Federal problems with VAT in Brazil*

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Summary: 1. Introduction; 2. The 1988 tax reform; 3. The federal tax system; 4. The VAT structure; 5. Tax assignment issues; 6. Directions for tax reform.

This paper contrasts the tax reform effected by the 1988 Constitution with the reform implemented in 1964-67. The structure and problems of the tax system at the federal and state levels are described. Emphasis is laid on the difficulty of discriminating among jurisdictions and at the same time guaranteeing that the three tiers of government have autonomy with responsibility in taxation. After years of centralized fiscal federalism, in a country with a patrimonialistic vocation and pronounced disparities in income distribution, there is natural tendency to use the tax system for paternalistic or welfare purposes. After considering the need to decentralize expenditures as well as revenues, this paper concludes with some suggestions for reform: minimization of intergovernmental transfers and more intense utilization of conventional tax bases (income, consumption and property). It is also argued that the base of the value added tax (ICMS) should be broadened, and existing indirect taxes (such as IPI, ISS, IVVC, PIS, Cofins) should be abolished. The method of fiscal debit and credit should be applied fully (thereby exempting investment) and the *destination* principle should be adopted in inter-state and international trade.

O artigo aponta contrastes entre a reforma tributária na Constituição de 1988 e aquela levada a efeito em 1964-67. Descreve a estrutura e os problemas do sistema tributário federal e estadual. Destaca as principais dificuldades para discriminar competências e ao mesmo tempo assegurar autonomia com responsabilidade tributária entre esferas de governo. Após anos de federalismo fiscal centralizado, especialmente num país de vocação patrimonialista e acentuada disparidade na distribuição de renda, a tendência natural é o abuso do assistencialismo. Considerando a necessidade de descentralizar encargos, mas também receitas, o artigo conclui fazendo sugestões de reforma: minimização das transferências intergovernamentais e maior utilização dos fatos geradores clássicos (renda, consumo e propriedade). No campo do ICMS, propõe o alargamento da sua base de cálculo e a extinção dos impostos indiretos hoje existentes (IPI, ISS, IVVC, PIS, Cofins etc.), a aplicação integral do método do débito e crédito fiscal (desonerando-se, portanto, os investimentos) e a adoção do princípio do *destino* nas transações comerciais, interestaduais e internacionais.

1. Introduction

The last major tax reform in 1965 was a step toward rationality, especially at the state level, where a multiple-stage turnover tax was replaced by a value added tax (VAT). At the federal level a VAT on manufactured goods, with various rates, replaced single-stage wholesale taxes on consumption. At the municipal level a specific tax on services replaced a myriad of small taxes and fees levied against local activities. The tax reform was meant to achieve greater centralization of tax legislation so as to avoid interjurisdictional tax disputes and smooth the way in formulating policies for macrostabilization and distribution.

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In spite of the reform, interjurisdictional disputes became a serious problem because taxes were not coordinated. Producer states benefited and consumer states lost revenue as a result of the adoption of the origin principle for domestic trade. Furthermore, states that were net exporters lost revenue and net importers gained, since an approximation of the destination principle prevailed for international trade. This type of arrangement not only redistributed revenue arbitrarily among states but also was unfair since the poorer states were usually net importers domestically and net exporters internationally.[1]

The state VAT base did not cover numerous products and services, until recently taxed by federal and local governments. Fuels, minerals, electricity, and other goods and services were excluded from the VAT. Undesirable consequences of this tax assignment include loss of potential revenue for states and inefficient border tax adjustments. Attempts to redress these difficulties before 1988 were aborted because they were incompatible with the prevailing stabilization policies of the central government.

Since the early 1980s there has been general agreement that the tax structure devised in 1965 is due for reform, this time in the direction of decentralization. Recent claims by states and municipalities to a larger share of national tax revenue were met by increased revenue sharing but not by the granting of greater autonomy.

2. The 1988 tax reform

The tax reform enacted as part of the 1988 Constitution was actually a set of circumstantial adjustments rather than a genuine modernization of the taxation structure. First and foremost, it is relevant to note that the Constitution is not the appropriate place to define the final form taxation is to take. Regulation in this field should be effected through implementing legislation. The Constitution creates taxes, establishes competences and defines how tax revenues are to be shared among the three tiers of government. In the case of the VAT, it determines the scope of its application to interstate commerce and to export trade. The 1988 Constitution does not make fundamental changes to the existing system for collecting taxes, but significantly alters the structure of tax assignment among the three tiers of government.

Compared with the 1988 reform, the 1965 reform can be termed elitist and centralizing. In line with the philosophy prevailing at the time, central government was given not only most of the competence but also the responsibility for legislating on and assigning taxes. It is not surprising therefore that when the time came to write the chapter on taxation in the new Constitution, the legislators took a diametrically opposite approach. This time they paid scant attention to proposals contained in studies prepared by special committees. Rather than study the best structure for collecting and distributing taxes, delegates to the Constituent Assembly took the easy option of raising the states' and municipalities' shares in federal tax revenues. The central government was also neglectful on this matter, at the time of decision-making process during the first stages of the Constitutional Convention. The president José Sarney, at this stage was especially concerned in extending his term of office from four to five years.

The new Constitution calls for a significant increase in transfers of revenue from the main taxes levied by the federal government to states and municipalities. From a long-term perspective it is worth asking whether this is the best way of decentralizing the distribution of tax revenues among tiers of government. Approximately half of the revenue from income

[1] See Longo, C. A. (1990b).

tax and industrial tax (IPI) now goes to states and municipalities, compared with only 20 percent before 1980.

During the last 10 years the tax revenues available to central government fell from 68.1 to 54.8 percent of the total, while the states' share increased from 23.1 to 29.3 percent and that of the municipalities from 8.7 to 15.8 percent (table 1). There is no provision to compensate central government for the loss through a corresponding transfer of obligations to spend. Indeed, mandatory federal spending items were increased in the sense that central

Table 1
Brazil: total tax receipts
% GDP

Years	Tax collection			Tax available			Total
	Federal	States	Municipal	Federal	States	Municipal	
1970	17.33 (66.7)	7.95 (30.6)	0.70 (2.6)	15.77 (60.7)	7.56 (29.1)	2.64 (10.1)	25.98 (100.0)
1975	18.59 (73.7)	5.93 (23.5)	0.70 (2.7)	17.20 (68.2)	5.91 (23.4)	2.17 (8.6)	25.22 (100.0)
1980	18.42 (74.6)	5.34 (21.6)	0.91 (3.6)	16.82 (68.1)	5.71 (23.1)	2.16 (8.7)	24.67 (100.0)
1985	16.39 (72.7)	5.60 (24.8)	0.54 (2.4)	14.13 (62.7)	5.91 (26.2)	2.48 (11.0)	22.53 (100.0)
1989	14.80 (67.4)	6.55 (29.8)	0.60 (2.7)	12.04 (54.8)	6.43 (29.3)	3.47 (15.8)	21.94 (100.0)

Source: Villela, R. A. (1991).

