The World Bank does not accept responsibility for the views expressed herein which are those of the author(s) and should not be attributed to the World Bank or to its affiliated organizations. The findings, interpretations, and conclusions are the results of research supported by the Bank; they do not necessarily represent official policy of the Bank. The designations employed, the presentation of material, and any maps used in this document are solely for the convenience of the reader and do not imply the expression of any opinion whatsoever on the part of the World Bank or its affiliates concerning the legal status of any country, territory, city, area, or of its authorities, or concerning the delimitations of its boundaries, or national affiliation.
INTERJURISDICTIONAL COORDINATION OF SALES TAXES

Sijbren Cnossen
Erasmus Universiteit, Rotterdam

September 1986

Development Research Department
Economics and Research Staff
World Bank

The World Bank does not accept responsibility for the views expressed herein which are those of the author(s) and should not be attributed to the World Bank or to its affiliated organizations. The findings, interpretations, and conclusions are the results of research supported by the Bank; they do not necessarily represent official policy of the Bank. The designations employed, the presentation of material, and any maps used in this document are solely for the convenience of the reader and do not imply the expression of any opinion whatsoever on the part of the World Bank or its affiliates concerning the legal status of any country, territory, city, area, or of its authorities, or concerning the delimitations of its boundaries, or national affiliation.
ABSTRACT

The paper surveys and evaluates the principles, criteria and practices that govern the interjurisdictional coordination of sales taxes. The analysis is illustrated by references to countries that are members of the OECD. The key issues examined are the equivalence theorem, border tax adjustments, tax treatment of mail order businesses and the distortions created by taxes. The paper concludes with some recommendations on what form interjurisdictional coordination of sales tax should take. This paper was prepared for the Conference on Value Added Taxation in Developing Countries, sponsored by the Public Economics Division, Development Research Department, The World Bank.
INTERJURISDICATIONAL COORDINATION OF SALES TAXES

Table of Contents

Page No.

I. Introduction and Summary ........................................ 1
   A. Principles of Sales Taxation .................................. 2
   B. Findings and Conclusions ...................................... 5

II. Criteria for Sales Taxation .................................... 10
   A. Interjurisdictional Equity ..................................... 10
      1. Equal-treatment rule ....................................... 11
      2. Benefit principle ........................................... 12
   B. Locational Neutrality ......................................... 14
   C. Administrative Feasibility .................................... 17
   D. Concluding Comment ........................................... 20

IV. Coordination of Sales Taxes .................................. 20
   A. Independent Nation States .................................... 21
   B. European Community ........................................... 26
      1. Background to Common Value-Added Tax .................... 26
      2. Deferred Payment Scheme .................................... 28
      3. Tax Credit Clearance System ................................. 31
   C. United States ................................................ 36
      1. Interstate Problems with Retail Sales Taxes ............ 36
      2. Towards More Effective Coordination ....................... 39
   D. Concluding Comments ........................................... 42

Endnotes .......................................................... 46

References ........................................................ 48

Table 1: Types of Sales Taxes with Respect to Interjurisdictional Trade ......... 3
INTERJURISDICTIONAL COORDINATION OF SALES TAXES

Sijbren Cnossen*

I. Introduction and Summary

This paper surveys and evaluates the principles, criteria and practices that govern the interjurisdictional coordination of general taxes on goods and services, referred to as sales taxes. Although other methods of treatment are possible, generally, taxes on commodities entering interjurisdictional trade may be levied according to the destination principle (imports taxed, exports exempt) or the origin principle (imports exempt, exports taxed). Section II discusses the equity, efficiency and administrative considerations involved in choosing between these two principles. The destination principle emerges as the preferred choice. Following, Section III examines the application of this principle: firstly, in a setting of independent nation-states with border controls; secondly, in a common market such as the European Community (EC) that wishes to banish such controls; and thirdly, in a federal system of government such as the United States (U.S.) in which border controls are not allowed. The remainder of this section places the sales tax principles in an appropriate analytical context and summarizes the paper's main findings and conclusions.

* The author is Professor and Dean of the Economics Faculty of Erasmus University Rotterdam. He is grateful to Carl Shoup for his perceptive comments on an earlier draft. Peggy Musgrave's contribution (1986) on the interjurisdictional coordination of taxes on capital income has also been helpful in structuring this paper.
A. Principles of Sales Taxation

In the order of their historical appearance, the sales tax family comprises the turnover tax, the manufacturers tax, the wholesale tax, the retail tax, and the value-added tax. Shoup (1969, pp. 208-209) has listed the alternative methods of treatment by which each of these taxes may dispose of interjurisdictionally traded goods. As shown in Table 1, seven situations are possible in addition to the no-tax situation. Each commodity is classed as being either (1) produced at home (H) and consumed at home (h); (2) produced at home (H) and consumed abroad (a); or (3) produced abroad (A) and consumed at home (h). Furthermore, each class of commodities may be either taxable (T) or exempt (E).

The universal sales tax (type 2) and the domestic-only sales tax (type 3) are rarely encountered. Under the universal sales tax, the domestic tax would be imposed on imports, but not remitted on exports. Thus, this type amounts to the destination principle plus an export tax, or the origin principle plus an import tariff. The reverse situation is found under type 3 that taxes goods produced for home use, but exempts both exports and imports. The domestic-only type of sales tax is conceptually bizarre and administratively infeasible because it extends an open invitation to tax evasion.

Under types 4 through 6, the sales tax is levied either on imports (type 4), on exports (type 5), or on imports and exports (type 6), but in neither case are commodities produced and consumed at home included in the base. Import and export duties are usually selective rather than general
Table 1: TYPES OF SALES TAXES WITH RESPECT TO INTERJURISDICTIONAL TRADE

<table>
<thead>
<tr>
<th>Type</th>
<th>Hh /a</th>
<th>Ha /b</th>
<th>Ah /c</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>No tax</td>
</tr>
<tr>
<td>2</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>Universal sales tax</td>
</tr>
<tr>
<td>3</td>
<td>T</td>
<td>E</td>
<td>E</td>
<td>Domestic-only sales tax</td>
</tr>
<tr>
<td>4</td>
<td>E</td>
<td>E</td>
<td>T</td>
<td>Import tax</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>T</td>
<td>E</td>
<td>Export tax</td>
</tr>
<tr>
<td>6</td>
<td>E</td>
<td>T</td>
<td>T</td>
<td>Export-Import sales tax</td>
</tr>
<tr>
<td>7</td>
<td>T</td>
<td>E</td>
<td>T</td>
<td>Designation-principle sales tax</td>
</tr>
<tr>
<td>8</td>
<td>T</td>
<td>T</td>
<td>E</td>
<td>Origin-Principle Sales Tax</td>
</tr>
</tbody>
</table>

Key:  
T = Taxable  
E = Exempt  
A = Produced abroad  
H = Produced at home  
a = Consumed abroad

a/ Non-trade goods, import-competing goods, and exportables consumed domestically.

b/ Exported goods.

c/ Imported goods.

taxes. The import duty, if levied, is mostly a protective tariff. Export
duties are often in the nature of natural resource taxes or levies on
agricultural products. The distinguishing feature of import and export duties
is that they are border taxes per se, that is, imposed only on goods crossing
international frontiers. As such they are inimical to international trade
because they reduce trade volumes below the level that would be indicated as
desirable by the principle of comparative advantage. By definition, border
taxes do not require coordination; hence, they fall outside the scope of this
paper.

This leaves the destination-principle sales tax (type 7) and the
origin principle sales tax (type 8) for consideration. Under the destination
principle, commodities are taxed on the basis of their location of consumption
or destination, that is, in the jurisdiction in which they are consumed,
regardless of where they are produced. To achieve this, exports must leave
the exporting jurisdiction free of tax and a compensating tax is required on
imports so that they compete on an equal tax footing with domestically
produced goods. The export rebate and the import sales tax are called border
tax adjustments, generally effected through border controls, that is, customs
posts that ensure that exported goods actually leave the taxing jurisdiction
and that imported goods actually attract sales tax.

