less costs of providing both financial and nonfinancial services. Both types of services are provided to both businesses and households. It will be convenient in what follows to focus primarily on value added in intermediation, ignoring for the most part nonfinancial services and their costs. It is recognized fully that we are setting aside important administrative problems: that explicit charges may not be made for such services, and that there are problems of allocating costs between types of service. Such problems are especially important, for example, for integrated financial institutions, such as banks, and for realtors.

The objective of policy in the purely financial sphere is ideally to tax intermediation services, allow businesses a credit for the tax on such services, and allow financial institutions a credit for taxes on purchased inputs. The problem is that interest payments involve both a pure interest charge, which should not be taxed under a consumption-based VAT, and a charge for financial intermediation, which should be.[29] It is difficult to determine what part of interest charges should be subject to VAT (see Hoffman, Poddar, and Whalley 1987, pp. 547–48).

Zero-rating would be an ideal solution if all financial services were offered to businesses. But to the extent financial services are offered to consumers, zero-rating loses revenue and may be seen as undesirable discrimination favoring the financial sector. This could be handled with a separate tax on financial transactions with households, but only at the cost of considerable complexity, including the need to segregate business and nonbusiness transactions.

The common European practice in dealing with this problem is to exempt financial institutions, but to zero-rate foreign transactions for competitive reasons. That is, interest is treated as it is in other sectors (not taxed and thus carrying no credit), and (except for expenses of foreign lending) no credit is allowed for purchases. This treatment of domestic lending discriminates against financial services offered to business, since, as noted above, exemption of pre-retail activities creates a burden, rather than a benefit; this may be especially onerous and undesirable, given the competitive pressure from foreign financial institutions. Moreover, it is necessary to distinguish between taxable nonfinancial services and exempt financial services, and some favoritism for consumer services would remain.

It is sometimes proposed that the addition or subtraction methods be employed to impose what is, in effect, a separate tax on the financial sector.[30] This does not solve the problem of allowing credits for purchasers of financial services. In addition, under either of these approaches it would be necessary

29. It is not universally agreed that household costs of intermediation should be subject to tax. This issue was hotly debated within the Finance Ministry of Canada.

30. The addition method of implementing a VAT involves adding together the various components of value added. As noted in McLure (1987, p. 102, n. 40), the addition and subtraction methods are closely related.

to construct border tax adjustments to avoid competitive disadvantage for domestic financial institutions.

The only conceptually attractive and administratively feasible approach seems to be one based on cash flow to and from financial institutions. Unfortunately, it suffers from perception problems that are probably fatal.

Canada has wrestled at length with this problem; indeed, one of the most perceptive analyses of the problem (Hoffman, Poddar, and Whalley 1987) was prepared in the Ministry of Finance. The initial 1987 White Paper proposed to utilize the subtraction method for financial institutions, that is, to levy the tax on revenues from implicit charges represented by the margin on financial intermediation (Wilson 1987, pp. 130–31). Customers of financial institutions would be allowed no credit for such taxes, since they are not computed on a transactions basis. Services provided to nonresidents would be zero-rated (see also Clarkson Gordon 1989).

Apparently because of insurmountable technical difficulties, the 1989 proposals retreated to the conventional treatment of the financial sector—exemption of services rendered to residents and zero-rating of services to nonresidents (Wilson 1989a, p. 14; see also Clarkson Gordon 1989, Ernst and Young 1990).

It is difficult to know what lesson to draw from the Canadian experience in this area, except that the taxation of financial institutions is, indeed, difficult. Perhaps we can do no better than agree with Yolanda Henderson's (1988) conclusion:

> If policymakers are concerned mostly with totally avoiding a tax on saving and with simplifying the VAT rules, then deciding to exempt financial intermediaries is a reasonable compromise. If they are instead concerned with creating parity of treatment between financial intermediation and other goods and services, then they should consider using the subtraction-method VAT for intermediaries and formulating rules that provide credits to business users of these services.

10.6.4 Nonprofit Activities

Many nonprofit organizations engage in commercial activities (e.g., bookstores, cafeterias), as well as in the activities that give rise to their tax-exempt status under the income tax (e.g., health care, education). While the commercial activities should be taxable, it is commonly felt that the noncommercial activities should not be taxed. Nontaxation can take the form of either exemption or zero-rating. In the former case, tax is paid on purchases, for which no credit is allowed.

