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**THE TAXATION OF CONSUMPTION IN PROCESSES OF ECONOMIC
INTEGRATION**

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ABSTRACT

The purpose of this paper is to analyze how the taxation of consumption behaves in processes of economic integration, both theoretically and in practice. To achieve this analysis, first the taxation neutrality is contextualized and the different modalities of taxes on consumption are analyzed in its perspective, especially VAT because of its predominance in the international scenario. Then the issue of inter-jurisdictional coordination is discussed. Under this theoretical basis, the status of three major economic blocs (MERCOSUL, NAFTA and European Union) is studied. Special attention is devoted to the Brazilian and North American structures, since they are, at the same time, the main economic forces of their blocs and their structures are the most disaccording towards their partners and also regarding the international model.

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1 INTRODUCTION

The process of economic integration has led countries to group themselves into economic blocs with different levels of unity. The basis of such a process is the interpenetration of the economies that takes place only with the free circulation of economic factors, in a system that does not discriminate capital, goods and other factors by their origin. In this context, the tax neutrality, characterized by the minimal interference of the taxes in the decisions of economic agents, becomes crucial at both the national level and in the economic space of the blocs.

In the taxation of consumption, neutrality plays a central role because the taxation of this base can cause strong disruptions of the way the companies organize themselves and of the personal consumption choices. As consumption has increased significantly as a tax base over the last decades, it is easy to understand the attention that this area has received, both in academia and in taxation practice by tax authorities. As a result, important developments have occurred and continue to occur. The appearance and the massive spreading of the Value Added Tax (VAT) and the current process of tax harmonization within the European Union are two important milestones of this evolutionary process¹.

Although the literature considers VAT as a theoretical model able to face the most part of the problems on the consumption taxation, the meeting of theory with political and social complexities of “real life” evinces a far less Cartesian reality. At the domestic level there are several VAT implementations with significant distortions towards the theoretical model and there are many countries that could not unify their internal consumption taxation around this tax. And in most cases of integration processes the first steps of the harmonization path have barely begun to be taken.

In this context, the purpose of this paper is to analyze how the taxation of consumption behaves in processes of economic integration, both theoretically and in practice. To achieve this analysis, first the taxation neutrality is contextualized and the different modalities of taxes on consumption are analyzed in its perspective, especially VAT because of its predominance in the international scenario. Then the issue of inter-jurisdictional coordination is discussed. Under this theoretical basis, the status of three major economic blocs (MERCOSUL, NAFTA and European Union) is studied. Special attention is devoted to the Brazilian and North American structures, since they are, at the same time, the main economic forces of their blocs and their structures are the most disaccording towards their partners and also regarding the international model.

¹ Tanzi considers the introduction of VAT to be one of the two important technological innovations introduced in the tax area between 1930 and 1960 (TANZI, 2008, p. 2).

2 NEUTRALITY IN THE TAXATION OF CONSUMPTION

From the economic perspective, the ideal tax system is the one that at once fairly distribute the tax burden between individuals, interfere as little as possible in their economic decisions and has a low operational cost. This concept is not new. Adam Smith, explaining the mechanisms that govern the functioning of the market economy and defending the low state intervention, listed out four "maxims" on taxes in general: equity, certainty and non-arbitrariness, convenience of payment and low collecting cost². The concern with equity, neutrality and efficiency of the tax system remains today the center of discussions on tax^{3 4}.

Stiglitz asserts that in the absence of market failures, the economy make the resources to be allocated as efficiently as possible. That happens because people and companies allocate their resources weighting the relative prices determined by the market seeking for maximum efficiency. Most of the taxes, however, distort the relative prices of products, changing the optimal allocation. He cites, as examples, the construction of houses without windows in the seventeenth-century England because of a tax which levied the windows and the disincentives to marriage because of the obligation on taxing a couple jointly in the U.S. federal income tax⁵. A current example of this, which is linked to the recent financial crisis, is the stimulus to debt in U.S. generated by the right to write off interest on mortgages and on borrowed money. This "tax shield" has encouraged individuals to put their wealth on housing instead of other investments and companies to finance themselves by borrowing money instead of reinvesting profits or raising equities.