The origin principle holds that commodities should be taxed on the
basis of their place of production or origin, that is, in the jurisdiction
where they are manufactured, regardless of where they are consumed. Prima
facie, the origin principle does not require explicit border tax adjustments,
because imports are not taxed and no rebate is given with respect to exports. But, as shown below, this is misleading. For instance, under an EC-type value-added tax, a notional tax credit would have to be attached to imports to prevent them from being taxed in subsequent domestic stages of production and distribution, and exports must be valued at some arm's length basis to ensure that they bear the full domestic tax upon leaving the jurisdiction of production.

Invariably, with respect to commodities subject to a general sales tax, international trade is conducted under the destination principle. However, in federal countries with local, provincial, or state taxing jurisdictions, goods may be taxed on the basis of their origin. Gewerbesteuern in Germany and Luxembourg are imposed on sales (in combination with a tax on wages and capital) and no tax rebate is given on exports. The origin principle applies because these subordinate governments cannot effect border tax adjustments. From time to time, the origin principle has been advocated for use in the Common Market as a means to get rid of border controls.

B. Findings and Conclusions

The considerations involved in choosing between the destination principle and the origin principle may be appraised from three main points of view or criteria: (1) interjurisdictional equity or tax base entitlement; (2) allocative efficiency, or, more precisely, locational neutrality; and (3) administrative feasibility. In short, the question is: who should tax, what, where, and how?
In economic theory it makes no difference to allocative efficiency whether the destination principle or the origin principle is applied. As postulated by the equivalence theorem, relative prices and trade are unaffected in real terms if one principle is substituted for the other, provided domestic prices and exchange rates are perfectly flexible. However, the conditions of price and exchange rate flexibility are so far from being met in practice that it is advisable to refrain from applying the theorem. Moreover, it holds only for a truly general, uniform-rate sales tax on all goods and services which does not have its counterpart in the real world. In such a situation, as argued in the tax literature (Hufbauer, 1977), a destination-based tax will place the effects of tax-induced distortions in the product market, because the structure of world prices facing producers stays unchanged. By the same token, under an origin-based tax tax-induced distortions are shifted to the factor market, because the structure of world prices facing consumers stays unchanged. Since there is a presumption that rigidities in factor markets are more severe than in product markets, a sales tax applying the destination principle emerges as the preferred choice. It is difficult to contest this choice on equity grounds. Under the origin principle, the equal-treatment rule appears to be violated, while the benefit-received approach offers little or no support. Moreover, the origin principle would involve far too much valuation at each export and import.

Thus, it is perhaps not surprising that the destination principle has been widely accepted as the best approach to deal with the tax implications of interjurisdictional trade. Between nation-states, the required border tax adjustments can be effected more precisely as one moves from the turnover tax
to the value-added tax. Inherently, the adjustments are indeterminable with respect to turnover taxes, because the tax borne in stages prior to the export stage is unknown; so is the precise amount of the compensating tax to be imposed on imports. The treatment of imports is problematic under manufacturers and wholesale taxes, because an equal-rate compensating import tax discriminates in favor of goods imported by non-registered traders and consumers. Border tax adjustments are hardly necessary under a retail sales tax, because by definition the tax is largely destination-based. In practice, some element of tax may be incorporated in the price of export goods since producer goods may not be fully freed of tax. Full border tax adjustments are most readily achieved under value-added taxes that rebate all prior-state tax stated on purchase invoices and that correct automatically in domestic stages for any understatement of the import tax.

Although border controls are an accepted phenomenon among independent nation-states, they are contrary to the philosophy of a common market, such as the EC that wishes to attain all the characteristics of a domestic market where there are no border controls, and indeed no exports and imports. To get rid of border controls, it has long been thought therefore that for its internal trade the EC should abolish border tax adjustments through replacing the destination principle by the origin principle. This paper shows that such a move would be unnecessary, undesirable and infeasible.

In the EC the solution to abolishing border controls lies in shifting border tax adjustments to books of account. This can be done under either of two approaches. Under the deferred payment scheme, it is achieved by levying
the compensatory import tax not from the importer but from the first inland recipient of the taxable goods. Furthermore, export rebates can be provided on the basis of documentary evidence rather than physical controls. A major drawback of this scheme is that a break occurs in the tax chain from producer to consumer. This does not happen under the proposed tax credit clearance system that taxes exports but allows importers a credit for the out-of-state tax which in turn is presented for payment to the exporting state's tax administration. Although more comprehensive than the deferred payment scheme, this system requires EC-wide agreement which is difficult to secure. If adopted, some realignment of the coverage of the various value-added tax rates of Member States would be desirable. The deferred payment scheme as well as the tax credit clearance system, are destination-based solutions to the problem of abolishing border controls. Unlike the conventional import sales tax procedure, both methods are neutral with respect to trade.

On its way to abolishing border controls, the EC will have to face many of the same problems encountered under the retail sales taxes that are administered by states and provinces in the US and Canada. Most US states levy use taxes on out-of-state purchases of taxable goods, but taxes on mail order and direct-marketing interstate sales, border sales, and some part of taxable business-to-business sales, escape collection because such sales are not always declared. Against a background of rising tax rates and revenue needs and increased competitive distortions, much tighter interstate cooperation is required. Federal legislation may be necessary to require mail order firms to collect and remit the tax of the destination state. Alternatively, a direct federal tax on interstate mail order sales might be
introduced. But this may be considered an abridgment of the states' powers to tax.

In concluding this summary, it should be pointed out that in practice no sales tax is neutral with respect to consumer and producer choices in the jurisdiction in which it is imposed. By extension, every sales tax is bound to distort the trade with other jurisdictions, whichever principle is applied and regardless of how accurate border tax adjustments are applied. As is well-known, cumulative effects that reduce specialization and hence economic growth and that cause erratic variations in tax-to-consumer price ratios are inherent to turnover taxes. But distortions of industrial and trade organization patterns are also unavoidable under manufacturers and wholesale taxes. Under the Canadian manufacturers tax, for instance, major valuation problems arise from the treatment of similar sales at different trade levels, transfers between related parties, sole distributors and private brands. Moreover, the tax base of the pre-retail taxes is highly incomplete because services are excluded and trading margins are not included in the value for tax. Differentiated rates compound the resulting distortions. These effects occur also under retail and value-added taxes that in practice are not simple, uniform taxes on all consumption, but rather fall in part on investment and with different weight on various consumption goods and hence on different consumers. Therefore, any sales tax, whatever its form, materially affects the level and composition of domestic production and consumption, and thus the level and composition of interjurisdictional trade flows.

Throughout the paper, the analysis is illustrated by references to countries that are members of the Organisation for Economic Co-operation and
Development (OECD), but the arguments are equally applicable to other
countries.\footnote{2} Furthermore, taxes on specific commodities are not covered,
although the issues and problems of coordinating excises, say, on alcohol,
tobacco and petroleum products, differ little from those encountered under
sales taxes. Unless the contrary is indicated, it is assumed that sales taxes
are added to price, and that their incidence is such that they reduce the real
income of consumers.

II. Criteria for Sales Taxation

Although there are no doubt other factors entering into the choice
between the destination principle and the origin principle, the major
considerations relate to carving up the sales tax base between two or more
jurisdictions as fairly as possible (interjurisdictional equity), to do so in
a manner that does not interfere with consumer and producer choices, in
particular manufacturing location decisions (locational neutrality), and in a
form that is as simple and certain for the taxpayer and the tax administrator
as is possible (administrative feasibility).

A Interjurisdictional Equity

The first criterion to be examined in choosing between the
destination principle and the origin principle may be called
'interjurisdictional equity' or 'tax base entitlement'. It means that the
proceeds derived from the taxation of goods and services produced and/or
consumed in two or more jurisdictions should be distributed fairly among the
jurisdictions sharing the same tax base.\footnote{3} In turn, in and between
jurisdictions, the principle must be related to individual taxpayers, either in the form of the equal-treatment rule or the benefit principle.