Canada has chosen to deal with this problem in a particularly complicated manner. Commercial activities will be taxed, with credit for input taxes. Other activities will be exempt, but to prevent the switch from the MST to the GST from either increasing or decreasing the tax burden on such activities, partial rebates of input taxes will be provided to certain organizations (e.g., regis-

tered charities, certain government-subsidized organizations). The standard rebate rate will be 50 percent, but special rebate rates are to be determined for each of the following four sectors providing exempt services: municipalities, universities, schools, and hospitals (the so-called MUSH sector). Allowing only partial credit means that research and education functions in the MUSH sector will taxed more heavily than in the private sector and more heavily than private investment in physical capital. There has been support for a less complex and more neutral approach, such as zero-rating. But this would result in a net transfer from the federal to subnational governments.

10.6.5 Small-Business Exemption

Several studies have indicated that small businesses find compliance with the VAT to be particularly burdensome, especially relative to large firms (see Sandford et al. 1981; Sandford and Godwin 1990). The 1984 Treasury Department study (1984, vol. 3, p. 61), concluded, however, that no small-business exemption would be needed in the United States.

The 1987 Canadian proposal for a federal GST called for making a small-business exemption available to firms with annual turnover of no more than $5,000 (Wilson 1987, p. 97).[31] The turnover figure was raised to $30,000 in the 1989 proposals. Firms with turnover below this level would be allowed to apply for registration, in order to avoid breaks in the chain of credits. Simplified accounting techniques (under which liability would be based on purchases, rather than on sales) would be available to small businesses, and those with sales below $50,000 would only be required to file annual reports (with quarterly payment of tax).[32] In addition, it was suggested that small businesses would be able to base tax liability on purchases and be paid an administration fee to help defray their costs of compliance; this practice is common in some states and provinces (Wilson 1989b, p. 22–23). In December 1990, the last feature was scaled back to a one-time credit of no more than $1,000, in order to help pay for the reduction of the rate to 7 percent (Ernst and Young 1990; Whalley and Fretz 1990).

10.6.6 Agriculture

Due in part to the zero-rating of basic groceries, the tax treatment of agriculture and fishing is relatively complex. Most output of these sectors would be zero-rated, as would much of the major equipment they use.

31. Such firms could register, in order to take advantage of input credits. The proposal indicated that the exemption level could be higher under the National Sales Tax (The quasi-BTT) and the federal VAT. I have argued elsewhere that high exemptions under the BTT create extraordinary latitude for evasion of tax through fragmentation of firms; see McLure (1987, pp. 117–23). That was in response to the proposal by Senator Roth for a BTT exemption of $10 million.

32. Japan exempts firms with annual sales of less than ¥300,000 and assumes for firms with sales of less than ¥500 million (roughly US$3.4 million or C$3 million) that purchases equal 80 percent of sales (90 percent for wholesalers). This creates a form of turnover tax, levied at an equivalent rate of 0.6 percent (0.3 percent for wholesalers) on sales of these firms.

If groceries were taxable, the tax treatment of these sectors would be somewhat less obvious. There seems, however, to be no reason that they could not be subject to tax in the United States.

10.7 Preparation

10.7.1 The U.S. Discussion

One of the most notable findings of the U.S. Treasury Department's 1984 VAT exercise was an estimate by the IRS that introduction of a VAT would require an additional 20,000 IRS employees and an additional annual expenditure of $700 million (at 1984 levels). In addition, it was estimated that eighteen months lead time would be required to get ready to implement the tax; this time would be needed for the recruitment of agents, public education, and other preparation.[33] Although these estimates have been questioned (e.g., by Tait 1988, ch. 12), it is clear that a VAT cannot be introduced without adequate preparation.

10.7.2 The Canadian Situation

In August 1989, Wilson stated that draft legislation would be released in early fall, in order to form the basis of technical discussions with business and to provide a starting point for planning and developing the systems needed to comply with the new tax to be introduced in January 1991. In addition, he said, "Well in advance of the start-up of the tax on January 1, 1991, Revenue Canada will be working closely with businesses to assist them in preparing for the new system. And most important, the government will act to ensure that the Canadian public is well-informed in advance about the GST" (Wilson 1989b, p. 35).

Despite growing skepticism in the private sector, Wilson has stated that preparation to implement the tax has been adequate, even though the legislation was only tabled on January 24, 1990, and has not yet (as of August 1990) passed the Senate.[34] Public discussion of the VAT has already stretched over three years. Registration forms were mailed to taxpayers in May 1990, and taxpayer information bulletins have been distributed. Drafts of tax returns have been prepared but not circulated.

The Canadian Ministry of Finance estimates that, whereas administration of the existing MST requires 1,500 person-years, administration of the GST

33. U.S. Treasury Department (1984, vol. 3, pp. 113, 124, 128). U.S. Internal Revenue Service (1986) estimates that a BTT extending through the retail level would require more than 16,000 additional staff members and cost almost $700 million per year. Note that these estimates are not fully comparable, for reasons stated there.