Brazil: structure of tax revenue and assignment (1989)

	All levels		Federal		State		Municipal	
	% GDP	% Total	% GDP	% Total	% GDP	% Total	% GDP	% Total
Federal taxes	14.80	67.4	12.04	100.0	6.43	100.0	3.47	100.0
Income tax (IR)	3.95	18.0	2.28	18.9	0.82	12.7	0.86	24.7
Industrial product tax (IPI)	2.04	9.3	0.96	7.9	0.58	9.0	0.50	14.4
Social security taxes	7.39	33.6	7.39	61.3				
Payroll tax	4.28	19.5	4.28	35.5				
Other taxes	3.11	14.1	3.11	25.8				
Financial operation tax (IOF)	0.15	-	0.15	1.2				
Rural property tax (ITR)	-	-	-	-			-	-
Other	1.27	5.7	1.27	10.5				
State taxes	6.55	29.8			5.03	78.2		
Value-added tax (ICMS)	6.07	27.6			4.55	70.7	1.51	43.5
Vehicle registration tax (IPVA)	-	-			-	-	-	-
Inheritance and gift tax	-	-			-	-		
Specific income tax	-	-			-	-		
Other	0.48	2.1			0.48	7.4		
Municipal taxes	0.60	2.7					0.60	17.2
Service tax (ISS)	-	-					-	-
Urban property tax (IPTU)	-	-					-	-
Retail fuel tax (IVVC)	-	-					-	-
Property transfer tax (ITBI)	-	-					-	-
Total revenue	21.94	100.0						

Source: Villela, R. A. (1991).

government's budget now has to guarantee minimum levels of expenditure on certain essential services (defense, foreign relations, justice and so on).

The changes made to the taxation system by the Constitution are an example of how not to proceed toward decentralization in this sphere. They were confined to restoring the financial capacity of states and municipalities at the expense of central government, without even a minimum of care to safeguard the generally accepted principles of fiscal federalism. In essence, subnational governments' share of federal tax revenues was increased without any measure to enhance local performance in collecting taxes or confer effective local autonomy.[2]

Decentralizing competences is not the same as deconcentrating the revenues obtained from tax collection. Decentralizing competences means granting autonomy both to collect and to spend, in accordance with availability of funds and with local preferences. Deconcentrating revenues simply transfers funds in accordance with centrally determined political criteria that do not take account of local decisions and local tax collection efforts.

The new value added tax (ICMS) was an improvement on the old one (ICM) in that its base was extended to cover goods and services previously covered only by federal excise taxes. In addition, states gained a degree of autonomy to decide individually on rates and exemptions. The 1988 Constitution delegated to the states the power of establishing internal rates, strengthened the legislating role of the National Public Finance Council (Conselho de Política Fazendária — Confaz) and expressly forbade the Union from granting incentives based on the ICMS. This was a major change towards increased decentralization of tax competence.

Further progress could have been made, however. The ICMS base could have been extended to services in general, which continue to be covered by municipal service tax (ISS). It would also be worthwhile finding a way for municipalities to exploit their own tax base more productively. One possibility would be to merge the existing municipal urban property tax (IPTU) with the federal rural property tax (ITR) and hand the resulting revenues over to municipalities together with the autonomy to administer them.

Since 1985 central government has been obliged to give ground to subnational units of government in the distribution of tax revenues. Until the mid-1970s, states and municipalities kept only 20 percent of the proceeds from the two main federal taxes. By the time the new Constitution was about to be enacted the proportion had risen to 33 percent, and it now exceeds 50 percent (table 2). Moreover, the base of the ICMS (a VAT collected by states) has been extended, and local governments have created new taxes (such as the IVVC, a retail fuel sales tax, and a 5 percent surtax on federal income tax) as well as receiving grants from a new fund set up to provide compensation for tax rebates on exports. In the federal sphere, meanwhile, several taxes have been eliminated, including excises levied on fuels, electricity, communications and minerals, the revenues from which were shared by all three tiers.[3]

In short, the Constitution basically redistributed the revenues from the main federal taxes. Elimination of some excise duties and the corresponding extension of the ICM base was undeniably an improvement: the federal duties no longer fulfilled the purpose for which they had been created, while the ICM moved a step further toward universality. However, there are no grounds for taking a positive view of the increased share of states and municipalities in revenues from the income tax and the industrial tax (IPI), which discourages them from

[2] See Longo, C. A. (1990a).

[3] Most of these changes were anticipated by Varsano, R. (1987).

Table 2
Participation funds: constitutional provisions for distributing revenues from the federal income taxes (IR) and industrial tax (IPI)

Period	% IR + IPI revenues				% IPI	% Total	
	FPE	FPM	FE	FFR	FPEx	IR	IPI
1968	10.0	10.0	-	-	-	20.0	20.0
1969-75	5.0	5.0	2.0	-	-	12.0	12.0
1976	6.0	6.0	2.0	-	-	14.0	14.0
1977	7.0	7.0	2.0	-	-	16.0	16.0
1978	8.0	8.0	2.0	-	-	18.0	18.0
1979/80	9.0	9.0	2.0	-	-	20.0	20.0
1981	10.0	10.0	2.0	-	-	22.0	22.0
1982/83	10.5	10.5	2.0	-	-	23.0	23.0
1984	12.5	13.5	2.0	-	-	28.0	28.0
1985	14.0	16.0	2.0	-	-	32.0	32.0
1986-Sept. 1988	14.0	17.0	2.0	-	-	33.0	33.0
Oct.-Dec. 1988	18.0	20.0	-	3.0	10.0	41.0	51.0
1989	19.0	20.5	-	3.0	10.0	42.5	52.5
1990	19.5	21.0	-	3.0	10.0	43.5	53.5
1991	20.0	21.5	-	3.0	10.0	44.5	54.5
1992	20.5	22.0	-	3.0	10.0	45.5	55.0
From 1993 on	21.5	22.5	-	3.0	10.0	47.0	57.0

Source: Serra & Afonso (1991).
Notes: FPE: Participation Fund for States and Federal District (included federal territories until 1988); FPM: Participation Fund for Municipalities; FE: Special Fund (for states in poor regions); FFR: Fund for Financing the Productive Sector in the Northeast, North and Center-West Regions, administered by regional federal banks (corporate finance); FPEx: Fund for transfers to states (75%) and municipalities (25%) that export industrial goods.

enhancing collection efforts and distorts the utilization of revenues throughout all tiers of government.

Today central government has few incentives to reformulate its traditional taxes, let alone increase them, since most of the additional revenue would have to be passed on to the other tiers. And as long as local governments are able to make use of their plentiful shares in transfers of funds they will be unable to evaluate and adequately exploit the tax-benefit ratio of the services they provide. This encourages states and municipalities to "take a free fiscal ride", and the federal government to create new taxes that do not have to be shared with local governments.

3. The federal tax system

From 25.98 percent of GDP in the 1970s, overall tax revenue in Brazil fell to 24.67 percent of GDP in the early 1980s and to 21.94 percent of GDP in 1989. The low effort of the Brazilian tax system reflects the slowdown of economic growth after the debt crisis and the acceleration of inflation, which has significantly eroded tax revenue (see table 1).

