

**Brazil : Fiscal Federalism and  
Value Added Tax Reform**

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by

*Parthasarathi Shome*

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## **I. Introduction**

This paper focusses on a particular aspect of a conference on fiscal federalism issues held jointly by the Brazilian Ministry of Finance and the International Monetary Fund at Salvador, Bahia between December 10-15, 1995.<sup>1</sup> The papers presented and the discussions followed encompassed a wide variety of topics under fiscal federalism, including fiscal adjustment, macro-economic implications of fiscal federalism, ramifications of borrowing powers by subnational governments, legal background to Brazil's history of fiscal federalism and public expenditure/public debt management. In addition, the specific case of Brazil in the context of a reform proposal for consumption taxes, which straddle all levels of government, was also discussed from the points of view of both tax policy and tax administration. This paper focusses, in particular, on policy aspects of consumption tax reform affecting various levels of government.<sup>2</sup>

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<sup>1</sup> The Conference was inaugurated by Mr. P. Parente, Acting Secretary of Finance and attended by Mr. E. Maciel, Secretary of Revenue, Mr. M. Portugal Filho, Secretary of Expenditure, State Ministers of Finance and various officials as well as Mr. Vito Tanzi, Mrs. T. Ter-Minassian, Mr. Carlos Silvani, and Mr. P dos Santos from the IMF, and the author. The five-day conference was heavily attended by officials from both the federal government as well as the states. The government filmed the proceedings for a proposed compendium of materials for future dissemination.

<sup>2</sup> In December 1995, the Minister of Finance of India invited the Ministers of Finance from all the states to discuss the possibility of introducing a harmonized VAT among all states and the federal government. The discussions were very similar to those held in the Brazil Conference. Brazil's experience thus has particular relevance in the context of India. Therefore, an attempt is made in the paper to draw comparisons in their experiences where appropriate.

In the context of tax reform, Brazil should first be characterized by its continental dimensions and the federalist spirit of its Constitution. A purist tax structure that may be possible in a smaller, more centralized nation may be neither possible nor suitable in the case of Brazil. This has become increasingly clear in federalist countries such as Canada with its recent referendum on the issue of continuance of the nation as currently configured, and India with recent constitutional amendments calling for increasing decentralization of fiscal powers and responsibilities to local level government. In Brazil too, the 1988 Constitution in effect stressed the importance of decentralization to the state level (Shah, 1991). Indeed, studies recommending further decentralization to the municipal level have also been carried out (World Bank, 1992).

Thus, tax reform in Brazil has to be necessarily cast within the context of maintenance of cohesion of the country and the economy at the macro level, as well as a recognition of the needs of various states and local areas with diverse backgrounds, cultures, economic conditions and potential at the micro level. Given these factors, any tax reform measures must be assessed in their capacity to address these issues and not just by their ability to correct the prevalent technical anomalies in the overall tax structure.

In Brazil, income tax is assigned to the federal government, though half of the revenue is shared, but consumption and production taxes are assigned to all three levels of government. Selected excises on manufacturing (IPI) with a credit mechanism is assigned to the federal level (again, 60 per cent of the revenue is shared), while a broad based, value added tax (VAT) is assigned to the states (ICMS). Selected industrial, commercial and professional services are taxed by municipalities (ISS) to the extent that they are not included in the federal tax base. Urban property is taxed by municipalities (IPTU) while rural property is a federal tax (ITR). Because of the high shares that the federal government has to pass on to lower level governments, increasingly it has designed rather distortionary unshared taxes such as taxes on corporate turnover, bank checks and so on (Tanzi, et al, 1992; Shome, et al, 1995).

The objective of this paper is, however, to focus mainly on Brazil's consumption taxes and to assess possibilities for its reform. Any assessment of Brazil's

consumption tax structure has to be attempted in the context of its framework of fiscal federalism since, as described above, Brazil has consumption taxes at various levels of government. These taxes are usually discussed in the context of the value added tax (VAT). But are they really VATs? In order to assess them, it is necessary to go back to the characteristics of various types of VAT. What seems to emerge from such an assessment is that Brazil's consumption taxes, as they are applied today, cannot be said to be on a pure value added basis.

Therefore, the paper takes up some of the following issues. Beginning by addressing the issue of what is an ideal structure for a VAT, it emphasises the equivalence of a consumption-type VAT with a retail sales tax. Presenting selected international trends, the paper attempts to analyse whether the IPI, ICMS and ISS really comprise a VAT. It asks why they are so revenue productive (is it only because there is no credit for tax on capital goods?). How might existing proposals for improvement of the consumption tax structure and for tax assignment be evaluated?. These assessments are followed by concluding remarks and recommendations.