1. Equal-treatment rule

   Equal treatment means that sales taxes should be imposed without distinction of person between producers or consumers similarly placed. Equal treatment is not the same as horizontal equity under the income tax, because the index against which such treatment is measured is not comprehensively defined. Equal treatment does not mean that a tax on automobiles is inequitable because persons that do not own cars do not pay it. But it does mean that all automobile owners, i.e. persons 'similarly placed', should pay it.

   The origin principle appears to come into conflict with the equal-treatment criterion. To illustrate, suppose jurisdiction A imposes a general sales tax of 10 percent, and jurisdiction B, a tax of 20 percent. If A exports automobiles to B that compete with similar, but more highly taxed, automobiles produced in B, then, under the original principle, a customer in B buys a foreign car with only 10 percent tax on it (aside from the value added in B by marketing the car there), compared with the 20 percent tax on a domestically produced car. An analysis of the alterations in the exchange rates upon adoption of the original principle (see below) is unlikely to convince the domestic automobile producer that no unfairness (or inefficiency) arises from the difference in tax rates. If the tax rate differential is reversed -- high tax rate in the exporting jurisdiction -- the origin principle will be perceived as unfair to the producer in A, whose cars must now sell at a higher price in B than B-produced cars.
Under the destination principle, these perceived injustices disappear, but in their place arises a perceived unfairness against producers of non-traded goods or importers in the exporting jurisdiction in favor of those who produce traded goods and therefore seem to benefit from the exemption or zero-rating of exports. Similarly, if two jurisdictions have different destination-based sales tax rates, the domestic producer in the lower-tax jurisdiction may believe that he has to pay a higher 'price of admission' to the higher-tax jurisdiction than the foreign producer has to pay for admission to the domestic market. In practice, however, these forms of unfairness seem to be regarded as less unfair, or at least to receive less attention, than the perceived unfairness of rate differences under the origin principle.

2 **Benefit principle**

Under the benefit-received approach, taxes are considered proxies for the payment of goods and services supplied by government. The idea is that the cost of such services, insofar as these are allocable, should be charged to those who benefit from them, although benefits are often only partly discernible and charges only an imperfect approximation of price. For instance, government-provided road, educational and health services are examples in respect of which the benefit-received approach makes sense. Conceivably, so is the provision of a climate of law and enforcement of contracts that makes production and export possible, or yet the maintenance of a clean environment that contributes to health and the general well-being.
In relation to the origin principle, the benefit-received approach implies that the revenue from the sales tax on a traded good, up to the time it is exported, goes to the exporting jurisdiction, that is, the jurisdiction in which the good has been produced. Presumably, the consumers of the goods in the importing jurisdiction would pay the tax in the price, and, quite properly, they would ultimately defray the costs of the goods and services the exporting jurisdiction's government has rendered to the producing firms. Under the destination principle, the consumers would pay just as much, but all of the sales tax included in the price, not just the tax on the value added in the importing jurisdiction, would go to the importing jurisdiction's government. The ideal case for the destination principle, by that reasoning, would be one in which the exporting jurisdiction's government supplied little or no services to the firms involved, while the importing country was heavily engaged in supplying services to consumers.

On closer inspection, however, the benefit-received approach as a rationale for tax base entitlement, does not cut much ice. Although of great financial and economic significance, arrangements for a favorable institutional climate can be provided practically without cost, just as, for instance, the rights of free speech and assembly. On these grounds, therefore, it is not possible to charge a tax on sales or value-added. To be sure, exporting firms do benefit from government services, such as the provision of roads, canals and environmental protection that are costly to produce, but obviously sales or value added are not an appropriate base to charge such firms for the benefits received. To that end, selective taxes, such as road user charges and effluent levies are needed. Benefit-based
justification for sales taxes finds little or no support in the real world (Musgrave, 1969, p. 242).

B. Locational Neutrality

An important interjurisdictional efficiency requirement, based on the maxim of comparative advantage, is that sales taxes should not distort the relative costs between home-produced and foreign-made goods. In the absence of a sales tax or in the face of a neutral tax, each jurisdiction, it is argued, would produce those goods which it produces cheaper than other jurisdictions and all jurisdictions would obtain a higher real income than they would if, as a result of the tax (and not because of increasing cost conditions), they would also produce goods that might be manufactured cheaper elsewhere. In short, the second choice criterion holds that the tax should be neutral with respect to manufacturing location decisions.

As is well-known in economic theory, the 'equivalence theorem' postulates that, under certain conditions, it makes no difference for locational neutrality whether the destination principle or the origin principle is applied to interjurisdictional trade, if exchange rate adjustments are allowed for. /4 A destination-based tax, which is added to price, will have no trade effects since the consumers in the taxing jurisdiction will find relative prices of foreign-made and home-produced goods unchanged (conversely, if prices stay unchanged while factor costs decline, there will be an appreciation of the taxing jurisdiction's currency in terms of other currencies, but trade will not be affected). Alternatively, if an added-on production tax is the preferred choice, imports will rise. This
results in an increase in the demand for and hence the price of the importing jurisdiction's currency, thereby dampening the desire for imported goods and restoring the original trading position. Thus, whatever is done, relative prices stay unchanged and trade is unaffected in real terms. More generally, exchange rate adjustments should cancel the effects of a change-over from the destination principle to the origin principle and vice versa.

This conclusion is gratifying until it is remembered that the equivalence of the destination principle and the origin principle is a long-run phenomenon in which domestic product or factor prices and exchange rates are perfectly flexible. In the short-run, however, in which prices and rates are fixed, a change from one principle to another would affect a country's competitive position and balance of payments, as exemplified by German and French experiences. Following the introduction of the EC value-added tax, at the end of 1968, Germany reduced its export rebates below the tax borne by previous stages and lowered the compensating import tax below the domestic rate. While the latter measure should merely result in a partial postponement of the tax payment, the reduction in the export rebate had the effect of a revaluation of the Deutsch Mark, thus reducing a substantial trade surplus that had given rise to speculative short-term capital inflows. At about the same time, France made a move in the opposite direction by abolishing the 4.25 percent payroll tax, levied on the origin principle, and replacing the revenue foregone by an increase of the value-added tax with a corresponding increase in destination-based border tax adjustments.

Moreover, a general tax levied at a uniform rate on all goods and services does not have its counterpart in the real world. All sales taxes,
whatever their form, exclude some goods and most services from their base, apply differentiated rates and exhibit cumulative effects, thus distorting consumer and producer choices more or less. In this situation, the choice of the border tax adjustment system materially affects the level and composition of domestic production and consumption and, therefore, the level and composition of interjurisdictional trade flows. A shift from the destination principle to the origin principle will increase consumption and decrease production of heavily taxed goods, and, conversely, decrease consumption and increase production of lightly taxed or exempt commodities with corresponding effects on imports and exports.

Finally, as shown in the professional literature, for the equivalence theorem to hold, trade between jurisdictions must be balanced, initially. Also, there should be no net transfer payments from one jurisdiction to the other (e.g. interest on debt) and no net flow of capital to one jurisdiction. If these conditions are met -- a highly unlikely assumption -- interjurisdictional differences in (uniform) sales tax rates would not lead to a reallocation of production and hence to economic inefficiency if, say, the member states of the EC, in which this issue arose, would replace the destination principle by the origin principle as a means to get rid of border tax adjustments and hence of border controls. But this claim is derived from models in which factors do not move across countries which, of course, is precisely one aim of a true common market and therefore an assumption that should not be made. Furthermore, it has been shown that even a uniform sales tax rate throughout the EC will not (save under certain unlikely conditions) prevent income transfers among member states under the origin principle.
In conclusion, the conditions for the equivalence theorem to hold are so far from being met in practice that it would seem to be desirable to heed Shoup's (1953) early warning that the general application of the theorem had better be refrained from.