34. As indicated in note 1, the Senate passed the VAT legislation on December 14, 1990, and the tax became effective on January 1, 1991. Since business expected the tax to be implemented, new price lists and catalogs reflected the VAT. It might have been more inconvenient not to introduce the tax than to do so.

will require an additional 3,400–3,900 person years. The administrative cost of the mature system is estimated at $380 million. The estimates are based on the assumption of a ratio of 300 taxpayers to each member of the tax administration staff; this figure is rather high by European standards.[35] The additional personnel are being hired, and regional taxpayer assistance offices are being set up. It appears that implementation will occur on schedule, unless the legislation fails to pass the Senate, or is passed only with substantial amendment.

10.8 Sales Taxes in a North American Free-Trade Area

The United States and Canada have recently entered into a free-trade agreement, and there is talk of eventually including Mexico to form a North American free-trade area. This prospect raises the important question of whether coordination of sales taxation in the three countries would be necessary or desirable, and how it might be achieved.[36] Though a comprehensive discussion of these issues is beyond the scope of this paper, some preliminary thoughts are offered, concentrating on U.S.-Canadian relations.

At a formal and superficial level one can conclude, if somewhat tautologically, that tax harmonization is not necessary for the creation of a free-trade area, since a free-trade area involves only the elimination of import duties within the area. Nor is tax harmonization required for the creation of a customs union, which involves common external tariffs. But if economic integration is to go further, as it has in Europe, tax harmonization will be appropriate. The next stage in economic integration, a tax union, clearly requires harmonization. Such harmonization involves the tax bases and perhaps tax rates. Harmonization in the EC began with the VAT, and still does not encompass income taxation.

The problem is even more complicated in North America than in the European context, because of the existence of separate state and provincial sales taxes in the United States and Canada. It would clearly be easier to contemplate coordination of three unified systems than of one unified system (Mexico's) and two nonunified ones. It is conceivable that the federal government of the United States will adopt a VAT or a RST and that the state sales taxes might be merged into it, either through piggybacking or a clearinghouse mechanism. Moreover, such a result may yet occur in Canada. But this is far from a safe bet; the continued existence of parallel systems in one or both countries seems more likely. For the foreseeable future, that parallel system in the United States will take the form of no federal tax and uncoordinated state

35. This information was provided in correspondence with the author.

36. The term "coordination" is used in the generic sense of meshing tax systems to avoid undesirable economic effects or administrative burdens. "Unified" is used below to denote a sales tax system in which national and subnational taxes are coordinated, as they are in Mexico, where there is only one tax, the federal VAT collected by the states and shared with them.

taxes. In short, the coordination problem would seem to involve meshing the Canadian system of federal VAT and provincial RSTs with the U.S. system of state RSTs and no federal sales tax (and perhaps eventually with the Mexican unified VAT system).

The combination of free trade, the adoption of the Canadian GST, and the continued absence of a federal sales tax in the United States is likely to aggravate existing problems of cross-border shopping. Canadians living near the U.S. border can be expected to shop increasingly in the United States for certain goods and services that are taxed in Canada, but not across the border. (The same problem exists along the U.S. border with Mexico, but in attenuated form, both because the population of Mexico is less concentrated near the U.S. border and because U.S. and Mexican income levels are quite different.) This effect will be experienced more strongly in some sectors than in others, depending on the tax saving involved, the convenience and expense of conducting and concealing cross-border shopping, tax treatment under RSTs in the United States, and existing treatment under the Canadian MST. Especially heavily affected will be such relatively "big-ticket" and essentially undetectable "importable" activities as domestic air transportation (e.g., flying to Vancouver from Detroit, instead of from Toronto) and automobile repairs. (International air transportation, including flights to the United States on tickets not purchased in Canada and domestic connector flights, is tax exempt. The law requires self-assessment of services imported for use in Canada; in many cases of services provided to households this provision will be impossible to enforce.) Of course, this point has greater implications for some parts of Canada (and the contiguous parts of the United States) than for others. In addition, there will be increased pressure on enforcement of rules relating to declaration of values and payment of tax on mail-order sales from the United States to Canadian households. (At present, no tax is due if the value is less than $40 and the tax and duty due would be less than $5.) There seems to be little likelihood that these problems can be avoided, as long as the United States has no federal sales tax and the state RSTs do not exceed the provincial ones by enough to offset the Canadian federal VAT.