## **II. What is a VAT**

### **1. Structure of an ideal VAT**

In its purest form, VAT is a tax that is levied on the value added along different stages of production and distribution of a commodity or service. Therefore, it is a tax on the sum total of value added, i.e., equal to the value of a commodity or service. In this sense, it is equivalent to a retail sales tax which would be collected only at the retail stage. But the retail sales tax is difficult to collect because there are too many retailers of various sizes. The VAT, instead, can be collected at earlier stages of production in different fragments and can end at the retail stage. But the total collected from the VAT should be exactly the same as if collected only from the retailers of the commodity concerned.

If the VATs, because of lack of administrative preparedness, cannot be

collected beyond the manufacturing stage, it could stop at that stage and be collected from the manufacturers and importers of the commodity. In this case, potential tax revenue is lost from the wholesale and retail stages but the loss in revenue could be made up by adjusting the rate of tax when applied upto the manufacturing level, though there may be difficulties since there may be different number of stages beyond manufacturing for different activities, and profit margins may also be quite different for them.

The VAT is preferred by economists to a system of simple excises or to turnover taxes because the VAT minimises distortions. What are these distortions in production? Typically a tax that is collected on inputs is fed into the price of the input. The purchaser who uses inputs and produces the output keeps the value of the input tax that he paid within the pricing of his output. Therefore, when the output is taxed, not only the value of the output is taxed, but also its input, together with the tax on input that had been earlier paid, are taxed again (because the input tax as indicated above is incorporated into the output price). This has the unintended effect of: (i) taxing an output (together with its input content) more than once; as well as (ii) applying a tax on the earlier paid input tax! This "tax on tax" is called "cascading". This should cause resources to move away from the production of this output to another one which does not suffer from cascading (Zee, 1995).

The VAT, because it gives credit for input tax earlier paid, avoids the distortion as represented by misallocation or redirection of economic resources from one activity to another. Therefore, it does not alter producers' decisions to produce particular commodities, which, in general, should reflect the demands from consumers. However, for this benefit to occur, the VAT must give credit for raw materials and capital goods. Only this form of VAT is a C-type VAT, and is equivalent to a retail sales tax. Other forms are: the income-type in which credit is given for capital depreciation only; and the production-type in which credit for capital goods is not given, with the effect of continuance of some cascading and, therefore, economic distortions as is the case currently with the ICMS in Brazil. Under ICMS, capital goods do not receive credit.

## 2. International experience

Hundred countries or thereabouts had some form of VAT in 1995, operating upto varying stages of production and distribution. It has therefore become a major revenue producer in many of them. Recently, the Tax Policy Division of the IMF gathered material on 60 of them. Nearly half of the sample countries have a single rated VAT, even though they may have started with more rates. This indicates that it is not impossible to operate a simplified VAT rate structure. However, many countries do have more than one rate and they tend to have differentiated lower rates for essentials such as clothing, medicine, books, electricity, and public transportation and water. Note that ICMS and IPI have multiple rates.

Many countries have also extended their VATs to services such as advertising, amusement and entertainment, freight and storage, hotel and restaurants, laundry and leasing, medical services, professional services, repair and maintenance and telecommunications. In Brazil, most services are under the ISS and not ICMS. Most countries have a special treatment for small traders by using a certain threshold below which they are not subjected to VAT. These thresholds in most countries are based on turnover but in others they can depend on capital used, employment size, purchases, trader type or tax liability. Brazil too uses the threshold concept based on turnover.

Most countries that have a few VAT rates, apply it to all goods and services while reserving a few separate excises (i.e., a tax on production without applying the credit principle) on commodities such as alcohol and liquor, petroleum products and tobacco products which fall within the categories of scarce goods or luxury goods. This principle is not applied in Brazil. They had existed earlier and were on: transportation, communication, fuels, lubricants, electrical energy, and minerals, and were abolished in 1988, being incorporated into the ICMS. Some countries have additional excises also on confectioneries, soft drinks, sugar, electronic items and coffee or tea. Having selective excises apart from the general VAT has gained popularity because of their revenue productive capacity and also because it facilitates having a simplified VAT structure which is conducive to tax administration. However, the list of such excises should usually be kept as short as possible.

If the VAT structure is kept simple, it should also be simple to administer. If a country had a single rated, widely based VAT with few exemptions (which is not the case currently with the IPI, ICMS, ISS combination with many exemptions and many rates of tax), enterprises would simply have to maintain one file of invoices which they receive when they purchase any commodity and another file of invoices that they issue when they sell their commodities. At the end of the month they would need to add the output invoices and subtract from it the input invoices. They would then simply apply the single VAT rate to the difference calculated and pass on the tax to government on a monthly basis. Thus, complications may arise not because of the intrinsic nature of the VAT itself, but if the design becomes unduly complicated, with exemptions, concessions and multiple rates. The need, therefore, is to structure a VAT in its simplest form, amenable to easy interpretation and efficient administration.