C. Administrative Feasibility

The third criterion concerns administrative feasibility. One of the great advantages of a destination-principle sales tax, particularly a value-added tax that extends through the retail stage, is that in applying border tax adjustments tax administrators do not have to worry about underlying taxable values. The notion 'taxable value' is irrelevant for export rebate purposes; all prior-stage tax is simply refunded. But even at the import stage, there is little concern. Under a tax-credit type of value-added tax, any underpayment of tax due to undervaluation at the border is caught at the first taxable stage inland. In the end, every domestic and imported good is always taxed in full at the rate applicable at the retail level. Thus, the notion 'taxable import value' has little relevance if goods are imported by registered traders. Since the value-added tax extends through the retail stage, only consumers might benefit from underdeclaring their imports. But normally, say, in the case of cross-border shopping they would already have paid the full value-added tax of the exporting jurisdiction, as neither they nor the supplying firm in that jurisdiction would be entitled to an export rebate. Thus, the advantage, if any, to a consumer would be small; in effect, out-of-state purchases would be taxed on the basis of their origin. The likelihood of a tax advantage would be even smaller if imported consumer goods were taxed again at the border.
The relative ease with which the tax aspects of interjurisdictionally traded goods are handled under the destination principle becomes a nightmare when the origin principle is applied in full. Since the jurisdiction of production then claims the tax on value added up to the time of export, exported goods must be valued for tax purposes. This might be a highly contentious matter. Presumably, in some cases actual selling prices might be taken, but in a large and growing number of inter-locking, interjurisdictional transactions recourse would have to be had to some arm's length principle. This would be difficult to administer, as anyone familiar with customs operations knows. Similar difficulties would arise on the import side of the ledger. To prevent the import value from being taxed in the subsequent stages under the tax credit technique, some notional credit would have to be attached to imports (at the import stage!) equal to the importing jurisdiction's tax rate times the import value.\(^{8}\) Again the appropriate underlying value would be an issue on which parties are not likely to agree forthwith.

These administrative problems would be compounded under the restricted origin principle that has been recommended for use in the EC. Imagine goods passing through several jurisdictions before being exported to, say, the United States. First, at each internal border the notional import tax credit, based on the importing jurisdiction's value-added tax rate (which of course might be the same as, or different from the exporting country's tax rate) would have to be established. Next, at the second and further export stages credit would have to be given for the same country's notional import tax. In short, the origin principle requires too much valuation at each import and export.
D. **Concluding Comment**

Thus, it is not surprising that the consumption base is generally associated with the destination principle. At the same time, the income base is usually taken to be linked with the origin principle. This then permits the simple solution of having the destination jurisdiction impose a consumption tax, while the origin jurisdiction levies an income tax. There is, however, no logical reason why the pairing has to be of this convenient form. Suppose that the claim to tax base is defined in destination terms, but that the destination jurisdiction wishes to place its tax system on an income base; or suppose that the claim to tax base is defined in origin terms, but that the jurisdiction of origin wishes to apply a consumption tax. In the former case, the jurisdiction of destination would tax the income earned in the production of goods produced at home as well as the income earned abroad in the production of its imports. In the second case, the jurisdiction of origin would tax the consumption of its own products at home as well as the consumption of its exports abroad. In both cases, some form of intergovernmental transfer mechanism would be needed, whereas such is not the case for the more conventional forms of pairing. Thus, feasibility may dictate the pairing of destination with consumption and of origin with income, but there is no logical reason for this. After all, any one jurisdiction is entitled to choose whether it wishes to rest its tax system on an income or a consumption base, whereas the question of entitlement to bases in relation to trade is a matter of interjurisdictional property arrangements (who is allowed to tax what) among nations.\(^9\)
IV Coordination of Sales Taxes

The destination principle emerges as the preferred basis for coordinating sales taxes among different jurisdictions. These jurisdictions range from independent nation-states to local governments with semi-autonomous taxing powers. Common markets, such as the EC, presently operating as a customs union but striving towards an economic union, and federal systems such as the U.S. and Canada with substantial tax autonomy for states and provinces, may be placed between these poles.

This section examines the various forms of sales tax coordination in these diverse political and economic settings. To define the settings more closely, a nation-state is understood to pursue independent economic policies. Subject to international agreements and the possibility of retaliation, such a state may not be very much concerned about inter-nation equity and efficiency, the exchange rate is flexible, and there are border controls to effect border tax adjustments. In a common market, member states care about competitive distortions, the exchange rate is fixed but adjustable, and the objective is to abolish border controls. In a federal system, states and provinces cannot pursue their own economic policies but have substantial independence in the tax field. Border controls are not permitted, but presumably border tax adjustments are allowed. Finally, the flexibility of local governments is further restrained insofar as border tax adjustments cannot be made; in other words, there is little, if anything, to coordinate in the sales tax area.
A. Independent Nation States

Destination-based border tax adjustments among independent nation-states are governed by the provisions of the General Agreement on Tariffs and Trade (GATT) Thus, Article III, paragraph 2, of Part II, provides that 'the products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied directly or indirectly to like domestic products.' Furthermore by implication, Article XVI, in conjunction with a note attached thereto, permits the exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption. Although these and related provisions have been the subject of much debate, clearly their purport is that compensating import taxes should not be used to protect domestic production and that export rebates should not be employed to subsidize exports.

To implement the destination principle, border tax adjustments among independent nation-states are enforced through border controls, originally installed to ensure compliance with border taxes. Invariably, sales tax laws stipulate that compensating import taxes should be levied as if they were import duties administered by the customs authorities. It follows that before being admitted to the country imported goods subject to sales tax are put under the power and supervision of customs personnel. And such goods are handed back to the importer only after the required documents have been cleared and the tax has been paid. Generally, the compensating import tax is calculated on the import-duty value of goods (an arm's length price concept)
plus any import, customs and excise duties. Viewed from the domestic sales tax angle, this procedure implies that, unless a suspension technique applies, the compensating tax on imports is due and payable on purchases rather than on sales.

Of all sales taxes, the turnover tax is the most intractable and non-neutral across domestic products as well as vis-a-vis imported and exported goods. \(^{12}\) Since a turnover tax strikes every sale at nearly every stage of production and distribution with no allowance for tax already paid at earlier stages, the total amount of the tax included in product prices varies widely, even for products taxed at the same nominal rate. Border tax adjustments cannot be reliably determined. Simple exemption of export sales takes no account of turnover tax collected at earlier stages. A rebate of such tax can only be approximate, given the differing number of selling stages that different goods go through before being exported and the differing values added at those stages. The same applies to imports. To match the cumulative burden of the tax imposed on goods produced domestically, the compensating rate of tax should be in principle be higher the closer the good is to its final form. But how much higher cannot be ascertained with reasonable certainty.

Under the manufacturers sales tax, levied in Canada, the compensating import tax is normally payable at the time of importation, but subsequently for imports by registered manufacturers because the suspension technique applies. \(^{13}\) Manufacturing exporters do not normally pay tax, because they are integrated forward to the export stage. Tax paid by other exporters may be
refunded and, where applicable, the refund equals the total tax paid on the product. Where goods are imported by non-registered traders, it is alleged that an equal-rate import tax favors imported goods over domestically produced goods, because the taxable value of the latter may include marketing costs (advertising, financing, warranty, etc.) which are not reflected in the value of imported goods. Furthermore, in the case of non-licenced traders, the Canadian sales tax, for instance, is applied to the duty-paid value of goods, and under the provisions governing the application of import duties this does not include the costs of transportation from the place of shipment abroad to the Canadian border. In short, under a manufacturers sales tax an equal-rate compensating import tax discriminates in favor of goods imported by non-registered traders. Uplifts may correct for this, but equal treatment is not possible.