Thus, whereas all taxes necessarily lead to income effects (reduction of income), the neutral tax is one that for not changing the relative market prices, do not cause substitution effects. The neutrality of the tax system is therefore achieved when the form of fundraising by the government does not change relative prices and does not influence the choices of agents. Any interference of taxation in the relative prices of the market helps to make less efficient the economic decisions, resulting in an undesirable reduction in the level of general welfare. Thus, in an ideal tax structure taxes should be chosen with the minimization of interference in market economic decisions that, in the absence of taxes, would be effective⁶.

In the ambit of consumption taxation, the idea of tax neutrality plays a primordial role. Taxes on consumption are characterized by levying, albeit indirectly, the economic force of the consumer.

² SMITH, 1937, pp. 777-779.

³ MUSGRAVE, 1980, pp. 216-217.

⁴ STIGLITZ, 1999. p. 457.

⁵ STIGLITZ, 1999, pp. 458-463.

⁶ MUSGRAVE, 1980, p. 178.

Although technically the taxable persons are industrialists, merchants and service providers, it is the consumer who economically bears the tax burden, by the price. Hence consumption taxes affect strongly both the taxpayers by law (economic agents) and in fact (the consumers).

There are several kinds of consumption taxes. Basically, these taxes vary in the extent of its base (excise *versus* general) and in the way they affect the chain of production and consumption (single-stage *versus* multi-stage taxes, and cumulative taxes *versus* value added taxes). As excise taxes normally levy on very specific set of goods and services and play a regulatory function as well, they do not have great importance in the issue of economic integration and will not be detailed⁷. Thus, in the following sections it will be analyzed how single-stage and multi-stage taxes behave in the perspective of tax neutrality and the virtues and problems of each of these subtypes of consumption taxes concerning economic integration.

2.1 Single-stage sales taxes

In the single-stage sales taxes, the incidence occurs only in one phase of the production/circulation cycle (as shown by Table I). In this manner, the exaction can be imposed on the manufacturer, the wholesaler or the retailer. The most usual single-stage tax is the one where the tax befalls in the retail phase. A classical example is the American Retail Sales Tax (RST), detailed in the section 5.2.

A quick analysis of the single-stage sales taxes in the light of the desirable characteristics of a tax system shows that such taxes disturb in some degree the neutrality of the tax system. Although at first glance there is no cumulative effect, just in the cases they are easier to administrate (on the stages of production and wholesale), these taxes ultimately affect the allocation decisions. This is because producers and wholesalers are induced to postpone production functions for a next phase of the cycle, in order to remove the values pertaining to the functions of the tax incidence. When the tax is levied at the retail stage this effect is not the case. Reflecting only on the sale to final consumers, such taxes do not allow manipulation of the tax base, preserving the neutrality.

Another kind of effect that causes distortions in the organization of the economic agents, concurring to reduce the neutrality, occurs when the single-stage tax levies the supply of goods and services that are useful as to consumption as to using as an input in the production of other goods

⁷ It is important to note that excise taxes are by nature non-neutral. An excise tax levying on product A but not on product B results in a change in their relative prices. The balance point of the production and consumption curve shifts to an inferior curve, making evident a loss of welfare. Their regulatory role is related to the reduction of the regressivity or to the reduction of consumption of demerit goods (i. e. cigarettes and alcoholic beverages), although some governments actually use these taxes to increase their revenue.

and services. These goods and services end to pass by more than a single tax phase in the production cycle, generating cumulative effects. The way to correct this distortion is to exempt or suspend the tax according to the using of the good/service by the buyer, what aggregates a lot of complexity to the administration of the tax and turns it more susceptible to frauds.

An analysis of the repercussion in terms of tax collection shows that the more the tax is levied at the beginning of the production cycle, the greater should be the rate to collect a determined revenue. This is because the prices increase over the cycle. So, either it lays the incidence of the tax on producer or wholesaler and establishes greater tax rates, or imposes on retail with shorter rates. In the first case, the resistance due to high tax rates can increase tax evasion. In the second, in sectors that show wide spread and predominance of small and medium enterprises the administration of the tax is much more difficult and the evasion remains favored.