### **III. An Assessment of IPI, ICMS and ISS:**

#### **Do They Comprise a VAT System?**

While two of the three consumption taxes could broadly be considered to be levied on value added: the IPI at the federal level, and the ICMS at the state level, the other--the municipal ISS--is specific. The tax system in effect prior to the 1988 Constitution also applied some specific excises: on transportation, communications, fuels and lubricants, electrical energy, and minerals. These taxes, however, disappeared when they were incorporated into the ICMS.

This section describes the general characteristics of the main Brazilian consumption taxes: the IPI, ICMS, and ISS.

#### **1. Criteria for assessment**

Consumption taxes play a prominent role in tax policy because of their high revenue-raising capacity, their potential administrative simplicity, and their reduced scope for tax evasion and avoidance. Furthermore, they should, ideally, be nondiscriminatory and thus

imply a lower degree of economic distortion due to their generality and their neutrality vis-a-vis relative prices of goods and services. A general system of consumption taxation should also be nondiscriminatory as to interregional and international trade flows.

Where discriminatory excise taxation is relied upon, it is usually warranted on the grounds of low price elasticities of the taxed goods,<sup>3</sup> and/or on the grounds of external costs caused by the taxpayer (for instance, an energy tax as a price for the use of roads), or based on "merit goods" arguments, which favour the Government taking a paternalistic role in the consumption of certain goods and services.<sup>4</sup>

Consumption taxes have been criticized because of their assumed regressive properties, however. Yet the argument regarding regressivity may be exaggerated. Equity may be taken care of by separate treatment--such as a lower VAT rate--for essential goods, selected excises on luxuries, or progressivity in the income tax. On a more theoretical premise, over a typical consumer's life cycle, during which period he can be seen to consume all his lifetime income, the argument that a consumption tax is regressive tends to lose some force.

## **2. Revenue-raising capacity**

Of the overall tax-to-GDP ratio of about 23-25 per cent in recent years, about half is accounted for by indirect taxes (including turnover taxes earmarked for social security). This ratio is quite high, especially if compared with the low ratios accounted for by personal and corporate taxes (approximately 2 per cent of GDP each). However, indirect taxes as a percentage share of GDP--both at the federal and, to a lesser extent, at the state level--have

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<sup>3</sup> In turn, a lower price elasticity of a good indicates a lower "excess burden" caused by a tax on it, i.e., the tax will not affect the consumption pattern as much as if the price elasticity of the good were high. This is a desirable feature of the effects of a tax.

<sup>4</sup> For example, tobacco and alcohol taxes act as instruments to check their use and to compensate for health services to be rendered to the taxed population concerned.

Furthermore, the sectoral delineation of tax competences among different tiers of government discriminates against particular sectors and could encourage tax evasion through shifting of taxed industrial activities to non-taxed sectors or through contracting out of particular activities. All this adds to the number of distortions within the overall consumption tax structure.

#### **4. Rate structure**

Inasmuch as the ICMS was designed as a harmonized, state level VAT, in practice it has become cumbersome. The ICMS has multiple rates: though in cross country comparisons of VAT rate, a main rate of 17 per cent is often cited, in reality a main rate of 18 per cent also exists in a few states. Reduced rates for essential goods and higher rates for luxuries also exist. Raw materials and semi-finished goods have a rate of 13 per cent. The rate on interstate trade is 12 per cent; if interstate trade is from rich to poor states, the rate is 7 per cent. Clearly, harmonization has become extremely difficult with the array of ICMS rates. The IPI has an even wider band of rates, varying between 0-300 per cent. The system is rendered more complex by the number of exemptions it grants.

#### **5. Definition of tax base**

Not only does the Brazilian consumption tax system use multiple rates, it is also very special as regards the definition of tax bases. Typically, tax is paid on the producer price. Yet, this base may be increased for the ICMS by including the estimated value added of later stages, for example, of retailers, where it is difficult to collect taxes directly. For administered retail prices, the IPI derives its (producer-oriented) tax base by looking backward and discounting an estimated value added at the retail level.

Further, states may concede tax base reductions, exemptions, and deferral of payments in order to give preferential treatment to certain industries. The Constitution (Art. 155, para. 2V) stresses the objective of coordinating the ICMS rates as well as tax bases among states and gives explicit powers to the Senate to resolve certain conflicts. Furthermore, interstate tax policy on the ICMS is coordinated through a regular conference of the

CONFAZ, which promotes treaties on tax benefits and rates granted in a harmonized fashion. The CONFAZ rulings must be unanimous. Over the last years, almost 60 per cent of the proposals made by states were adopted by CONFAZ.