The Brazilian tax system is complex. There are six major taxes on domestic production and consumption — IPI, ICMS, ISS, Finsocial, PIS-Pasep, and the municipal tax on fuels and gas (IVVC); six taxes on income — the federal withholding tax on income (IRRF), the federal personal income tax (IRPF) and the federal corporate income tax (IRPJ), an additional tax, a federal surtax on corporate income earmarked for social security, and a state surcharge on

corporate taxable profits; 11 payroll taxes, including social security contributions, an education tax,[4] and a severance pay scheme (FGTS); and there are five property and inheritance taxes, including the urban property tax (IPTU), the rural property tax (ITR), and the tax on motor vehicles (IPVA). In addition, there are customs duties on imports, duties on some exports, the withholding tax on financial transactions (IOF), and a large number of other minor levies.

Brazil's overall tax burden (at the general government level, including social security contributions) is not high compared to a sample of middle-income countries. The tax burden is heavily concentrated, however, on goods and services and payroll taxes (in particular, social security contributions). In contrast, revenue from other taxes, such as those on income and property, is low.

In an endeavor to achieve greater decentralization, the 1988 Constitution substantially modified the tax assignment and revenue-sharing arrangements across the three levels of government (table 3). It repealed excise duties on minerals, electricity, fuels, transportation and telecommunications, formerly collected by the federal government, and instead included these goods and services in the ICMS. At the same time, states were granted the right to levy an income tax surcharge on corporations (5 percent), while municipalities acquired the right to impose a 3 percent levy on retail sales of fuels and gas (except diesel). However, the

Table 3
Brazil: tax assignments in percent

Tax collected by: distributed to:	Federal	States	Municipalities	Regional programs
Federal				
Income	59	18(FPE)[a]	20(FPM)[a]	3
Products (IPI)[b]	59	18(FPE)[a]	20(FPM)[a]	3
Imports	100	-	-	-
Exports	100	-	-	-
Finance (IOF)	100	-	-	-
Rural land	50	-	50	-
Wealth[c]	100	-	-	-
States				
Inheritance		100	-	-
Value-added (ICMS)		75	25	-
Automobiles (IPVA)		50	50	-
Income tax surcharge[d]		100	-	-
Municipalities				
Urban property	-		100	-
Retail sales of fuels	-		100	-
Property transfers	-		100	-
Services (ISS)	-		100	-

Source: Brazilian Constitution.
[a] According to the Constitution, the FPE (Participation Fund for States) and the FPM (Participation Fund for Municipalities) will reach 21.5 percent and 22.5 percent respectively in 1993.
[b] The federal government transfers 10 percent of the industrial tax (IPI) to states in proportion to the value of their exports of industrial products.
[c] Tax not yet implemented.
[d] Applied only in some states.

[4] "Education tax" means a specific tax on wages earmarked for expenditures on education.

percentages of federal revenue and VATs transferred through tax-sharing funds (FPE and FPM) to states and municipalities were raised from 15 and 17 percent to 18 and 20 percent, respectively. Furthermore, the percentage of revenue from the ICMS transferred from states to municipalities was raised from 20 to 25 percent.

Fiscal federalism in Brazil is more developed than in any other country with a similar level of income. It is broadly comparable to three of the most decentralized industrial economies: Canada, Australia and the United States. In Brazil the ICMS has been a large contributor to the high level of government revenue when compared to similar figures for other middle-income countries. However, notwithstanding substantial revenue from the ICMS, state and local governments fund roughly 30 percent of their expenditures through central government transfers. Municipal governments are particularly dependent on transfers from higher levels of government, as their own revenues cover less than 20 percent of their total expenditures.[5]

Excessive reliance by municipalities on federal and state transfers discourages local revenue-raising efforts. At the same time, the generous IPI and income tax-sharing arrangements have hampered macroeconomic stabilization policies, as the federal government cannot fully use the proceeds from additional tax efforts. This situation explains the creation of unshared, yet distortive, alternative sources of taxation at the federal level in recent years (such as the Finsocial and the IOF).

While fiscal federalism in Brazil can be said to be advanced in the sense that detailed rules for tax assignment and revenue sharing among levels of government exist, it is also true that the rules suffer from various shortcomings. There is a bias toward transferring revenue to lower levels of government without a corresponding transfer of expenditure responsibilities. This in turn leads the higher levels of government to seek alternative means of taxation that are not efficient. The revenue sharing rules discourage efforts to collect taxes by individual governments of whatever level.

4. The VAT structure[6]

The ICMS rates are set by each state within certain legal constraints. A ceiling rate is fixed by the Congress for certain transactions and interstate as well as international transactions are subject to generally harmonized rules. The typical rate on consumer goods is 17 percent. The ICMS rates are inclusive (i.e., statutory rates are in fact higher than indicated in the code).

The ICMS is calculated according to the invoice (or credit) method. Each firm is taxed on its gross receipts from sales, with credits allowed against liability for all taxes paid by its suppliers and invoiced on its purchases. This method results in a tax liability equal to that arrived at by applying the tax rate directly to the value added.

Brazilian tax law distinguishes between two concepts of credits. Financial credit is granted for all merchandise entering the factory, while "physical credit" is granted only for goods actually incorporated into products that will eventually be sold. The ICMS uses the "physical credit" concept for items purchased but not used as part of the actual production process; these are considered consumption items and hence do not entitle the factory to credits.

[5] See IMF (1992, p. 11); World Bank (1990).

[6] For a comparative study on VAT structure see Tait, A. (1988).

The VAT is levied on the producer price. However, this base may be increased by including the estimated value added in later stages of processing (e.g., by retailers) where it is difficult to collect taxes directly (a process referred to as "substitution"). Definition of the tax base is further complicated by the fact that states may confer tax base reductions or exemptions, and defer payments in a nonstandard fashion in order to give preferential treatment to certain industries. The Constitution (art. 155, par. 2, item V) gives explicit powers to the federal Senate to establish ceilings and floors for ICMS rates across states. Interstate tax policy on the ICMS is coordinated through a regular conference of the National Public Finance Council (Confaz), which promotes treaties on tax benefits and harmonizes rates. The Council's rulings must be unanimous.

Both "zero-rating" and "exemptions" are found in the law. Under zero-rating, no tax is paid on outputs but the VAT embedded in inputs is fully creditable. Thus, no accumulation of tax burdens occurs and output is truly untaxed. However, if a sale is exempt from taxes, a tax credit is typically refused because the unit is not taxable and hence loses the right to claim taxes embedded in its inputs. The price of an exempt activity would thus include taxes for intermediate goods that cannot be reclaimed in the form of a tax credit.

Under Confaz agreements specific products such as vegetables, eggs and domestic fish are exempt. Among the other exemptions granted by Confaz are sales of agricultural equipment to the Northeast, and to Pará, Amapá and Rondônia; some agricultural exports, including specified vegetables and fruits; and small businesses which are exempted for reasons of administration cost.