An advantage of these taxes is the easiness to exempt products, with no break in the chain.

2.2 Multi-stage cumulative taxes

Multi-stage taxes assess the process of production and circulation of goods and services in successive phases. The incidence along the economic cycle can be either cumulative or by value added.

When the incidence falls in the whole volume of sales, with no relief for taxes paid at previous stages, the incidence is said “cumulative” and the tax is known as a “turnover tax”. The transactions are taxed successively in each stage of the production/circulation chain by their integral value (see Table I). Thus, the tax suffers a cumulative effect which makes the amount of tax at the end of the chain be much greater than it would be if the incidence was in only one stage. Another aspect is that the tax of one phase is incorporated in the tax base of the subsequent phase, producing a so-called “cascade effect”, where tax levies on tax.

With regard to the neutrality, the interference caused in the organization of production/circulation factors is an important agent of disturbance. Because of this phenomenon, this is the sort of general consumption taxes which is most contested by specialists.

The cumulative effect of these taxes “favors the concentration of enterprises, encouraging vertical integration of production rather than disintegrated processes of production - so, work on behalf of big corporations, harming the micro and small enterprises”⁸. This happens because the greater the number of transactions along the production/circulation chain, the greater the total

amount of tax. This phenomenon is easily demonstrated when we compare the *quantum* of tax collected in longer cycles to the amount collected in shorter ones. Following the same logic, it is observed that the cumulative effect ends up burdening more the chains where the relative value of the products is greater in the earlier phases.

In terms of inter-jurisdictional coordination, the cumulative effect and the cascade effect make it difficult the relieving of exports, whereas it is not possible to determine precisely the fiscal burden that has been accumulated from the beginning of the productive process until the selling operation to another country. To bypass this problem estimative methods are created. They are complex and imprecise⁹ and can be considered as incentives by the other countries.

In terms of productivity, from the merely revenue point of view, the cumulative taxes have the advantage of generating a significant revenue even when applying low rates. This happens just because of the demonstrated characteristics that disqualify them by the neutrality angle. If in one hand they produce expressive revenue, on the other hand these taxes are difficult to administrate and to inspect, because of the large number of taxpayers and the stimulus to evasion due to the heavy weight of the tax. Moreover, the fiscal burden, accumulated, gets hidden in the final price of products and services, being difficult for the consumer to identify it.

2.3 Value Added Taxes (VAT)

The Value Added Tax – VAT can be outlined as a general multistage sales tax that assess commercial activities involving production and distribution of goods and provision of services “that is collected in chunks at each stage of production and distribution in proportion to the value added by each taxpaying firm”¹⁰.

Although the basic principles of VAT had been developed before in other countries, the famous “*Taxe sur le Valeur Ajoutée*” (TVA) was first implemented in France in 1954 by Maurice Lauré. It emerged as an evolution in relation to the before consumption taxes due to the multi-stage and proportional (to the value aggregation) incidence. In the late 1960s the French TVA took its final form and began to spread rapidly around the world, becoming today the model of consumption tax prevailing in most countries.

Its qualities are exalted by references like "the quintessential of modern tax" and "an unparalleled tax phenomenon", which swept the world in thirty years, from theory to practice and to

⁸ BINS, 1999, pp. 7-8.

⁹ See the Brazilian PIS and COFINS taxes in the section 4.2.

¹⁰ SCHENK & OLDMAN, 2001, p. 48.

supplant the income tax as the most important source of revenue in many countries at the end of the century (referring to the twentieth century)¹¹. Nowadays the VAT model is implemented in 8 of the 10 major economies and in 140 of the approximately 170 countries around the world working well for large economies (such as Germany) and in small countries (like Mauritius)¹².