## **6. Multiple forms of tax credit**

As a rule, tax credits on capital expenditures are not granted for either the IPI or the ICMS. These taxes thus follow the philosophy of a production-type VAT. A consumption-type VAT--as adopted within the European Union (EU)--would grant full tax credit on all capital expenditures, which would make the tax structure neutral to investment decisions. The Brazilian system, however, in effect, discriminates against industries with large capital expenditures to the extent that these are taxed twice: first on the capital formation itself, and later on the services derived from capital goods as they are translated into the price of final products. The system does alleviate some of these double burden effects by granting exemptions to selected investment goods. This is a concession to the philosophy of the consumption-type VAT, yet the selective and inconsistent nature of these concessions not only complicates the system, but it is also likely to induce further distortions and inequities.

In addition, tax credit for intermediate goods is accorded only to the extent that these goods physically enter the final product. This disallows tax credit for a large number of current business outlays that are normally incorporated in the price of the final product (such as administrative costs and cooling and heating costs), which are all considered to be consumption expenditures. This applies to both IPI and ICMS. It is obvious that this tax treatment not only discriminates against industries with a high service content, it also inhibits the development of particular service-oriented activities.

Furthermore, both zero-rating and exemptions are found in the laws. Under "zero-rating", no tax is paid on output, yet the VAT embedded in inputs is fully creditable (within the limits explained in the preceding paragraph). Thus, no accumulation of tax burdens occurs and the output remains truly untaxed. If, however, a sale is "exempt" from taxes, a tax credit is typically declined because the unit is not taxable and hence loses the right to claim any VAT embedded in its inputs. The price of an exempt activity would thus

tend to include VAT paid on intermediate goods since it cannot be reclaimed in the form of an input tax credit.

## 7. Does Brazil's consumption tax structure comprise a VAT?

To sum up, the taxation of value added in Brazil is, first, selective with respect to sectors of activities and to output categories; second, it is inconsistent as to the treatment of capital (which, in principle, double-taxes capital yet accords preferential treatment to selected investment goods) and to inputs that do not physically enter the final product. Third, the great variety of tax rates and the multiplicity of exemptions that often lead to a cumulative cascading effect of taxation through non-deductible VAT on inputs leads to non-neutrality vis-a-vis economic decision making. Fourth, multiple objectives are pursued through the differential treatment of items.<sup>7</sup> Fifth, the system of consumption taxation is likely to invite tax arbitrage and avoidance, and thus is likely to be a major source of tax base erosion and declining tax revenue in terms of GDP. Sixth, both the IPI and ICMS seem to suffer from an inappropriateness in the design of the taxes, resulting in a lack of transparency from being increasingly punctured by the need to make concessions to producers some of which may be warranted, paradoxically, on the grounds of avoiding double-taxation and inequity. In doing so, the system has, however, become quite complex, and difficult to monitor as to its economic and distributional ramifications. Whereas Brazil once pioneered the idea of a VAT, its adoption of a production-type tax and a complex dispersion of the VAT among different tiers of government seem to have led away from a strict adherence to the basic concept of consumption taxation. The IPI and ICMS are, therefore, strong candidates for reform within a major overhaul of the Brazilian tax system. This overhaul is needed to restore the tax system's efficiency, equity and revenue-raising capacity.

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<sup>7</sup> When we visited in 1992 the list of exempt items included, for instance, the sale of machinery, equipment, and tools, which bears testimony of an inherent compromise in the system that tries to foster investment despite the fact that full tax crediting--as under a consumption-based VAT--is not granted. The sale of alcohol-powered cars intended for use as taxis--which is also given preferential treatment--reflects the policy to stimulate both a specific type of energy consumption as well as to accord concessions to a typical consumer-close service (backed by a strong pressure group).

## 8. International and interregional trade

Another issue of concern is the problem of neutrality as regards interregional and international trade. Two different principles can be distinguished under the VAT: the origin principle and the destination principle (Cnossen and Shoup, 1987).

### a. Comparing the origin and destination principles

Under the origin principle, traded goods are taxed in the region of origin, and the tax is thus included in the price of exports; conformingly, imports are not taxed while they bear the tax levied in the region of their origin. The destination principle, on the other hand, would zero-rate exports, for example, prices of exported goods would be net of any VAT, while imports would be subject to an import VAT that would raise the net price of incoming products to the gross price level prevailing in the importing region. This requires border controls and conforming fiscal adjustments.