Farmers' purchases of inputs and capital goods are taxed as a rule. While in principle they receive credits these are difficult to implement because it is hard to identify the value of the tax built into the costs of inputs. Many farmers do not keep detailed enough accounts to keep track of their input costs. Moreover, in view of long time lags between input purchase and output marketing, and the prevalence of high inflation, it is complex to keep a record of the real value of the credit adjusted for inflation. Major exceptions include insecticides, fertilizers, and seeds, which all benefit from true zero-rating. Tax rates on perishable foods such as vegetables vary from state to state and reflect special exemptions granted to states on intrastate transactions. Corn is also given special treatment: it is taxed when used for production of flour for human consumption but not when used for animal consumption.

Among the major agricultural exports (coffee, soybeans, poultry, beef, silk, vegetables, fruits, and fruit juices) only coffee and soya pay the VAT. There is a list of exempted fruits, but in practice almost all are included except pineapples. Meat is not taxed unless it is frozen and hence similar to an industrial product.

Two different principles can be distinguished in the treatment of interregional trade for the purposes of the VAT: the origin principle and the destination principle.[7] Under the origin principle, traded goods are taxed in the region of origin, and the tax is thus included in the price of exports; imports are not taxed since they bear the tax levied in the state of origin. The destination principle would zero-rate exports: for example, prices of exported goods would be exempt of VAT, while imports would be subject to an import VAT that raises the price of incoming products to the price level prevailing in the importing region.

The origin principle tends to induce tax competition among regions with similar producer costs. This renders the origin principle inappropriate where coordination is difficult to

[7] For a review of the destination principle and its counterpart, the origin principle, see Cnossen & Shoup (1987, p. 67).

achieve. Here, the destination principle has clear advantages over the origin principle. It guarantees full tax neutrality for interjurisdictional trade: zero-rating of exports ensures that goods sold to another country pay no VAT in the country of origin. The corresponding import tax will generally raise the price of imports to the consumer price level of the country of destination. In addition, this treatment of international trade ensures that VAT revenue is assigned to the jurisdiction where the goods are actually being consumed.

The destination principle was adopted by the European Community, for example, both for internal trade and for trade with third countries. It must therefore be stressed that European regime realizes the destination principle in a double sense. This is important to keep in mind when discussing proposals for VAT reform in Brazil.[8]

While the origin principle induces tax competition, the efficacy of applying the destination principle for interregional trade is not self-evident. For example, if internal tax borders are not effective, there will be problems affecting interregional trade.

This analysis applies to both international and interregional trade. Interstate competition is embedded in the present arrangements for the ICMS in Brazil. These may take various forms, despite the fact that Confaz tries to harmonize rules according to its constitutional mandate. There is evidence that some of the concessions refused by Confaz are practised anyway. Since minimum rates are set, states can resort to tax base reductions or grant unindexed payment deferrals, tantamount to full exemption in an inflationary environment.

The ICMS is a state tax requiring coordination for both international and interstate transactions. As regards international transactions, the Constitution grants immunity to exported industrial products but excludes a number of semimanufactured goods. The latter, in principle, are subject to an export ICMS. Although primary, intermediate and agricultural exports are thus taxed under the ICMS, treaties among states (governed by Confaz rules) have exempted a large number of items, especially agricultural products. Furthermore, the list of industrial products that are tax-exempt under the Constitution has been considerably lengthened to include such items as frozen meat and fruit juice.

With respect to imports, the Constitution stipulates that the ICMS is to be levied on imported goods destined for consumption or for fixed capital formation; services rendered by foreigners are also subject to the tax. However, intermediate goods are exempt from import ICMS. Import ICMS revenue is accorded to the state to which the import is shipped for first-stage processing.

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 rarely reimbursed in cash. Export credits are thus *de facto* nonrefundable, making the ICMS an export tax even where the Constitution grants tax immunity.

As to interstate transactions, the origin principle basically applies. The "exporting" region taxes its output, cashing in the tax on its exports, and the "importing" region returns the tax in the form of a credit accorded to its importers although this tax was paid to another state.

The normal rate on interstate transactions is 12 percent. To support the poorer states, the rate for shipments from the South to the North was set at 7 percent, with Confaz approval. This generally applies to transactions originating in the South and Southeast (except Espírito Santo) and destined to the North, Northeast, Center-West, and Espírito Santo. By levying 17

[8] See IMF (1992).

percent on sales and reimbursing 7 percent to importers, Ceará now raises 10 percent on imports; São Paulo experiences a corresponding revenue loss. If a transaction takes place from the Northeast to the South, Ceará collects 12 percent, which is reimbursed by São Paulo. Thus the latter raises only 5 percent in revenue (17 percent less 12 percent) on imports consumed in the state.[9]

In sum there are four rates: 17 percent for intrastate transactions and final consumption; 12 percent for interstate transactions, except shipments from the South and Southeast (excluding Espírito Santo) to the North, North-East, Center-West and Espírito Santo, which are taxed at 7 percent; 13 percent for exports; and a true zero rate (a tax rate of 0 percent which creditors are given for taxes on inputs) in certain cases discussed above (industrial exports, some agricultural inputs). Since rates are applied to prices inclusive of tax, the actual rates applying to producer prices are 20.48, 13.64, and 9.89 percent respectively for the three non-zero rates. One of the major changes in the new Constitution is increased freedom for states to set these rates. However, early in 1989, the states decided essentially to stick to the old rate structure. The only novelties were a 12 percent rate for basic necessities, and a 25 percent rate for luxuries in addition to the existing 17 percent rate. Most sectors were to remain subject to the 17 percent rate.

Trade with the Manaus Free Zone was also given special treatment. "Exports" of domestic industrial goods to the zone are zero-rated, so that "exporters" benefit from full credits on taxes paid on the inputs used to produce exports, as in the case of international exports.

Exemption from the ICMS for small business (Complementary Law nº 48, Dec. 10, 1984) was repealed by art. 41, par. 3, of the Transitory Constitutional Provisions Act and art. 151, III, of the Constitution. Confaz Agreement nº 40/89 on ICMS granted small business exemption from ICMS through March 31, 1989. This exemption was extended through May 31 of the same year under Confaz Agreement nº 48/89. For the states of Goiás and Mato Grosso, extension lasted through December 31 (Agreement nº 105/89).

On June 1, 1989, new rules on this issue came into force under Confaz ICMS Agreement nº 59/89, which authorized states (and the Federal District) to grant differential treatment to small business, basically consisting of the following: (a) the ICMS to be paid each month on the basis of the estimated amount owed, offsettable by credits relating to inputs; (b) accessory obligations to be waived or simplified; (c) supplier to withhold the ICMS on output operations performed by a small firm. ICMS Agreement nº 59/89 also states that when a small business files with the taxpayers' register it is obliged to declare projected ICMS-taxable outputs within the limits laid down in state legislation.[10]

5. Tax assignment issues

The subcontinental size of Brazil's territory is largely due to chance and the misfortunes of the Portuguese Imperial Court. With Napoleon's armies beating at the gates of Lisbon, the

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[9] See IMF (1992, p. 27). When it was put into force (1964-67), the ICMS caused heavy controversy between the producer states (South and Southeast) and the consumer states (North/Northeast), due to application of the principle of "pure" origin, in interstate trading. In fact, the producer states, as they were net exporters, gained revenues, and the consumers, as they were net importers, lost revenues. There is an extensive literature on this matter. See, for instance, Longo, C. A. (1979, 1981).