The incidence mechanism of VAT is easily demonstrated by a hypothetical example. Suppose a production and circulation cycle of a product with a final cost of 150 unities of value. Before arriving in the final consumer, the product passes by a series of firms and processes. In each phase the product (or its parts) gets more valuable, as the firms aggregates value to it. Instead of being collected only in the final stage, as it happens in the retail sales taxes, VAT has incidence on the value added in each single phase. Instead of taxing the whole purchasing value in each phase, as it happens in the turnover cumulative taxes, VAT taxes only the aggregated value to the product in the current phase. In other words, "the portion of the total amount of tax is paid by each company in proportion to the value that each one aggregates (adds) to its taxable inputs"¹³.

Thus, a modern VAT with a 10% rate collects 10% of the value added in each phase of the economic cycle, neither more nor less. It is exactly the same amount that would be collected in a single-stage retail sales tax. The table bellow illustrates the incidence mechanism of VAT and compares it to other consumption tax models.

Table I - mechanism of incidence of consumption taxes

Economic Agent	Value of the Acquisitions or Sales (without tax)	Retail Sales Tax	Turnover Tax ⁽¹⁾	Value Added Tax (tax credit method)		
				Credit	Debit	Net Tax
MANUFACTURER						
Acquisitions	0	0	10	0	-	
Sales	100			-	10	10
WHOLESALER						
Acquisitions	100	0	12	10	-	
Sales	120			-	12	2
RETAILER						
Acquisitions	120	15	15	12	-	
Sales	150			-	15	3
Total of Tax		15	37			15

Notes: ⁽¹⁾ The table is not reflecting the "cascade effect" of the Turnover Tax (see section 2.2)

Although there are some variations, the typical VAT implementations are based on the Consumption-type VAT (referring to the aggregated base) and on the tax credit method (referring to

¹¹ TAIT, 1988, pp. 3 and 397.

¹² SCHENK & OLDMAN, 2001, pp. 552-555.

the form of assessment). Briefly, the “Consumption-type VAT” has as aggregated tax base the consumption of the country. In order to tax this base the Consumption-type VAT levies only on the consumption goods and services, without including capital goods. Ordinarily this is done by the allowance of integral credit on the capital goods purchased. As variations of the Consumption-type VAT there is the Revenue-type VAT and the Production-type VAT.

Referring to the assessment method, in the “tax credit method” (or “indirect subtractive method” or “tax on tax method”) the tax is assessed indirectly by a mechanism of tax debits and credits in each transaction. To every purchase there is a corresponding credit of tax that is detached in the invoice document. And to every sale, there is a tax debit. At the end of each assessment period (typically a month), the tax to pay results from the difference between the sum of debits and the sum of credits. Differently, in the direct methods the tax is assessed directly on the value added on the products/services by the application of the corresponding rate, by addition or subtraction.

Neutrality and the advantages of VAT

The adjectives dedicated to VAT in the specialized literature are mainly due to its adherence to the principle of neutrality. Indeed, the great advantage of VAT resides on its low interference on the decisions of resource allocation that are done based on the market mechanisms, both in terms of organization of business and in relation to consumption .

First, VAT is a neutral tax in order not to produce distortions in the form of business organization. As VAT is not cumulative, the number of transactions in the production / circulation cycle does not affect the total amount of VAT, as with the cumulative taxes. The advantage of vertically integrates the production in order to reduce the phases of the chain, which exists in cumulative taxes and even in single-phase taxes, do not exist in VAT. Moreover, its multi-stage character prevents the tax burden from concentrating in a single phase of the chain. Without such a concentration, there is no stimulus to transfer production functions for a next phase in order to remove the pertaining value added from the tax incidence. The distribution of the value added by the various production phases do not change the final amount of tax levied¹⁴.

¹³ SCHENK & OLDMAN, 2001, p. 29.

¹⁴ It is important to remark that exemptions in the middle of the economic chain can withdraw this advantage as long as VAT on goods and services purchased cannot be compensated in the next stage since the input is exempt and there is no VAT element in the purchase invoice. This interrupts the chain of credits and debits and the tax ends up being incorporated into the cost of the product or service which is exempt. The taxpayer is treated as if he was the final consumer, generating cumulative effect. As paradoxical as it may seem the exemption on an intermediate stage makes the total tax burden of the chain grow. Due to the “catch-up effect” this phenomenon does not occur when the exemption is on the first or on the last stage nor with rate variations.