If the United States adopted a federal sales tax, it would be desirable for the two nations (three, with Mexico) to engage in some sort of coordination that would reduce the need to implement BTAs on cross-border shipments. Otherwise, progress in achieving the administrative objectives of the free-trade area by eliminating customs duties would be largely nullified. (This problem will arise once the Canadian VAT is introduced. It generally does not arise under the state and provincial taxes. If Mexico were to join the free-trade area its VAT would raise the same issues.) There are two obvious alternatives. One is to adopt the restricted-origin principle under the VAT: origin principle for trade between Canada and the United States (intra–North American free-trade area trade) and destination principle for trade with other (nonmember) nations. The other is to adopt a clearing house for tax payments among the two

(three) nations (see Cnossen 1983, 1990a; Poddar 1990). The former approach has the disadvantage of requiring the same tax rate in both (all three) countries. The loss of fiscal sovereignty this entails has caused the European Community to delay its implementation since it was first recommended by the Neumark Committee in the early 1960s. (In addition, it is not clear that there is much administrative benefit, given the need to value exports.) The clearing-house technique may be more promising, but the lack of trust that has caused its implementation to be resisted in the EC creates some doubt. It might be noted that such an approach would be somewhat simpler to operate if both (all three) countries had RSTs, rather than VATs. Presumably it could be operated if one or two had VATs and one a RST.

10.9 Concluding Remarks

The Canadian experience provides several types of lessons for the United States. For convenience, I distinguish between lessons on general issues and lessons on special questions. These are simply stated, with no further documentation or argumentation.[37] I conclude by noting that the Canadian model is not the one to follow if the United States is to consider adopting a federal sales tax.

10.9.1 General Issues

First, if the United States considers a federal sales tax, of whatever type, the tax should extend through the retail level.

Second, if relief is to be provided from the regressivity of the sales tax, it should be through explicit transfers or refundable credits, rather than through exemption or prorating of selected goods and services.

Third, it seems unwise, even so, to gamble that the Congress would apply one rate to virtually all consumption, especially if the tax is to be used to raise substantial revenue. Thus, the BTT should not be considered seriously. This view would be strengthened if it were thought that a joint federal-state BTT were under consideration.

Fourth, the credit-method VAT has considerable advantages over the RST, despite the relative simplicity and familiarity of the latter.

Fifth, there is no good answer to the problem of intergovernmental competition and coordination in this area. The two most promising approaches seem to be: a federal credit-method VAT with a clearing-house arrangement to

37. I do not bother to discuss issues about which there is neither much disagreement nor much Canadian debate, such as the superiority of the consumption base and the destination principle and the inferiority of the addition method. See, however, McLure (1987). It should also be noted that several features of the Canadian proposals reflect the prior existence of the MST. These include the decision not to zero-rate the activities of nonprofit organizations. Such considerations are not relevant for the United States and are not discussed. In addition, I do not discuss transition issues, which would not arise in the United States.

channel revenues to the state of destination of revenues; and a federal RST with state piggybacking. It appears that there would be considerable loss of state fiscal autonomy under any administratively feasible system.

Sixth, it is essential that taxpayers be prepared to implement any new federal sales tax.

Seventh, the introduction of the Canadian GST will aggravate problems of cross-border shopping and stymie efforts to allow trade to cross the international border with a minimum of delay. Adoption of a sales tax in the United States would reduce the first of these problems but would increase the need for administrative coordination between the two countries.

10.9.2 Special Questions

Food. One can only look to the proposed Canadian treatment of food with amazement. Rather than following the lead of New Zealand in introducing a relatively "clean" VAT, and after explicitly acknowledging the benefits of such a system, the government proposed a needlessly complicated form that zero-rates basic groceries. The United States should not follow Canada's lead.

Housing. The taxation of housing is problematic. Taxing the first sale of all housing is preferable to taxing new housing, but is politically difficult. If rebates for taxes on housing are to be provided, they should be designed with more attention to detail than the Canadian scheme exhibits.

Financial Institutions. As is well known, the taxation of the financial sector is extremely difficult. It might be better to zero-rate the sector than to exempt it, as Canada proposes.

Nonprofit Organizations. Rather than simply zero-rating the charitable activities of nonprofit organizations and the MUSH sector, Canada proposes to exempt them and pay partial rebates of tax. This seems to be needlessly complicated.

Small Business. The treatment of small business seems relatively generous by world standards. Such an exemption may not be needed in the United States.

Agriculture. That most agriculture will be zero-rated in Canada should have little relevance for the United States, since that feature of the proposal reflects primarily the decision to zero-rate basic groceries. If groceries are taxed, as is proper, agriculture should also be taxable.

10.9.3 Whose Lead to Follow

Despite the defects identified in this paper, Canada's VAT may not be markedly worse than those of the European Community. At least it has only one

positive rate, and most exempt sales (residential sales, day care, education, health and dental services, etc.) are by those like the MUSH sector, who sell mostly to final consumers and make few taxable sales. Yet the Canadian VAT seems to be the wrong standard for comparison. It is decidedly inferior to the New Zealand tax, which is a more appropriate benchmark—and is the system the United States should emulate.

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