[10] See Spíndola, S. L. (1992).

royal family and nobility fled to their Brazilian colony in 1808. On returning 15 years later, they left behind the Prince Regent who shortly afterwards declared Brazil independent and himself its Emperor. The Empire lasted until the Republic was set up in 1889. In the intervening period the government succeeded not only in suppressing nationalist uprisings and rebellions but also in pushing the frontier westwards.

Brazil's *patrimonial State,* where vested interests of the bureaucracy merge with those of private enterprise, has historical roots. Portuguese law served the purposes of political organization more than those of trade and the private economy. The Philippine and Manueline Ordinances were mainly concerned with assigning public office, military commissions, and Church property and privilege. Only once the architecture of administration had been structured did they specify civil and penal law and rules of court. The rights inherent in sovereignty were not derived from studies of the longstanding customs of the Kingdom but created wholesale by adopting the teachings of Roman law. The Ordinances characterized state intervention in the economy, business, shipping, domestic trading, pricing, the export embargo and so on.[11]

Strictly speaking, there was neither civil law nor commercial law but only administrative law. Thus private individuals were subjected to a discipline that was political in content rather than economically inspired. It served not individuals and commerce, in rational and calculable business dealings, but the patrimonial State. There was nothing impersonal or equitable about the logic of laws and decisions, for the prince ruled supreme. England, birthplace of classical capitalism, had no need to consolidate its laws in order to guarantee the expansion of its economic system. It could do without formal codes or Roman law because of the driving force of its economy and its roots in private enterprise, under which industrialization flourished. Brazil, however, inherited a long history through centuries of ancestral assimilation that began with the revolution of John of Aviz and Manuel I.[12]

Brazil's first republican Constitution (1889) was inspired by the federalist model of the United States of America. The Imperial provinces, enjoying full sovereignty, were transformed into states, and municipalities were created. The contrast with the U.S. could hardly be sharper, however. The society of the Founding Fathers developed out of local communities and a federation of states with a diversified, open economy. In Brazil, the colonial "flagbearers" (*bandeirantes*) struck inland from coastal settlements to stake claims for hereditary landowners (*capitanias*), who amassed fortunes by growing export crops. Brazil's Congress is still locked in controversy about the construction of a true federal system, in terms of the assignment of taxing power and spending obligations to the three levels of government. In addition to the diversity of factors inherited historically and the cultural disparities, there are sharp regional differences in per capita income and economic development.

Until the mid-1930s there were virtually no significant taxes in Brazil. Federal and state governments collected the bulk of their revenues from a variety of limited taxes and tariffs on trade and business. The tax provisions of the 1934 Constitution sought to broaden the scope of taxation by consolidating some of the scattered levies. As a result a personal income tax began to be collected by the federal government, a turnover sales tax by states, and an urban property tax by local governments. These taxes did not become relevant sources of revenue until later, however. In the meantime, the federal government collected much of its revenue

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[11] See Faoro, R. (1957, p. 64-5).

[12] See Faoro, R. (1957, p. 66-9).

from import tariffs and excises on liquor and tobacco, while states depended heavily on export and import taxes.

In 1965 income taxes and various single-stage wholesale consumption taxes (on cigarettes, liquor and luxury items) accounted for about 75 percent of total revenue at the federal level, excluding social security. At the state level, the turnover sales tax was the most important source of income, having gradually overtaken the taxes on trade. The sales tax accounted for 80 percent of total state revenues. States had long had absolute control over their own tax bases and rates, and rates differed according to local conditions and needs. In 1959 the sales tax rates ranged from 3 to 5 percent; by the eve of the 1965 reform, they ranged from 4 to 7 percent.

The major tax reform in 1965 grouped existing taxes into four categories according to their economic base — external trade, income, production, and special taxes — and assigned each tax to a specific level of government. This reform abolished numerous taxes on specific activities, such as licenses and stamp duties, which were similar to the cascade turnover tax. Value added taxation was introduced in Brazil when the European Economic Community was still considering its adoption.

The border tax adjustment (BTA) issue has usually been confined to cases of open economies under balanced international trade, flexible price levels and/or exchange rates, and internationally immobile factors of production. In this setting the allocation effect of a general tax on products is equivalent to a general tax on incomes, since no factor income flows between countries. The long run equivalence between the origin and destination principles in connection with general taxes breaks down with factor/owner mobility, fixed exchange rates and unbalanced trade.[13]

Consider a setting where general use is made of benefit taxation which takes care of both tax and expenditure coordination. Under such a system, a distinction would be drawn between the financing of intermediate and final expenditures of government. Final expenditures provide for the supply of public services which are consumed by individuals in their place of residence. The provision cost of such services is usually reflected in the product price as paid by domestic consumers. When products are exported, the cost of these public services should not be paid for by the foreign consumer who, in this case, does not become their beneficiary. Interjurisdictional tax neutrality would require that revenues to cover the cost of such services be collected according to the destination principle if product prices rise with the tax.

As mentioned above, the tax rate applied on interstate transactions in Brazil is below the tax rate applied on internal sales and imports in each state. On the other hand, foreign exports of manufactured goods are tax exempt and rebates are allowed for taxes paid on previous stages. Although the treatment of foreign exports of raw materials and agricultural goods is not regulated by tax law, states are often forced to confer tax rebates on these goods too, as a result of special interstate agreements.

Adoption of this restricted origin principle instead of the destination principle on domestic as well as foreign trade reallocates tax revenues from the Northeast (NE) toward the rest of the country (ROC). Examination of trade statistics in table 4 for the Brazilian Northeast tells us that the NE has had perennial deficits with the ROC. On the other hand, the NE has had perennial surpluses with the rest of the world (ROW). Therefore a clear pattern of triangular trade takes place between the NE, the ROW, and the ROC, with the NE paying for

[13] See Longo, C. A. (1978).