Referring to consumption, VAT also responds well to neutrality. It is not restricted to tangible goods and it works well also for services of different kinds, including professional services, financial services and even those provided by e-commerce. A broad-based VAT, levied on all goods and services does not provide favorable terms for this or that product or service in order to influence consumer choices¹⁵. The choice is restricted to buy/not buy a product or service. That is, the tax reveals itself neutral with respect to consumer choices. A broad-based VAT also tends to be neutral with respect to choices between consumption and savings. It happens because it will tax equally the present or the future consumption. The same happens referring to investment *versus* savings.

Besides responding better towards neutrality than other consumption taxes, VAT has advantages in other aspects too. From the productivity point of view, VAT exceeds RST because much of the revenue is collected in the early pre-retailers phases. Besides advance the collection, it favors administration and auditing as long as the retail is wide spread and has predominance of small and medium firms. VAT also has the merit of being a tax that favors self-enforcement.¹⁶

From the point of view of the transparency of the tax system, which is a very desirable characteristic in every democracy, VAT is a tax of great visibility as long as the effective tax burden of a good or service is obtained very easily, by simply applying the tax rate to the price of the good or service in the stage of the economic cycle where it is.

The most important advantage of VAT concerning economic integration, however, is the transparency in foreign trade. With no cumulative and cascade effects, the VAT collected in every phase of the cycle does not represent cost to the next phase because it is recoverable on it¹⁷. Thus, it is not necessary to reconstruct the cycle to determine the tax burden in a given stage. Because of that inter-jurisdictional coordination is made possible by withdrawing the tax burden in the origin and levying in the destination, as detailed further. The possibility of double taxation or no taxation is withdrawn. Once more neutrality is favored, since VAT does not impose different charges on domestic and imported products¹⁸ and therefore do not discriminate them by its origin.

¹⁵ Exemptions and variations of rates harm neutrality as long as they change the relative prices of the products. They should be avoided in order to keep the VAT efficiency, although some governments fail to do that due to political reasons.

¹⁶ In the tax credit method of calculation, adopted in almost all VATs in the world, the taxing of the value added is done by a debit and credit mechanism. In this mechanism, a taxpayer can only make a credit of VAT on a purchase if the seller records properly the tax in the invoice. Thus, only in the case of collusion between the selling company and buyer the underpricing would be accepted by the second, since without the registration of the tax it would be deprived of credit and, therefore, would have increased the amount of VAT to pay.

¹⁷ This characteristic also allows exonerating the acquisitions of capital goods, which are out of the consumption base, with relative facility. While it is difficult to effectively do that with a cumulative tax, with a VAT it can be done simply by an exemption.

¹⁸ Tait says that because of this the former GATT (today WTO) accepts the VAT border adjustments in international

On the other hand, it is important to remark the most common structural criticism to VAT, which classifies it as a regressive tax, as long as it reduces the consumption ability of the lower income households more sharply than the richer ones. VAT supporters argues that it is enough to expect that VAT provides the necessary financial resources for the state and that the regressivity should be addressed by compensatory policies through public spending¹⁹ and not through adaptations on its model that can compromise its efficiency and neutrality²⁰.

3 INTER-JURISDICTIONAL COORDINATION

One of the main discussion topics about the taxation of consumption, which goes beyond the theoretical debate and lead on the political issue, is the form of taxing the transactions that extrapolate the frontiers from one jurisdictional entity to another, both in national (states or provinces of a country) and international levels (countries that can be grouped in an economic bloc or not). The differences among the legislation and/or the lack of coordination between the taxes from different entities can affect the neutrality in an undesirable way, as it gives distinct tax treatment according to the origin/destination of the good or service.

In order to avoid distortions and guarantee equity in the distribution of the revenue that result from the goods and services, coordinating the way taxes work in operations between different jurisdictions is necessary. This coordination is traditionally done by one of two principles: taxing on the origin or taxing on destination.