One of the few important advantages of the wholesale sales tax, levied in Australia and Finland, over a manufacturers sales tax is that it provides for more equal treatment of domestically produced goods vis-a-vis imports, because selling and promotion expenses incurred after importation are also included in taxable value. Still, problems and non-neutral treatment of occur with respect to the importation of fully manufactured goods by non-licensed traders, such as retailers and consumers. In valuing such goods for sales tax purposes at the import stage, the domestic wholesale margin must be taken into account. Australia adjusts for this by adding 15 percent to the duty-paid value before calculating sales tax liability. Although such rough adjustment procedures are inevitable, nevertheless they remain highly arbitrary (and excessive). Again, imported goods are not treated at par with
domestic goods. Generally, no such discrimination occurs on the export side of the ledger. Exporters do not normally pay tax.

The compensating import tax is seldom payable under the retail sales tax (widely used by subordinate governments in the U.S. and Canada), because the tax is inherently destination-based. Consumers and unregistered small traders are liable to tax at the import stage, but in most cases the personal exemption, usually applicable for import as well as sales tax purposes, would be large enough for the importer not to incur sales tax. Very few, if any, infringements on the neutrality criteria occur. Of course, exporters do not pay tax. In their case, an element of undercompensation may arise if the tax on producer goods, such as office machines purchased from retailers, cannot be rebated.

From a neutrality point of view, the value-added tax adopted by EC Member States is even more precise in fully freeing exports from tax and in levying an equivalent compensatory tax on imports. Since the tax has to be explicitly stated on invoices, at each stage, including the export stage, the amount of tax paid at previous stages, and therefore to be rebated, can be reliably ascertained. Similarly, the value-added tax imposes an equivalent compensatory tax on imports even if import values are understated, because any underpayment is automatically caught and corrected at the following stage. The only non-neutral aspect is that under conventional procedures, the value-added tax at the import stage is payable as if it were an import duty, that is, immediately, rather than, say, the following month as under procedures applicable to domestically traded goods. Although the import tax is creditable by the purchaser, compared to domestic transactions, the importer
foregoes the interest on the prepaid tax until he receives that tax back from his customer.

A point worth noting is that with respect to all sales taxes an element of undercompensation may arise from so-called taxes occultes, that is, taxes paid in respect of specific goods and services used in the production, transportation and distribution of goods. Such taxes occultes may comprise taxes on: (1) auxiliary materials such as energy, fuel and lubricants; (2) durable capital equipment, such as vehicles; and (3) services such as transportation. Undercompensation might occur if such goods and services are subject to separate excises that are not rebated upon exportation, nor accounted for upon importation. It will readily be seen that by incorporating such excises in a value-added tax that covers all stages of production and distribution, full credit can be ensured, that is, undercompensation does not occur. Of course, if the taxes represent benefit charges, that is, proxies for the cost of road and other services provided by government, no credit for tax should be allowed because the taxes reduce production costs. This is achieved by levying such taxes in the form of (non-creditable) excises.

In summary, only the retail sales tax and the value-added tax are inherently suited to ensure neutral treatment of internationally traded goods vis-a-vis domestically produced goods. The retail sales tax is perhaps somewhat more neutral to the extent the import tax does not have to be prepaid. The value added tax on the other hand is more comprehensive in freeing producers goods from tax. Therefore, undercompensation is less likely to occur.
B. European Community

The value-added tax has been adopted by the EC as the preferred form of sales tax, because it permits precise and expeditious border tax adjustments. This satisfies one of the objectives of the Treaty of Rome prescribing that competitive conditions among Member States should not be distorted on account of the sales tax. However, another objective is to abolish border controls. Given the preference for the destination principle, the question therefore is how border tax adjustments can be effected without maintaining border controls and customs posts. Two proposals are discussed, following a brief account of the reasons for introducing a common value-added tax.

1. Background to Common Value-added Tax

When calling for the creation of a common market in which distortions of competitive conditions would be prevented and the free movement of goods and services ensured, the founding fathers of the EC recognized that the elimination of import duties (completed on July 1, 1968) would not be sufficient for these goals to be achieved if sales taxes (and excises) were to continue to be allowed to function as trade barriers. There was ample reason for such fear. At the time the Treaty of Rome was signed in 1957, five out of six original Member States were levying a 'cascade' type of turnover tax which, as indicated above, does not permit a reliable and unambiguous computation of border tax adjustments. Border tax adjustments were at best guesstimates and it was tempting to use them for protective purposes or to correct trade balances.
Germany provides a good example of the discrepancy between the estimated tax burden and the actual tax burden under a turnover tax. In 1967, the average tax rebate on exports was 2.9 percent of their value, while it was estimated that prices of exports incorporated some 3.5 percent of turnovor tax. Similarly, the so-called equalization tax on imports averaged 4.6 percent, while the estimated turnover tax burden on related home-produced goods was 7.0 percent. Under the turnover tax, therefore, border tax adjustments resulted in an undercompensation of approximately 3 percent. In Belgium and the Netherlands, it was also argued that border tax adjustments under the existing cascade-type of sales tax did not provide for full compensation. The change-over to the value-added tax therefore had a 'devaluation effect.'

Although these countries represented cases of undercompensation, no doubt over compensation was just as likely to occur, sooner or later. Moreover, since the rebates and equalization taxes were estimated average percentages which differed from one product to another without equaling the actual effective rate of tax, except by sheer coincidence, border tax adjustment arrangements under the turnover taxes could be compared with a highly arbitrary schedule of import duties and export subsidies. As described above, this does not happen under value-added taxes extending through the retail stage. Under this form of sales tax, the export rebate, shown on purchase invoices, is exactly equal to the tax paid in previous stages of production and distribution, and the tax on imports and subsequent domestic transactions eventually always equals the statutory rate levied at the retail stage.
Although the border tax adjustments under the value-added tax put foreign and domestic goods on an equal tax footing, seemingly they do require the maintenance of border controls. Such controls are of course contrary to the spirit of a common market that wishes to attain all the characteristics of a domestic market. Until recently, therefore, the European Commission, supported by expert advice (Neumark Committee, 1963), favored the eventual adoption of the origin principle. Intra-community border controls would not be necessary, it was argued, if each member state confined the tax to the value added within its own jurisdiction. In the light of the considerations provided above, this point of view has now been abandoned in favor of retaining the destination principle. Present proposals are to eliminate border controls by shifting border tax adjustments to books of accounts of taxable persons in other Member States (Commission, 1985), either under a deferred payment scheme or, preferably, a tax credit clearance system.

2. Deferred Payment Scheme

The deferred payment scheme was pioneered in the Netherlands and has been in use there ever since the value-added tax was introduced. Under this approach, the compensating import tax, required to put foreign and domestic goods on an equal tax footing, is not levied, nor are imported goods checked physically at the border. Instead, the credit mechanism of the value-added tax is relied upon to ensure that the first taxable person in the importing country implicitly pays the compensating tax, because there is no offsetting credit. The method works so satisfactorily that nearly all of the compensating import tax otherwise payable on internationally as well as intra-
community traded goods is shifted inland. Additionally, eligibility for the export rebate may be proven on the basis of documentary evidence (bills of lading, payments from abroad, etc.) rather than physical clearance at the border. To qualify for a rebate, exporters are not required to prove that goods have left the country by a certificate or affidavit signed by the customs authorities.

Under the Dutch deferred payment scheme, therefore, customs clearance methods are set aside by incorporating the compensating import tax in the domestic ambit of the value-added tax. The scheme makes the recipient, not the importer, of the goods, liable to tax. The former has to compute and report the compensating import tax, but may take credit for that tax in the same return. To illustrate, suppose a manufacturer imports goods worth Df. 10,000 in a month in which his domestic sales are Df. 50,000 and his domestic purchases Df. 30,000. At a value-added tax rate of 19 percent, he has to declare taxable sales and imports totaling Df. 60,000 on which Df. 11,400 gross tax is due. At the same time, he is eligible for a tax credit of Df 7,600 (Df. 5,700 on domestic purchases + Df. 1,900 on imports), so his net tax liability is Df. 3,800 which, of course, exactly equals 19 percent of his own value-added of Df. 20,000.