Table 4
Trade balance (1985)
Cr$ millions

State or region	State GDP	Interstate balance	International balance	Internal absorption	Ratio: absorption/GDP
North	53,850	-5,587	115	59,322	110.1
Rondônia	6,938	-1,866	132	8,671	124.9
Acre	1,833	-578	0	2,411	131.5
Amazonas	17,593	3,405	-2,138	16,326	92.7
Roraima	817	-841	-1	1,660	203.1
Pará	25,434	-5,142	1,899	28,676	112.7
Amapá	1,233	-565	223	1,576	127.7
Northeast	170,569	-23,469	9,902	184,136	107.9
Maranhão	11,702	-4,321	93	15,930	136.1
Piauí	5,951	-1,745	100	7,595	127.6
Ceará	19,642	-4,596	700	23,538	119.8
Rio Grande do Norte	11,294	-1,308	236	12,367	109.4
Paraíba	8,958	-2,796	220	11,534	128.7
Pernambuco	30,408	-3,415	620	33,202	109.1
Alagoas	9,859	-2,710	809	11,760	119.2
Sergipe	8,897	-1,349	125	10,120	113.7
Bahia	63,855	-1,227	6,994	58,087	90.9
Center-West	79,418	-19,037	356	98,100	123.5
Mato Grosso do Sul	13,472	-1,868	100	15,240	113.1
Mato Grosso	11,229	-4,176	197	15,207	135.4
Goiás	27,335	-5,846	335	32,847	120.1
Federal District	27,381	-7,145	-278	34,805	127.1
Southeast	732,482	43,566	20,400	668,515	91.2
Minas Gerais	121,701	5,592	14,403	101,705	83.5
Espírito Santo	21,024	-3,453	4,073	20,403	97.0
Rio de Janeiro	160,937	11,662	-16,514	165,789	103.0
São Paulo	428,819	29,764	18,438	380,615	88.7
South	222,665	4,528	24,463	193,673	86.9
Paraná	78,655	3,465	9,087	66,103	84.0
Santa Catarina	44,153	1,341	3,445	39,366	89.1
Rio Grande do Sul	99,856	-278	11,930	88,203	88.3
Brazil	1,258,986	0	55,238	1,203,748	95.6

Source: Torres, I. (1992).

at least part of the domestic trade deficit (made up basically of industrial goods) with the foreign trade surplus (made up basically of agricultural raw materials). There is no particular reason why a triangular trade of this nature between the Northeast, foreign countries and the rest of the country will necessarily bring forth economic disadvantage to the former. This pattern of trade would be the same as that of a country which spends in another the favorable balance of trade it maintains with a third nation.[14]

Another problem with tax assignment among Brazilian states is the very unequal distribution of taxing capacity. Southern states (25 percent of the total number of states in Brazil) account for 80 percent of total state VAT revenues. São Paulo alone collects 38.21 percent of total ICMS in 1991 (table 5). Unequal distribution of taxing capacity leads to

[14] See Longo, C. A. (1982a).

Table 5
Collection of ICMS by state
In percent

State or region	1988	1989	1990	1991
North	2.53	3.74	4.29	4.07
Tocantins	0.00	0.18	0.19	0.22
Acre	0.05	0.05	0.07	0.07
Amazonas	1.17	1.68	1.94	1.68
Pará	0.84	1.11	1.40	1.51
Amapá	0.03	0.06	0.08	0.08
Rondônia	0.41	0.05	0.53	0.44
Roraima	0.03	0.05	0.07	0.07
Northeast	11.58	11.19	12.25	12.41
Maranhão	0.54	0.61	0.68	0.71
Piauí	0.33	0.33	0.39	0.44
Ceará	1.50	1.53	0.17	1.88
Rio Grande do Norte	0.48	0.55	0.59	0.56
Paraíba	0.61	0.61	0.67	0.70
Pernambuco	2.67	2.60	2.64	2.66
Alagoas	0.55	0.52	0.64	0.61
Sergipe	0.40	0.43	0.53	0.55
Bahia	4.49	4.01	4.36	4.31
Center-West	5.54	5.99	6.54	6.67
Mato Grosso	1.21	1.29	1.36	1.29
Mato Grosso do Sul	1.26	1.27	1.39	1.62
Goiás	2.22	2.39	2.64	2.63
Federal District	0.85	1.04	1.14	1.14
Southeast	63.33	61.25	60.83	60.48
Minas Gerais	9.09	9.06	9.25	9.95
Espírito Santo	1.41	1.59	1.89	2.03
Rio de Janeiro	9.47	9.24	9.36	10.28
São Paulo	43.30	41.36	40.32	38.21
South	17.01	17.83	16.89	16.37
Paraná	5.91	5.87	5.53	5.48
Santa Catarina	3.58	3.88	3.56	3.23
Rio Grande do Sul	7.52	8.08	7.80	7.67
Brazil	100.00	100.00	100.00	100.00

Source: DTN, Cotepe; reproduced in Bonini, M. R. (1992).

unbalanced distribution of taxing efforts. Taxes collected by the relatively poor states of the North and Northeast regions account for 39.32 percent and 44.53 percent of their public expenditures respectively, while those collected by Southeastern and Southern states cover 72.74 percent and 68.52 percent respectively (table 6).

Federal tax revenues are shared with states, municipalities and the Federal District in accordance with criteria laid down in Complementary Law nº 62/89. In the case of the Participation Fund for States (FPE), the law states that the North, Northeast, Center-West and Federal District get 85 percent, with the South and Southeast taking the rest. The law also specifies the percentage for each individual state; this varies positively in line with area and population, and negatively in line with per capita income. The aggregate (average) results are far from the individual situations. Just as there are government which are excessively dependent on transfers, there are others in which self-generated revenues are predominant —

Table 6
Self-funding capacity
Ratio: tax revenue[a]/budget revenue

State or region	1985	1988	1989	1990
North	23.59	25.04	35.40	39.32
Acre	6.61	7.28	8.48	8.81
Amazonas	42.98	40.92	48.22	66.97
Pará	37.39	30.57	49.28	49.00
Amapá	0.00	0.00	2.96	4.93
Rondônia	13.64	21.65	34.86	34.26
Roraima	0.00	0.00	4.44	6.43
Northeast	39.68	52.81	40.90	44.53
Maranhão	16.25	15.32	20.28	30.57
Piauí	18.57	29.08	28.63	32.88
Ceará	51.14	28.05	42.56	43.63
Rio Grande do Norte	28.66	29.94	36.26	39.26
Paraíba	21.29	29.13	41.58	41.21
Pernambuco	50.63	49.75	53.75	58.89
Alagoas	41.43	40.58	45.65	37.85
Sergipe	27.24	25.02	31.43	35.24
Bahia	50.69	44.67	43.90	47.52
Center-West	40.39	42.51	45.18	49.51
Mato Grosso	33.20	47.19	57.59	59.76
Mato Grosso do Sul	43.69	57.87	71.87	75.56
Goiás	45.91	59.06	76.38	68.66
Federal District	35.87	21.13	19.18	24.42
Southeast	70.12	64.96	66.30	72.74
Minas Gerais	53.29	40.68	46.24	63.35
Espírito Santo	46.96	51.55	58.45	68.86
Rio de Janeiro	69.58	66.61	70.98	70.85
São Paulo	78.23	74.71	72.24	76.00
South	70.08	61.22	68.00	68.52
Paraná	68.99	70.27	82.22	74.46
Santa Catarina	79.59	58.55	58.05	72.69
Rio Grande do Sul	67.41	56.65	65.15	63.20
Brazil	58.71	56.88	59.04	63.41

Source: Bonini, M. R. (1992); Villela, R. A. (1992).
[a] Mostly ICMS.

such as the wealthier states. The FPE/ICMS quotient is of merely 8 percent in the Southern region, while it rises to over 100 percent in the Northern region (table 7).