In a tax that treats the inter-jurisdictional transactions considering the origin principle, the tax is collected on the place where the value is added to the goods and services, in other words, in the jurisdiction (country or subnational entity) where the goods are produced and where the services are supplied. The jurisdiction of destination fails to tax what it imports as the operation is already taxed in the origin. For instance, a given product X for which raw materials came from country A, but the manufacture occurred in part on country B and in part on country C, the whole amount of tax is given by the sum of the incidence in A (on the raw materials) and in B and C (on the

transactions (TAIT, 1988, p. 222).

¹⁹ SARAIVA FILHO, 2007, p. 109.

²⁰ Indeed, the evidences show that a broad-base VAT is actually regressive. There are, however, strong arguments which indicate that changes on the foundations of VAT in order to reduce its regressive effect do not solve its problems and ends up disfiguring the tax by removing its best characteristics (TAIT, 1988, pp. 214-220). The attempts to turn the VAT more progressive by a succession of exemptions and reduced rates is undesirable both from administrative and collection perspectives. The efficiency is doubtful because these measures benefit both the richest and the poorest people and the fiscal renouncement can be much greater than the resources needed to implement compensatory policies through public spending. Nothing can be worse to a VAT than an eroded base, with a complicated set of exemptions and with a complex and expensive administration both to the taxpayer and to the tax authority.

manufacture), independently from where the final product is consumed. By this principle, from the VAT point of view, the exports are treated as internal operations.

In opposition to the origin principle, in a VAT that addresses the inter-jurisdictional transactions applying the destination principle, the tax incidence is on the place to where the goods and services are dispatched. The exporter jurisdiction not only fails to tax the export transaction as it relieves the whole amount of tax burden that comes from the previous phases of the productive process. Meanwhile, the importer country imposes a tax that is equal to the one that would be levied if the operation was internal. This mechanism is known as “reverse charge” as long as the taxable person is dislocated from the seller to the purchaser.

For instance, a given product X consumed in country A will be taxed there, independently of its origin. It can be produced in country A, entirely imported from country B or C, or even manufactured in the country A with raw materials from the countries B or C.

The origin principle is normally used in internal transactions whereas the destination principle is a standard in foreign trade. As a matter of fact, the reason why VAT is acknowledged as a good tax concerning foreign trade which has favored closer economic integration is that the border adjustments necessary to implement the destination system are much simpler with VAT than with other consumption taxes. Indeed, in order to relieve the burden on exports it is enough to give a tax exemption (or zero-rate) on the export transaction and rebate the tax paid on the purchases of inputs in the domestic market. In imports, it is sufficient to apply the same rate as in domestic transactions or, alternatively, allow the suspension (postponing to the next phase) if the import is done by a registered taxpayer. In the case of a cumulative tax, the adjustments are much more complex because of the difficulty in determining the effective tax burden existing in each transaction²¹.

3.1 The problems concerning processes of economic integration

The pattern origin in internal transactions and destination in external transactions works very well where there is weak economic integration between the jurisdictions involved. This is not the case, however, for federal countries where VAT is in the state level or in common markets. As a matter of fact, many difficulties arise, as Michael Keen observes, when “*trading partners seek to establish a more complete economic union with one another*”²².

²¹ It is the case of exoneration of PIS/PASEP and of COFINS (cumulative modality) on exports in Brazil, which is done by an artificial credit of another tax (IPI).

²² KEEN, 2000, p. 3.

The problem that arises is how to run an integrated VAT system with VAT powers allocated to the partners. This is the problem that the European Union has been facing for a long time and which federal countries (like Brazil and Canada) internally confront. Not coincidentally the two largest countries still without a VAT are both federations (United States and India).

VAT emerged and has been successful in a unitary country (France). However, it faces difficulties in the implementation on a federation. The best technical solutions for the federal integration of VAT not always are viable politically. Arrangements due to political disputes may withdraw from the tax its best features, reducing its neutrality and efficiency, and encouraging tax evasion.