The destination principle was, for instance, adopted by the EU, both as to its internal trade as well as its trade with third countries. Therefore, it ought to be stressed that the European regime recognises the destination principle in a double sense: (1) as regards the distribution of tax burdens among taxpayers across regions; and (2) as regards the allocation of tax revenue among the fiscs of member states, or regional revenue assignments. This is important to keep in mind when discussing VAT-reform proposals for Brazil.

The application of the destination principle for interregional trade does require a solid administrative framework, however. For example, if internal fiscal frontiers are not effective, as seems to be the case in Brazil where the VAT (ICMS) remains a state activity, the application of the destination principle for interregional trade would need special arrangements.<sup>8</sup>

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<sup>8</sup> Although fiscal borders exist among the Brazilian states, their impact seems to be uneven and arbitrary. Typically, these borders exist where interstate trade flows are relatively small and easily checked. Where trade is significant (as between Sao Paulo and Rio de Janeiro), fiscal borders have typically been abandoned, however. For a federal entity like Brazil, a single market without internal fiscal borders might in fact be seen as the medium-term reference point for any VAT reform in the nation (and will be the case for the system to be adopted in the EU). The more interregional trade expands the more cumbersome and costly fiscal barriers will become--hindering regionally balanced economic developments. This presumption does not exclude possible exceptions where internal fiscal frontiers prevail--as, for example, in the tax free zone (ZFM) in Manaus.

b. Issues pertaining to the IPI

For international transactions, the IPI comes close to adhering to the destination principle. Exports included in its base are zero-rated, and imports are, in principle, subject to the IPI.<sup>9</sup> There are, however, a great number of exemptions accorded to imports, and political tendencies seem to favour further reductions in the taxation of imports. All items excluded from the import tax are also excluded from the IPI.

For interstate transactions, the IPI follows the origin principle. The IPI is collected unevenly from different states, given their varying industrial capacities on which the tax is based. It is estimated that 75 per cent of IPI revenue collected comes from three states only: Minas Gerais, Rio de Janeiro, and Sao Paulo (World Bank, 1990).

c. Issues pertaining to the ICMS

The case of the ICMS tends to be more complicated because the ICMS is a state tax requiring coordination for both international and interstate transactions.

i. International transactions: As regards international transactions, the Constitution grants zero rate status to exported industrial products, yet excludes a number of semi-manufactured goods. The latter, in effect, are subject to an export ICMS. Although primary, intermediate, and agricultural exports are thus taxed under the ICMS, treaties among states (under CONFAZ arrangements) have exempted a large number of items, especially agricultural products. Furthermore, the list of industrial final products, tax-exempt under the Constitution, has been considerably lengthened to include such items as frozen meat and fruit juice.

As regards imports, the Constitution stipulates that the ICMS is to be levied on imported goods destined for consumption or for capital formation. Services rendered by foreigners are also subject to the tax. However, intermediate goods are exempt from import ICMS. Revenue from import ICMS is accorded to the state to which the import is shipped

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<sup>9</sup> There are also other zero-rated items under the IPI other than exports.

for first-stage processing. This is, of course, a concession to the destination principle for interstate trade under an origin-based tax.

The ICMS thus applies a hybrid destination/origin principle to international trade by exempting some--but not all--exports, and by being selective as to the taxation of imports. Furthermore, the system is undermined by the fact that exporters may accumulate export credits, which are not often refunded in cash. Export credits are thus de facto nonrefundable, which renders the ICMS an export tax even where the Constitution grants tax immunity.

ii. Interstate transactions: As regards interstate transactions,<sup>10</sup> the origin principle basically applies. The "exporting" state taxes its output, cashing in the tax on its exports, and the "importing" state returns the tax in the form of a tax credit accorded to its importers although this tax was paid to another state. Such a scheme can be implemented without distortions and negative distributional consequences at the union (or common market) level, because the reimbursing authority is identical to the one collecting the tax. Operated at the state level, however, this mechanism should have severe horizontal distribution effects.

To illustrate the distributional impact of this system, a typical example would be trade between two states, São Paulo--an industrialised state with a potential export surplus with the rest of the nation--and Ceará--a poorer Northeastern state with potential import needs. Both may apply a common rate of 17 per cent on their internal consumption. If the interstate ICMS rate were also 17 per cent, São Paulo would levy the tax, yet the full crediting at the point of entry would lead to loss of revenue in Ceará (assuming no local value is added on the product). It is obvious that tax revenue in Ceará, thus, hinges on the tax policy of São Paulo--which reflects the need for tax coordination among the states.