As to the municipal fund (FPM), the following criteria are currently in force: 10 percent to state capitals, 86.4 percent to other municipalities, plus 3.6 percent to those with a population exceeding 156,000 (except state capitals). Individual coefficients for each municipality are established by the Federal Court of Audit (TCU) according to criteria defined in specific laws (Decree-laws nº 1,805/80 and 1,881/81), which can be summarized as follows: (a) state capitals and municipalities entitled to the 3.6 percent share; proportional to population and in inverse proportion to per capita income; (b) others: share increasing with population in 18 different classes, each of which corresponds to a specific percentage. The distribution

Table 7
Transfers from FPE and ICMS revenues (1991)
Cr$ thousand

Region or state	Popu-lation Thousand	Transfers from FPE	ICMS revenue (Own 75%)	ICMS per capita	FPE per capita	ICMS+FPE per capita	Ratio: FPE/ ICMS
North	10,146	426,854	339,523	33.46	42.07	75.53	1.25
Rondônia	1,130	47,369	36,572	32.35	41.90	74.25	1.29
Acre	417	57,554	6,071	14.54	137.87	152.42	9.47
Amazonas	2,088	46,945	139,756	66.91	22.47	89.38	0.33
Roraima	215	41,735	6,075	28.15	193.40	221.56	6.86
Pará	5,084	102,828	125,892	24.75	20.22	44.98	0.81
Amapá	289	57,403	6,867	23.75	198.59	222.35	8.35
Tocantins	920	73,016	18,288	19.87	79.35	99.23	3.99
Northeast	42,387	882,505	1,035,563	24.43	20.82	45.25	0.85
Maranhão	4,922	121,439	59,177	12.02	24.67	36.69	2.05
Piauí	2,581	72,703	37,099	14.37	28.16	42.54	1.95
Ceará	6,353	123,436	156,983	24.70	19.42	44.13	0.78
Rio Grande do Norte	2,413	70,289	46,617	19.31	29.12	48.43	1.50
Paraíba	3,200	80,568	57,995	18.12	25.17	43.29	1.38
Pernambuco	7,109	116,089	221,598	31.16	16.32	47.49	0.52
Alagoas	2,512	69,989	50,720	20.18	27.85	48.04	1.37
Sergipe	1,492	69,908	45,889	30.74	46.84	77.59	1.52
Bahia	11,801	158,081	359,481	30.46	13.39	43.85	0.43
Center-West	9,419	120,682	556,262	59.05	12.81	71.86	0.21
Mato Grosso do Sul	1,778	22,409	135,098	75.96	12.60	88.56	0.16
Mato Grosso	2,020	38,828	107,357	53.13	19.21	72.34	0.36
Goiás	4,024	47,832	219,022	54.42	11.88	66.30	0.21
Federal District	1,596	11,611	94,784	59.37	7.27	66.65	0.12
Southeast	62,121	142,704	5,044,971	81.21	2.29	83.50	0.02
Minas Gerais	15,746	74,942	829,862	52.70	4.75	57.46	0.09
Espírito Santo	2,598	25,236	169,666	65.30	9.71	75.01	0.14
Rio de Janeiro	12,584	25,702	857,597	68.14	2.04	70.19	0.03
São Paulo	31,192	16,824	3,187,844	102.19	53	102.73	0.00
South	22,079	109,655	1,365,882	61.86	4.96	66.82	0.08
Paraná	8,415	48,507	456,787	54.27	5.76	60.04	0.10
Santa Catarina	4,536	21,531	269,571	59.42	4.74	64.17	0.07
Rio Grande do Sul	9,127	39,617	639,523	70.06	4.34	74.40	0.06
Brazil	146,154	1,682,402	8,342,204	57.07	11.51	68.58	0.20

Source: Bonini, M. R. (1992); Villela, R. A. (1992).

of the population, of the ICMS and FPE, as well as of the FPM per states and regions, is on table 8.[15]

In brief, the Constitution should have decentralized jurisdictional powers for taxation, instead of increasing the participation of the states and municipalities in the main federal taxes. However, the decentralization of responsibilities is more complicated due to their very nature: for instance, *health* is important in all levels of the government. However, *preventive health* is a responsibility of the central governments, and *curative health* pertains to local govern-

[15] In spite of massive revenue transfers a very unequal distribution of regional income per capita remains. The issue of separation is frequently raised in this regard as a rational solution for each region to explore its comparative advantages. But this is not what became implicit in the Constitution. See in this respect Camargo, A. (1992).

Table 8
Brazil
Distribution of population, ICMS, FPE and FPM[a](1991)
In percent

Region or state	Population	ICMS	FPE	FPM Capitals	FPM Interior
North	6.94	4.06	25.37	22.06	7.06
Acre	0.29	0.07	3.42	3.18	0.26
Amazonas	1.43	1.67	2.79	2.38	1.24
Pará	3.48	1.50	6.11	4.94	3.29
Rondônia	0.77	0.43	2.81	2.12	0.74
Amapá	0.20	0.08	3.41	2.82	0.13
Roraima	0.15	0.07	2.48	2.12	0.08
Tocantins	0.63	0.21	4.34	4.41	1.29
Northeast	29.07	12.41	54.45	48.74	34.07
Maranhão	3.37	0.70	7.21	5.52	3.97
Piauí	1.77	0.44	4.32	4.41	2.40
Ceará	4.35	1.88	7.33	11.04	4.58
Rio Grande do Norte	1.65	0.55	4.17	3.18	2.43
Paraíba	2.19	0.69	4.78	4.41	3.19
Pernambuco	4.86	2.65	6.90	7.07	4.79
Alagoas	1.72	0.60	4.16	3.53	2.08
Sergipe	1.02	0.55	4.15	2.47	1.33
Bahia	8.08	4.30	9.36	7.07	9.26
Center-West	6.44	6.66	7.17	9.27	7.12
Mato Grosso	1.22	1.28	2.30	2.12	1.89
Mato Grosso do Sul	1.38	1.61	1.33	1.76	7.50
Goiás	2.75	2.02	2.84	3.18	3.73
Federal District	1.09	1.13	0.69	2.20	-
Southeast	43.50	60.47	8.48	12.81	32.94
Minas Gerais	10.77	9.94	4.45	5.30	14.18
Espírito Santo	1.78	2.03	1.50	1.76	1.75
Rio de Janeiro	8.61	10.28	1.52	3.09	2.73
São Paulo	22.34	38.21	1.00	2.65	14.26
South	15.11	16.42	6.51	7.15	18.78
Paraná	5.76	5.47	2.88	3.09	7.28
Santa Catarina	3.10	3.28	1.27	1.59	4.19
Rio Grande do Sul	6.24	7.66	2.35	2.47	7.30
Brazil	100.00	100.00	100.00	100.00	100.00

Source: IBGE, Finance Ministry, Federal Court of Audit (TCU); reproduced in Castro, F. de. (1992).
[a] Excluding the extra 3.6 percent of the FPM for municipalities whose population exceeds 156,000, except state capitals.

ments. Thus, there is no way to specify strictly in the law what is the responsibility for expenditure at each level of the government. It would be better to leave such separation to be decided in the routine of the budgetary process, given the broad outline of what appears to be the proper assignment of jurisdictional expenditure benefits.[16] Of course, this rule would not support local expenditure financed by the Union with electoral objectives, such as building schools (CIACs), vicinal roads, and so on. The very existence of assistance-type ministries must be questioned, such as the Ministry of Social Welfare and the Ministry of Regional Development.