The return for the compensating import tax has to be filed at the time the imported goods are received, but at the latest on the eighth day following the day of importation. The day of importation can be verified, because lorry drivers have to drop a copy of the exporter's invoice in a letter box at the border crossing. Similarly, the self-assessment procedure,
which in theory is redundant, facilitates compliance control. In most cases the effect of the scheme is that the import tax is not paid until the underlying goods are resold by the firm that actually receives them. This arrangement prevents a large number of export rebates that has to be given in a country heavily engaged in transit trade.

Deferral is compulsory for nearly all registered taxpayers importing goods across the Belgian-Dutch border, as well as for all taxpayers, regardless of the port of entry, importing specified goods that by nature can be used only for taxable activities (in other words, not for personal consumption). Taxpayers importing other goods by sea or across the German-Dutch border may obtain a personal permit enabling them to make use of the deferred payment arrangements (provided they are resident, import regularly, and meet certain bookkeeping requirements). Deferral is not permitted with respect to the importation of passenger cars and motor cycles (except by personal permit), goods imported through the postal service (unless a special permit is obtained), excisable goods (except banderolled tobacco products), and for goods imported by individuals, exempt farmers and small businesses, and non resident taxpayers without a permanent establishment in the Netherlands. Although nearly all imports are covered, the scheme is not so comprehensive as to make border controls completely redundant.

The principle of the deferred payment scheme has also been adopted in Article 23 of the Sixth Directive and amplified in a draft-program of the Commission, as the direction the EC should take initially in an attempt to abolish border controls for the value-added tax. In 1982, the method became
the subject of the Fourteenth Draft Directive. The preamble to the Directive states that experience shows that the scheme meets the requirements of simplicity and effectiveness in combatting fraud. The draft Directive limits the scheme's application to intra-community trade, to goods used for taxable (i.e. not exempt) activities, and to regular taxpayers. The scheme would be administered through a system of permits. Obviously, like the Dutch Scheme, it is not so comprehensively designed as to banish all border controls.

3. Tax Credit Clearance System

Under the deferred payment scheme, some vestiges of border controls remain. Documentation has to be provided at customs posts. Moreover, there is a break in the tax chain from foreign producer to domestic consumer. Exports are freed of tax and imports are not taxed until the first inland production or distribution stage. The main advantage of the scheme is that border formalities and congestion are reduced to a minimum. Nevertheless, border controls are not completely done away with. By definition, such border controls do not exist in an economic union towards which the EC strives.

Another solution to the proper coordination of rate-differentiated value-added taxes in the setting of an economic union would be to make registered businesses selling to registered or non-registered entities or consumers in another member state liable to tax at the rate prevailing in that other state. Thus, over-the-counter sales, say, in excess of a specified monetary threshold, would be taxable in the jurisdiction of residence of the buyer as evidenced by his mailing address or other identification. Similarly, goods shipped by a vendor in one member state to a vendee in another state
would be taxable at the rate applicable in the jurisdiction of destination. Tax collections on out-of-state sales would be identified separately by the vendor on his return and paid to the destination-jurisdiction, possibly through some form of clearing mechanism. However, a major drawback of this proposal is that it requires vendors to distinguish between resident and non-resident buyers, a task as difficult to perform and subject to as much abuse as the application of end-use exemptions. In essence, the vendor is held responsible for the honesty of the vendee identifying himself as an out-of-state buyer.

Probably, the best system for value-added tax coordination in the EC is to shift border tax adjustments to books of account in other member states under a so-called tax credit clearance mechanism. Vendors of intra-community traded goods would pay the full value-added tax in their jurisdiction of registration; (export) rebates would not be provided. But the first taxable person in an importing member state would receive a credit for the out-of-state value-added tax charged by his supplier. The importer would list that credit, and those of other out-of-state suppliers, separately on the return he has to file with the local value-added tax office. Next, the importing state's value-added tax administration would collate and tabulate the various out-of-state tax credits separately for each exporting state. Finally, the out-of-state tax credits would be presented for payment to the value-added tax administration of exporting states. An EC-wide clearing mechanism could be set up to handle the various claims. Net balances would be payable by states that are net exporters./18
To illustrate this method of removing border controls, assume that exporter in A in jurisdiction X is faced with a value-added tax rate of 10 percent, and importer B in jurisdiction Y with a rate of 20 percent. Furthermore, assume that A exports goods worth $200 to B, and that these goods have been produced with inputs worth $150. Under conventional border tax adjustments, A receives a rebate of $15 (10 percent of $150) from jurisdiction X; he pays no tax on his own value-added of $50. Furthermore, importer B pays a compensating import tax of $40 to jurisdiction Y. Now, under the proposed method, A would pay $5 (10 percent of $200 minus a tax credit of $15) to his jurisdiction of registration. Thus, jurisdiction X would receive $20 with respect to the goods sold to B. Following importation, B, who would not be liable to any compensating import tax, would claim, when he files his next regular return in jurisdiction Y, a tax credit or refund of $20 against his gross tax in that return. In turn, Y would present a compensation claim for the same amount to X. All tax transactions balance but exactly, because the value-added tax administration in X receives $20 tax from exporter A and those X-country firms that preceded A, which it pays to Y, which in turn extends a credit to importer B for the same amount. And exporter A receives $20 tax invoiced to B, who is reimbursed (through the credit just noted) by the value-added tax administration of jurisdiction Y. Jurisdictions X and Y may be said to administer the destination principle jointly.

The tax credit clearance system brings additional administrative obligations in its train (which, it should be noted, can generally be met when it suits the taxpayer), but on the other hand the costs of red tape and delays at the border, in all estimated at 5.7 percent of the value of intra-community
trade (Commission, 1975) in the EC would be eliminated. There would be no valuation problems at the time of exportation, because generally the exporter's selling price would be taken as the value for tax. Undervaluation would result in a lower tax credit in the importing jurisdiction, as well as a lower tax credit clearance payment by the exporting jurisdiction. An objection might be that the exporter's payment risk is increased by the amount of the value-added tax for which he invoices his client. To meet that problem, the system might be supplemented with a zero-rate notification procedure. Upon his request the exporter would then receive a rebate, the importer would pay tax as if subject to a deferred payment scheme, and the exporting jurisdiction would not have to compensate the importing jurisdiction's tax administration. In view of administrative ramifications however, zero-rate notifications should be used sparingly, if at all.

The approach has to be supplemented by rules exempting or regulating intra-community imports by non-taxable persons, such as individuals and exempt organizations and institutions, including governments. A good case can be made for the complete elimination of compensating import taxes on internally traded goods bought by individuals. Until recently, in the EC individuals were charged the full value-added tax of their country of residence upon importing goods from other member states with a total value in excess of the personal exemption, even though value-added tax had already been paid in the country of origin. In 1982 however, the European Court of Justice (Case 15/81) issued a prejudicial ruling that an importing country could impose its compensating import tax, but that the residual of the value-added tax paid in the exporting member state, and still incorporated in the value of the
product, had to be credited against the import tax. Here it is proposed that for over-the-counter sales, only the value-added tax of the country of the vendor should be payable, i.e. for consumer purchases the tax would be applied on the basis of the origin principle. To minimize abuse, however, mail order firms should be obliged to compute and remit the tax of the customer's member state or, alternatively, the difference between the destination and origin-state tax rate.

For current consumer goods the proposed procedure would mean little more than formalizing the de facto situation: individual exemptions are so high and cross-border shopping is so difficult to police that nearly all out-of-state purchases are taxed on the basis of their origin. As regards expensive durable consumer goods, such as cars and pleasure yachts, which attract higher rates of value-added tax in some countries, existing registration requirements in residence countries might be used to collect the additional import tax from consumers in the form of an extra registration duty or purchase tax. Of course, durables imported through dealers would be taxed in accordance with the tax credit clearance system. It would seem advisable to apply that system also to governments and other exempt entities. The amounts of tax involved may be so large that the destination principle should continue to be applied.