The normal rate on interstate transactions is 12 per cent. To support the poorer states, the rate for shipments from the South to the North was set at 7 per cent, with

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<sup>10</sup> Abstraction is made from interstate trade with the ZFM, which is treated like a third party under the destination principle, so zero-rating applies to all interstate "exports" to the ZFM.

CONFAZ approval.<sup>11</sup> By levying 17 per cent on sales and reimbursing 7 per cent to importers, Ceará now raises 10 per cent on the imported good; São Paulo experiences a conforming revenue loss. If a transaction takes place from the Northeast to the South, Ceará collects 12 per cent revenue, which is reimbursed by São Paulo; therefore, the latter raises only 5 per cent revenue (17 per cent less 12 per cent) on its imports consumed within the state. Unless effectively administered, this type of system obviously has built-in possibilities of misuse.

Border adjustments of the ICMS under these arrangements are thus intended to act as a regional equalization scheme by which the South supports the North by granting it tax reductions, which can be fiscalized in the poorer regions.

The scheme is not proof, however, that the North always benefits from these arrangements. To illustrate, Ceará always has the option to buy its goods abroad; typically, these would bear no VAT at all (though, in principle, this should not happen). At least for intermediate goods where the states are not compelled by the Constitution to levy an import ICMS, the foreign product would be cheaper than that from São Paulo. The arrangements are therefore in the interest of São Paulo as well, since they act as a safeguard against "shopping abroad" by poorer Brazilian states.

From the standpoint of the importing firm in Ceará, the system appears to be neutral, because taxes paid to São Paulo can be credited against the state ICMS. Yet under inflationary conditions, with no indexing of the tax credit, the system is biased against the use of local products in the poorer states: if a Ceará firm has to pay 17 per cent tax on local inputs, yet only 7 per cent on imported goods from São Paulo, it would tend to shop in São Paulo because the tax credit, subject to erosion through inflation (hence the loss of real tax credit caused by inflation) is smaller.<sup>12</sup> This disparity would tend to decrease as inflation is contained.

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<sup>11</sup> This generally applies to transactions originating in the South and Southeast (except Espírito Santo) and destined for the North, Northeast, Center-West, and Espírito Santo.

<sup>12</sup> The effect is enhanced where no tax credit is given.

Therefore, tax coordination is essential to avoid competition among states and to achieve an equitable interregional tax sharing under the ICMS. This is the rationale for the existence of CONFAZ. Yet, however effective CONFAZ may be in its work, inherent deficiencies of the system will remain. First, there is continuing pressure exerted by states to obtain concessions on their interstate imports to alleviate the burden on their budget at the expense of the richer states--which must ultimately lead to greater complications and the erosion of the overall tax base. Second, there will be continuing tax competition among states where such exemptions are not granted because the origin principle applies; if tax competition cannot be exerted through rate competition--because these are set by the Senate or controlled by CONFAZ--other forms of tax competition will be relied upon, for instance, base reductions or payment deferrals. Third, the regional distribution of the multiple tax concessions granted under the ICMS will be difficult to monitor. The system, therefore, could be questioned regarding its ability to foster the balanced development of regions or a coordinated economic policy at the national level.

#### **IV. Design of Reform Proposals**

VAT reform proposals for consumption taxes which have been under consideration should correct the existing distortions in the tax structure in at least a revenue neutral way, improve its distributive burden, reduce tax evasion, and eliminate uncalled for ramifications for interstate trade in the context of a well designed fiscal federalism structure.

The first correct step would be to propose an identical base for the value-added tax (VAT) at both the federal and state levels. Thus, the IPI and the ICMS would both be converted to a VAT with the same base, while the tax rates would be determined separately, by the Senate in the case of the ICMS, and by the executive branch of the government in the case of the IPI. This is to occur, expectedly, after adequate understanding of, and preparation for the changeover. These constitute the gist of one set of proposals under discussion among Brazilian tax experts and authorities.

The proposed congruence of the tax base--which would include domestic,

including interstate activity and imports--would be a correct step since there is no particular argument why different levels of government should necessarily apply taxes to different bases or different entities. In the United States, different levels of government may share the same tax base. The fear of losing investment and economic activity tends to keep the tax rates of competing tax jurisdictions in check. It would perhaps not be wrong to say that most instances in which conflicts in interpretation in tax law and in rights over a particular tax have arisen, have occurred in federalist countries such as India, in which the Constitution has attempted to identify and differentiate tax bases for different levels of government. Court battles lasting many years before a resolution is arrived at, have often been the consequence. Therefore, the proposed step of an identical tax base is the right one for Brazil.