[16] See Longo, C. A. (1982b, 1987).

6. Directions for tax reform

When examining the ideal distribution of public revenues among levels of government, it is also important to take account of the spending side. In theory central government can collect all taxes and share them with states and municipalities according to set criteria. However, a minimum of fiscal autonomy is desirable, from both the political and economic standpoints. Local characteristics, such as availability of natural or acquired resources, community preference for particular public services and the degree of state involvement in the economy, are not easily converted into formulas (necessarily uniform) for redistribution of the fiscal cake. Assignment of expenditures and revenues to levels of government derives not only from a nation's cultural formation and historical opportunities but also from pursuance of explicit policies on fiscal centralization or decentralization.

On the basis of economic principles it is possible to construct a model of fiscal federalism.[17] This model assumes asymmetrical mobility of production factors. Capital flows unhindered among jurisdictions, whereas labor is increasingly less mobile as it moves from local to national jurisdictions. The main functions of government are: provision of public goods, reduction of economic inequalities, and stabilization of prices and the level of activity. To fund its operations, government can resort to taxation and special levies. The most widely accepted criteria used in taxing are ability to pay and assessment of taxes in accordance with benefits. Personal taxes (on income and net worth) are of the former type, while local taxes (on property) are of the second.

It follows from these premises that public spending which benefits the local community in the first instance should not be funded out of personal taxes. To do so would be to encourage emigration of wealthy individuals for whom the personal cost-benefit ratio of public services is greater than average, while simultaneously attracting individuals in the converse position. In principle the burdens and benefits of public service provision should be allocated neutrally, i.e. paid for and appropriated at the borders of the respective jurisdictions. Thus the tax on property is *par excellence* a local tax, the costs and benefits of which affect property prices. Similarly, with adequate border adjustments the value added tax can be spatially confined to the jurisdiction which benefits from the related public spending. For the same reason, the redistributive and stabilizing functions of government should be concentrated at the central level.

In short, at central level personal taxes should fund public goods that pertain to the national interest, in addition to stabilization and redistribution policies. Local governments should confine themselves to exploiting their own tax bases (property, user charges and other levies) to fund eminently local services. Intermediate instances of government should take charge of current public spending within clearly defined spatial limits, using indirect taxes, minimizing fiscal externalities and adopting the destination principle in interjurisdictional transactions.

The "subsidiarity" principle must prevail among tiers of government. Changes must be designed to ensure greater accountability and administrative decentralization. Assignment of tax revenues and spending obligations to the various levels of government must be altered in

[17] See for example Musgrave, R. A. & Musgrave, P. B. (1983); and also Longo, C. A. (1984); McLure, C. E., Jr. (ed.) (1983). An alternative model is given by centralizing revenues at central government (or in a special fund) and sharing them in accordance with a priori formulas. In Germany, for example, revenues from the state VAT are redistributed among states in proportion to their population. Thus the principle is not subsidiarity, whereby public services are funded and provided at local level whenever possible.

such a way as to grant more fiscal autonomy and administrative responsibility to states and municipalities, and more financial independence to central government and the central bank, to carry on its stabilization and distributive policies, as well as the provision of strictly national public services.[18]

Central government should rely above all on personal income tax to cover the vast majority of its expenditures non related with social security. Federal revenues could be supplemented from corporate income tax levied on large firms and a selective consumption tax on tobacco and liquor. The industrial tax (IPI), Cofins, PIS-Pasep, withholding tax (IOF) and the "social contribution" paid by corporations as a percentage of gross profit should all be eliminated.[19]

States should make better use of the ICMS, a modern and productive value added tax. Its potential would be enhanced by elimination of the IPI and other federal levies. The municipal service tax (ISS), a cascade tax, should be merged with the ICMS tax base, thus eliminating cumulative incidence and the perennial disputes about the concept of services between states and municipalities. In interstate and international transactions, zerorating should prevail in the exporter state and the internal tax rate in the importer state, according to the destination principle.

The debit-credit system would be applicable to all operations with the goods and services included in the tax base, including those incorporated into fixed assets, according to the consumption principle. Sales of goods to other states would be taxed just as in internal operations, in order to discourage the issuance of fake bills. The application of the destination principle would be enforced through a "clearing house" for interstate debits and credits, possibly through the banking system: fiscal controls at the borders would provide certification for such documentation.

Municipalities, in addition to being able to rely on their share of a more comprehensive tax, would benefit from the merging of the taxes on rural and urban properties (ITR and IPTU). In the new model for distributing the fiscal revenues, each level of government should concentrate on administering very few taxes. Central government would have basically the income tax and states the broader ICMS. Action of this type will inevitably have consequences on the present distribution of revenues. However, the costs of the transition can be ignored, if such alterations are embodied in a broad fiscal package, and its introduction is *phased in* gradually.

Interstate exports are currently taxed at reduced rates. Thus, the adoption of the destination principle would imply lower revenues in the state of origin, while the importing states would gain with the difference. The exports of primary (unprocessed) goods are not benefitted with a zero rate; exports of non-manufactured goods are basically taxed at a reduced rate (13 percent). Except for a few states in the North, and some net exporting states in the extreme South, revenue losses would not be statistically significant after the general adoption of the zero rate in exports. Likewise, the adoption of the consumption base implies revenue losses for all states, in particular for those where gross capital formation is more intense. In this case,

[18] See for example Longo, C. A. (1990a). For a reference on the principle of subsidiarity, see Tuchtfeldt, E. (1983).

[19] The "social contributions" in force at present (complementary source of revenue to pay for social security, health and unemployment benefits) would be extinguished, replacing the gradual privatization of the social security system, which thereafter would operate on a capitalization basis. The compulsory contributions (payroll taxes) would continue to finance social insurance limited to the poor.

the revenue losses will have to be compensated by bringing into the tax base untaxed consumption, such as services.

Although most of the states may wish to exempt basic foodstuffs, not all of them are in a position to do so. Industrialized states in the South would be willing to forego some of their revenue, but the poor states, which depend largely on subsistence farming, are less inclined to give special treatment to such products — food is still an important portion of their production and consumption base.

A potencial source of revenue for the states is the integration of the federal value added industrial tax (IPI) with the state value added tax (ICMS). The IPI tax base (manufactured goods) would be taxed exclusivelly by the state ICMS. In this case, the states could increase the ICMS rates on such products, to the same extent as those of the IPI would be reduced to zero.

When all these alterations are considered simultaneously, it may be anticipated that the net impact on the revenue of each unit of the federation will not be significant. However, the prospect of less "fiscal war", due to the adoption of the destination principle, and the encouragement to investments resulting from the consumption principle are factors which weigh heavily in favor of moving in that direction.

Revenue sharing funds should be kept to a minimum and redistribute tax revenues to lower levels of government in inverse proportion to per capita income and in proportion to population and collection effort. They should be calculated on the basis of the federal government's total revenues, excluding social security contributions.

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