Although value-added tax rates do not have to be equalized for the removal of border controls, without question some alignment of the rate structures would facilitate a shift of border tax adjustments to books of account. Credits for foreign tax are easier to check if the coverage of a
particular rate is uniform with respect to intra-community traded goods. Thus, agreement might be sought on a dual rate structure that would comprise a reduced rate for agricultural and food products (simply defined as all items enumerated in the first 21 chapters of the Common Tariff Nomenclature), pharmaceutical and medical supplies, and a standard rate for all other products and services. Although the issue need not block the implementation of the proposed schemes, increased rates might be abolished. Their coverage is mainly confined to motor vehicles and excisable goods. In other words, any revenue loss can be recovered by increasing the rates of corresponding user charges and excises. But apart from these minor adjustments, each member state would remain free to set its own rate or rates of value-added tax.

C. United States

Historically, Canada and the U.S. which have federal systems of government, have considered the retail sales tax the natural tax handle of provinces and states and, to a lesser extent, local governments. In Canada 9 out of 10 provinces, and in the U.S. 45 out of 50 states, the District of Columbia, as well as some 7,000 local governments, have this form of tax. In the U.S. to which this analysis is confined, sales tax receipts average 31 percent of all states' tax revenues. Rates range from 2 percent to 7.5 percent or, if local rates are taken into account, from 4.25 percent to 8.25 percent.

1. Interstate Problems with Retail Sales Taxes

The retail sales tax is ideal for states, because that tax is almost inherently a destination-based tax. Interstate border tax adjustments and
hence border controls are not required. Virtually all interstate trade is
carried on in a tax-free area since sales at retail are nearly always made
within the boundaries of the state taxing jurisdiction. Exceptions arise, but
until recently these have not affected the feasibility and efficacy of the
various retail sales taxes. Thus, use taxes, imposed 'for the enjoyment of
that which is being purchased,' are levied on out-of-state vendors with an
adequate 'nexus', that is, a business location or other linkage (warehouses,
service facilities, salesmen) in the state. Similarly, sales or use taxes can
be effectively enforced on out-of-state automobile purchases by collecting it
at the time of the mandatory registration of the vehicle in the state.

For lack of an audit trail or possibilities of recovery, greater
difficulties are encountered with the collection and enforcement of the tax on
taxable purchases from out-of-state vendors be businesses as well as consumers
through mail order firms, direct marketing activities and in the form of
border sales. The tax on taxable out-of-state business purchases must be
collected through the usual (voluntary) process of monthly or quarterly
returns. With respect to the tax on out-of-state consumer sales, mail order
firms used to cooperate with destination states in collecting and remitting
the tax due by their clients. This was backed up by a network of mutual
assistance agreements between states that made it possible to enforce tax
collection from out-of-state firms through state courts.

In recent years, a number of legal, technological and sociological
events have increasingly put this hiterto workable arrangement under
pressure. Firstly, in 1967, in National Bellas Hess, the U.S. Supreme Court
ruled that a state could not require an out-of-state mail order vendor to collect and remit the state's sales or use tax on sales made to customers in that state if that vendor did not meet some minimum linkage or nexus test in the taxing state. Secondly, there has been a significant increase in interstate mail order sales through the use of 800 numbers, computers, television ads and specialty catalogs. Thirdly, mail order firms are increasingly unwilling to provide assessment data to destination states in order to enable the latter to collect the use tax directly from customers. Fourthly, growing revenue needs have induced many states to increase their reliance on the retail sales tax by increasing tax rates. Twenty-nine states and numerous local governments did so since 1967.

In combination, these events have put the efficacy of states to collect sales and use taxes from out-of-state vendors increasingly in the limelight. A reliable estimate for 1983 puts consumer purchases of products via mail order at US$ 31 billion and direct business purchases at US$28 billion (Ulbrich, 1985, p. I, 2/3). Potentially taxable interstate sales in 1983 therefore totalled some US$60 billion or, assuming average annual growth rates of 8-12 percent, US$70 billion in 1985. Based on these figures, it is estimated that states lose some US$1 billion in sales tax revenue every year. This represents 1 - 2.5 percent of total sales tax revenues, a relatively small but growing figure. Moreover, in individual states the revenue loss may be as high as 5 percent of total sales tax receipts. Potential evasion and avoidance problems may be much more serious.
2. Towards More Effective Coordination

In considering various solutions to the problem, as before, equity, neutrality and administrative arguments have to be taken into account. Destination states take the position that since consumers bear consumption taxes, the retail sales tax base is theirs. Moreover, the argument of out-of-state vendors that they do not benefit from the use that is made of the revenue collected on their products is said to be spurious. After all, destination states put their market at the vendors' disposal and therefore are entitled to tax the benefit thus conferred. In the past, destination states have been willing to concede a tax credit to buyers of out-of-state products at the rate levied in the origin state. This endured the continued cooperation of the vendor's state and, in contrast to double taxation, promoted locational neutrality. They are willing to consider a continuation of this origin-backup solution if their ability to reach out-of-state purchases is not impaired.

Destination states are also concerned about the effects of out-of-state purchases on sales and profitability of both in-state firms and out-of-state businesses with adequate nexus. Tax-related price differentials can be as high as 8.25 percent, the combined state and local tax rate in New York City. Of course, actual effects depend on cross-state price elasticities of demand which are very high for identical products but may be low for products which are complementary to services provided locally. Estimates for such price elasticities range from .35 to .87, meaning that a price elasticity of .5 and a tax difference of 4 percentage points should lead to a 2 percent loss in sales volume (Fox and Campbell, 1984). In a study of metropolitan
Washington D.C. buying patterns, Fisher (1980) estimated that a one percentage point rise in the local tax rate could lower sales by about 6 percent. Whatever the exact effect, these figures indicate that consumers are responsive to tax-induced price differentials, especially of big ticket items such as television sets, washing machines and other consumer durables.

Out-of-state vendors, on the other hand, point at the costs they have to incur in complying with the enormous diversity of tax rates and exemptions for products as well as designated purchasers (local government agencies, charitable organizations) in 45 states and nearly 7,000 local taxing jurisdictions. The Willis Report (1965), however, found that there were no significant differences in compliance costs of interstate sellers as compared to in-state firms. Moreover, the higher cost of multi-state filings fall mainly on those larger firms whose costs were lower than those of median firms. Since this study, which was undertaken in the mid-1960s, technological progress has probably reduced the costs of staying current with sales tax rates and exemptions. Small firms might form an exception, but in their case a de minimis amount, below which out-of-state sales would not be taxable, would alleviate undue hardships. Also, uniform combined state-local rates might be agreed upon. Such rates would effectively reduce the number of rates a vendor would have to be cognizant of to 46. And finally, it is pointed out that 27 states already provide a rebate for compliance costs in the form of either a breakage or percentage allowance. Any remaining compliance cost differentials should be negligible.
It is probably impossible to find a solution that would satisfy all interested parties: state tax administrators, mail order firms, consumers and competing in-state businesses. After a careful examination of the pros and cons of the various arguments, Ulbrich (1985) proposes four alternative solutions: (1) affirm the status quo, thereby accepting the infringements on interjurisdictional equity and locational neutrality; (2) initiate state-litigation to overturn or modify the nexus standards established in National Bellas Hess returning to multi-state cooperative agreements to collect and enforce the use tax on interstate mail order sales; (3) initiate federal legislation requiring mail order firms to collect and remit the use tax of the destination state if that firm engages in regular or systematic solicitation of sales (compliance costs might then be reduced through a de minimis rule and the adoption of single-state rates); or (4) introduce a direct federal tax on inter-state mail order sales and distribute revenues among states according to some proxy for mail order purchases.