Second, the proposed resolution on the tax rate issue is not a poor one and has to be judged in the context of the realities of a federalist nation such as Brazil. In order to ensure that ICMS is not perceived by the states as being usurped by the federal government in the form of a VAT of its own, it is proposed that the rates of the federal and state VATs will be set by different entities. Tax administration would also be carried out by independent bodies at the two levels. On this point, however, another view is that, for a fully harmonised VAT, one administration may be more efficient to successfully deflect any potential conflict.

Third, an argument has appeared that the sum of federal and state VAT rates would be the same for each consumption item for the country as a whole. On the one hand, these steps would eliminate the production and domestic trade distortions caused by the currently prevailing differences in rates caused by lack of uniformity in rates. On the other, it might impinge upon the autonomy of the states to set their own tax rates for consumption items. This argument would envisage a commonality in tax base rather than of tax rates across all states, or in the overall centre-state rate.

There are further problems that may be anticipated. First, if rate variations appear among different goods and services reflecting how essential a consumption item it is, or there are too many variations among states, that would result in multiple tax rates. It could be in contraposition to practical considerations regarding the VAT which suggests a minimization in the number of rates. This is also supported by cross-country experience

which reveals that the number of VAT rates has diminished over time in most countries. This, in turn, has helped tax compliance, enabled improvements in tax administration and rendered the VAT a most revenue productive tax in many such countries.

Another matter of great importance that seems to have been left to political decision is the matter of distribution of VAT revenue based on the destination principle but operated through the intermediation of the federal government (or based on a formula). This matter is being left to the Senate. However, the proposal does make clear suggestions regarding the modus operandi for the functioning of the destination principle. Take an example of a 10 per cent federal ICMS rate and a 20 per cent state ICMS rate (see Silvani and dos Santos, 1995). There are three stages of value-added in the example: the first and second stages in state X; and the third stage in state Y (Table 1).

**Table 1. Flow of Interstate Transactions (R\$)**

A. Goods sold	100		
Federal tax	10		
State tax	20		
Total price	130		
B. Value added	40		
Goods sold	140		
Federal tax	42		
State tax	0		
Total price	182		
		D. Value added	50
		Goods sold	190
		Federal tax	19
		State tax	38
		Total price	247

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Source: Silvani and dos Santos (1996).

Taxpayer B in state X purchases inputs from a taxpayer A in state X and sells his product to a taxpayer D in state Y. When B sells to D, the ICMS of state X is zero since

the product goes to another state.<sup>13</sup> Taxpayer B does, however, receive a credit vis-a-vis state X equal to the state ICMS paid on the purchase of inputs (R\$20). Nevertheless, B will have to pay R\$12, the amount of total VAT (R\$42-10-20). Taxpayer D in importing state Y has an ICMS credit of R\$42 paid on the purchase from B and a debit of R\$57 (state ICM R\$38 and federal ICMS R\$19). Thus D pays a net amount of R\$15.

If the revenue is distributed purely on the destination principle, the final distribution will, therefore, be as follows. The federal government will receive a net amount of R\$19 which is the result of R\$10 received from A; R\$4 received from B; and R\$5 collected from D. State X will receive a net amount of zero, comprising R\$20 received from A but refunded to the federal government on inter-state sale. State Y receives a R\$38 which is the result of R\$10 from D and R\$28 from the federal government.

From the above example, it should be clear that the proposed mechanism, by moving from the origin principle to the destination principle, results in a revenue gain for the importing state Y and an equivalent revenue loss for the exporting state X (Table 2).

**Table 2. Calculation of Revenue Loss and Gain  
by Moving from Origin to Destination Principle (R\$)**

	<u>Destination Principle</u>	<u>Origin Principle</u>	
Value Added	190	190	
Federal ICMS	19	19	: 10% of 190
State X ICMS	0 <sup>14</sup>	28	: 20% of (100+40)
State Y ICMS	38	10	: 20% of 50

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Source: Calculations based on Table 1.

<sup>13</sup> At this point, the centre would levy the tax at the unified rate of 30 per cent (that is 42) and give credit of tax already paid by A (30), but receive the credit given for the state ICMS, from state X, and pass it on to state Y. Alternatively, the state ICMS collected by the centre on inter-state sales may be pooled and allocated among the states on a formula basis. The distribution of revenue would depend on the final arrangements regarding the matter.

<sup>14</sup> Note that this does not take account of the revenue that X would receive from imports from other states when the destination principle is applied. Whether X would ultimately lose or gain revenue would depend on whether it is a net exporter or importer.

Thus federal ICMS revenue remains the same; state X loses R\$22 while state Y gains R\$22 from the switchover to the proposed from the prevailing system. Somehow state X would have to make up a revenue loss of R\$22 which it was earlier receiving for producing a value added of R\$110 (100+10). It would have to find alternative sources of revenue to make up for that loss, or a political solution would have to be found for a revenue redistribution acceptable to all parties. On the other hand, it is also quite possible that state X is a bigger consuming state so that the revenue it loses on the production side is made up on the consumption side, with a shift from an origin-based, to a destination-based, VAT.