The potential for effective enforcement of these solutions increases as one moves from solution (1) to (4). So does the intrusion of the federal government into what states have hitherto considered their sovereign domain. Given this partially political context, the arguments are difficult to weigh properly. As in the Common Market, it appears that the destination principle should be the ruling criterion for the interjurisdictional division of the tax base. It might be backed up by the origin principle for out-of-state consumer purchases, meaning that destination states should concede this part of the tax base to origin states to ensure their cooperation in collecting and remitting the difference between the destination and the origin rate to the destination
state. Such origin taxation might take the form of a credit to purchasers for tax paid out-of-state. Arguments supporting an equitable treatment of both in-state and out-of-state sellers appear to outweigh arguments for a dogmatic adherence to the destination principle. As long as locational neutrality is maintained, out-of-state sales and out-of-state purchases are more likely to balance out. This implies that a mixed destination-origin principle solution should be a matter of indifference with respect to the division of the tax base.

D Concluding Comments

There are remarkable similarities between the coordination of different state retail taxes in a federal system of government and the coordination of different value-added taxes in a common market that wishes to banish border controls. In this respect, the EC has much to learn from the U.S. experience. Prima facie, interjurisdictional coordination without border controls, if desired, may be easier to achieve in the EC, because the tax base of the various value-added taxes is more comprehensive and uniform than those of the US retail sales taxes. On the other hand, coordination is more urgent, because all pre-retail stages are taxable and it is imperative that domestic prior-stage taxes are creditable in subsequent stages abroad. The various pros and cons are best considered by reference to the types of transaction that can take place in an interjurisdictional context: in-state sales to businesses or consumers, sales by in-state firms to out-of-state businesses or consumers, and sales by out-of-state firms to in-state businesses or consumers.
No serious conceptual or practical problems arise under either form of sales tax with respect to in-state sales. Under retail sales taxes, the full amount of tax is collected by vendors selling to consumers, including businesses buying consumer goods, such as food and drinks, or services, such as lodging. Business-to-business sales of producer goods are made in a tax-free area comprising all pre-retail firms not conducting business at retail. Difficulties are encountered when the use that is made of the taxable commodity, i.e. a typewriter or computer, determines whether that commodity is taxable or exempt. End-use exemptions are notoriously difficult to police, because they depend on the purchaser's declaration of intent as verified by the vendor. These issues are less problematic under value-added taxes, because all transactions attract tax and tax credits for consumer goods used in the course of business are simply denied at the user's level. Moreover, a value-added tax is collected piecemeal throughout the entire production-distribution process leaving an audit trail so that evasion may be more difficult, or at least less likely to succeed for the full amount of the tax.

Sales by in-state firms to out-of-state businesses or consumers are the mirror image of sales by out-of-state firms to in-state businesses or consumers. Therefore, only the latter will be considered here; presumably some form of interjurisdictional cooperation would be established to achieve reciprocal treatment. Sales by out-of-state firms to in-state businesses or consumers may be in the nature of direct marketing activities, mail order sales, or border sales, and the goods sold may be either consumer or producer goods. Under a retail tax, sales from direct marketing activities or through mail order houses must be taxed at the level of in-state businesses or
collected from consumers in the form of use taxes. A tax credit might be allowed for the out-of-state tax and the out-of-state administration might remit that tax to the destination state. Presumably, this would satisfy interjurisdictional equity, although locational neutrality would not require it. Over-the-counter sales would have to be taxed on an origin basis, except consumer durables, such as automobiles, that have to be registered for tax and other purposes and therefore can be fully taxed on a destination basis.

While more or less ad hoc solutions are tolerable under retail sales taxes, the treatment of interjurisdictional sales under value-added taxes requires a more structured approach, because prior-stage taxes must be taken into account. Consumer sales by out-of-state mail order firms or in the form of direct marketing activities can be taxed fully on a destination basis, but the origin state's cooperation would be required for audit and enforcement purposes, conceivably, only the revenue corresponding to the rate differential might be paid over to the destination state. An exception might be made for designated durable consumer goods and government purchases. The tax attached to inter-state business-to-business sales is best treated under a multi-jurisdictional tax credit clearance system which, unlike the deferred payment scheme, would leave the tax chain intact. Border sales of consumer goods would have to be treated according to the origin principle if use taxes, which are extremely difficult to police, are to be avoided. As under retail sales taxes, concessional value-added tax regimes might be permitted in populous areas straddling inter-state borders.

Finally a tax credit clearance system should also be feasible in a federal setting such as exists in the U.S. and Canada, if it were decided to
replace the retail sales taxes by rate-differentiated value-added taxes. Border controls between subordinate units of government are prohibited in a federal system of government, but, as evidenced by U.S. practices, border tax adjustments are allowed. Similarly, the EC might decide to substitute the retail sales tax for the value-added tax, but placing the full impact of a high-rate sales tax at a single stage would probably exacerbate compliance problems. With respect to the EC, therefore, the solution for abolishing border controls lies in the adoption of the deferred payment scheme or, preferably, the tax credit clearance system. Both methods ensure locational neutrality. This is not true of the conventional import sales tax method which discriminates against imports, because the tax is payable immediately rather than later at the time the regular return is filed.
ENDNOTES

1. The OECD (1985, p. 45) defines sales taxes as taxes levied on the production, leasing, transfer, delivery or sales of a wide range of goods and/or the rendering of a wide range of services, irrespective of whether they are domestically produced or imported and irrespective of the stage(s) of production and distribution at which they are levied. For more on the definition and classification of sales taxes, see Cnossen (1977, chapter 2).

2. For a recent survey and evaluation of sales taxes in industrial countries, see Cnossen (1983b).

3. This and the following subsections have benefitted from earlier work done in collaboration with Carl Shoup; see Cnossen and Shoup (1986).


5. Of course, even under a general destination-based sales tax excess burden would arise between consumers at home who are taxed and consumers abroad who are exempt. See Shoup (1969, p. 221).

6. See Due and Friedlaender (1975, p. 519), Musgrave and Musgrave (1984, p. 769) and Shoup (1969, p. 644). For an analysis in the U.S. setting see also McLure (1980). In this literature, the idea is that the EC should use the origin principle for its internal trade, but maintain the destination principle vis-a-vis third countries. Hence, this system goes by the name of the restricted origin principle. That this system is irrelevant, because border controls are not necessary to effect border tax adjustments under the destination principle is argued in Cnossen (1983a).

7. For the literature, see Shibata (1967), Berglas (1981), and Whalley (1979 and 1981).

8. That the origin principle appears incompatible with the credit method of computing the tax liability has been pointed out by Shoup (1969, p. 264) and Messere (1979, p. 489).

9. I am grateful to Richard Musgrave for providing this paragraph in a comment on this paper.

10. Drawn up in the 1940s, the General Agreement represents a codification of practices existing at that time. Previously, border tax adjustments were normally provided for in bilateral trade agreements and the main provisions of the Agreement are based on such agreements concluded by the U.S.
11. For a review of these and other articles of the General Agreement, see Gerhard and Takamuki (1968). Broadly, the debate on border tax adjustments has concerned the incidence of indirect taxes versus direct taxes (for which adjustments are not allowed) and the assumptions on the use that is made of tax revenues.

12. For a highly useful analysis of the equity and economic effects of the turnover tax, as well as its administrative ramifications, see Shoup (1969).

13. For an expert analysis of the history and shortcomings of the Canadian manufacturers sales tax with many references to the literature, see Gillis (1985).

14. Until recently the wholesale tax was also levied in New Zealand and Portugal, but in these countries it has been replaced by the value-added tax. For an assessment of the wholesale taxes in Australasia, see Due (1985).

15. For an evaluation of experiences in several European countries, see Aaron (1981).

16. For the figures in this paragraph, see Gerhard and Takamuki (1968).

17. This section and the following draw heavily on Cnossen (1983a, pp. 153-157).


19. This case, referred to as the Dutch Yacht case, reached the finale on May 21, 1985 (Case 47/84) when the Court of Justice ruled that the credit for foreign value-added tax incorporated in imported used goods should be calculated on their value net of such tax.

20. This section draws heavily on Ulbrich (1985). The record and analysis of the U.S. retail sales taxes owes much to John F. Due. For a concise and succinct treatment, see Due (1983).
REFERENCES