Once a modus operandi is accepted by the Senate, it should be ratified for a stipulated period--say five years--at the end of which a freshly examined modus operandi might be introduced, reflecting the lessons learnt during the operation for the previous arrangement. Otherwise, if there are too frequent changes to the agreed upon modus operandi, it may be difficult for a stable system of revenue distribution to emerge.

The experience of India in this area could be illustrative. In the ongoing discussions on state level consumption tax reform in India, taxation of interstate trade is a major bone of contention. Currently, the state tax and retain revenue on the basis of the origin principle while a lower rate of tax--at a maximum of 4 per cent--is applied on interstate trade and the revenue retained by the exporting state. While there is emerging agreement among states that the tax base should be similar and tax rates should be harmonized on the basis of minimum tax rates, so far there is little agreement on any possible move to the destination principle since some powerful, industrialized "net exporter" states expect to lose revenue from such a move, even though they are the main consumer states.<sup>15</sup> They, therefore, view the possibility of introduction of a harmonized state level VAT as one that would require "revenue justice" for them, and a solution would need much background work that has just begun.

Finally, while support is expressed in the proposal for including services in the

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<sup>15</sup> The state of Maharashtra, which would lose revenue, claims for example, that much of its consumption comprises international imports, from which revenue would accrue mainly to the federal government, and not to the state's own exchequer.

ICMS by eliminating the ISS--whose revenue productivity has been low--and arguments are offered in favor of such a modification, the reform proposal stops short of recommending it at least in the short run. European experience regarding the difficulties faced in taxing services is cited. Nevertheless, it is important to recognize that taxing services comprehensively is important for neutrality as well as for revenue productivity. Indeed, the increasing complexities in differentiating goods from services in various types of economic activity would also affect the administration of the reformed VAT, unless services are broadly included in the tax base. Also, the suggestion that the maximum and minimum ISS rates should be fixed in order to obviate tax competition needs a careful reexamination: the requirement for federal government to define the maximum and minimum rates indicates a certain federal bias in the design of the tax which may not necessarily solve the problem of low revenue productivity.

## **V. Directions for Reform**

Inasmuch as Brazil's consumption tax system seems to have been originally designed as a harmonized system, in practice, it has become cumbersome and adheres little to a pure VAT structure. Thus a fundamental reform of the entire system is necessary. First, the overall rate structure--which has become quite complex--must be simplified, with a significant reduction in the number of rates.

Second, erosion of the base must be checked, with selective containment of rights to grant exemption that lead to base erosion, for example, by CONFAZ.

Third, the base should be effectively utilised. Thus, services should be incorporated into the base of the ICMS. In India too, services have virtually remained outside the base of consumption taxation possibly reflecting a Constitutional anomaly which does not specifically identify the level of government that should tax services.

Fourth, it would be preferable to convert to the destination principle, but it cannot be done easily because of revenue impacts across states. Perhaps it could be done over

3 years. step by step. In India, a similar process is being attempted. The 4 per cent Central Sales Tax on inter-state trade based on the origin principle is currently being examined by a Group of Officials and Experts formed by the Ministry of Finance under the chairmanship of this author for possible reform. If "consignments" from a parent unit in one state are sent to a branch or subsidiary in another state, such consignments are not taxed, however. Many exporting states have suggested a "consignment tax" but it has never been put in place. It remains an unpopular potential tax in the business community, but is considered a loophole by exporting states.

Fifth, the structure should be converted from a production-type to a consumption-type VAT. This would imply giving credit for capital goods, but calculation of a revenue neutral rate would be needed. Otherwise, revenue may be expected to decline. In India, when input tax paid on capital goods began to be allowed as a result of a conversion to a consumption-type VAT, the change led to lower revenues in the initial years of conversion.

Sixth, the reformed VAT must be fully harmonized--at both the federal and state levels. CONFAZ operations may have to be broadened to achieve the necessary harmonization across different levels of government.

Seventh, in order to maintain the revenue productivity of the consumption tax system as a whole, a few traditional excises--typically at the federal level--without the feature of input tax credit, need to be reintroduced. In India too, in the process of introducing the VAT concept in the Central excise tax structure, the selected traditional excises--without input tax credit--have virtually disappeared, leading to revenue loss. Indeed, they should be reintroduced, though the list of excisable items should be kept short and include, perhaps, only tobacco products, alcoholic beverages, petroleum products and selected luxuries.

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