As Keen points out, a consumption taxation system in an economic integration process should address specific objectives besides the traditional canons of equity, efficiency, and minimal collection costs²³. It should preserve the autonomy in tax setting of the subunits, guarantee compliance symmetry, preserve the VAT chain, minimize scope for game-playing by the subunits, favor the taxation on the destination and provide proper collection incentives within existing tax administrations. The traditional origin/destination pattern fails to achieve some of these objectives.

The great advantage of **taxing on origin** is the dispensation of the “border adjustments”, which are necessary when the destination principle is applied. As the exports had already been taxed on the origin and as there is no taxing on the imports, there is no necessity of a mechanism that take out the VAT burden from the exported goods, nor tax barriers to tax the imported goods.

Thus, the criterion of the origin unifies the tax space, rendering the tax treatment of an operation indifferent to the product destination (inside or outside a country). The applicable rate and the formalities are the same, establishing the desirable compliance symmetry. Because of that, this criterion is seen as a more evolved form from the political-economic integration point of view, promoting “*real integration and unity in the market made up of different states*”²⁴.

If there is no difference in the internal tax treatment among the countries, the total tax will be the same, no matter in which country the product is consumed. But if, as it occurs frequently, there are differences of rates and exemptions, the total burden of VAT will vary according to the arrangement of the production and to the country where the consumption happens. In this case, there are distortions related to the origin of the product, with a relative advantage to the countries where the rates are lower and where there are exemptions, as they tend to export to the ones where

²³ KEEN, 2000, p. 4.

²⁴ DERZI, 1999, pp. 24-25.

the rates are greater. So, there is a disturbance of neutrality, either to final consumers or among registered firms. It can also stimulate tax planning by transfer pricing.

In addition, the taxing on origin implies renouncing the power to tax by the country (or state) that imports a product, diminishing its autonomy and collection. So, part of the tax revenue on the goods imported and consumed in the destination country goes to the origin country, deviating the tax from the Consumption-type VAT and damaging the net importer country. Besides that it discourages tax enforcement.

In federative countries where VAT is in the scope of subnational entities (or even in common markets), the use of the origin principle seems to be a way to maintain market integration. But the good operation of a system on the origin principle depends on the existence of a compatible tax base and on uniform rates. In other words, it depends on tax harmonization. What one sees in practice, however, is the resistance of the countries and states to assign autonomy and collection.

The taxation on the **destination**, on the other hand, preserves better the autonomy of countries or states, enforces a greater adhesion to the Consumption-type VAT and lowers the propensity to cause distortions when there are exemptions and variations on the rates.

However, it establishes a strong asymmetry among internal and external transactions as long as border adjustments are necessary by the two jurisdictions involved²⁵. The exporter jurisdiction has to take out the VAT content from what it exports while the importer jurisdiction should impose border controls to guarantee the VAT incidence on what is imported. Moreover, as it breaks the VAT chain by setting a zero-rate on exports, it gives rise to the right of refunding earlier VAT to the exporter. As Keen points out, it “*puts great pressure on the ability of the tax authorities to control refund claims: limiting the obvious scope for fraud whilst ensuring prompt refunds for honest traders is one of most difficult aspects of administering a VAT*”²⁶. He observes that this problem has been a major concern both in developing countries and in the European Union where the inter-jurisdictional “tax-free” transactions represent an important part of the economy. As a matter of fact, the “carousel fraud” has been a major concern in the European Union (see section 6.1).

3.2 Alternative approaches

Due to the problems of the conventional destination and origin systems, alternative approaches have emerged. In the following sections three different approaches are presented.

²⁵ As it will be discussed in the section 6, the European Union subverted this logic, abolishing the border controls among its Member-States, even maintaining the destination criterion.

²⁶ KEEN, 2000, p. 7.

3.2.1 *Clearing house*

As detailed in section 6.2, the European Union has been discussing a shift to the origin principle for a long time. In order to correct the problem of revenue allocation under this principle, the EU proposed a “clearing house system”. The system transfers revenue from the exporter country to the importer, resulting in the same allocation as would occur under the destination principle (see Table II). Without such redistribution, part of the tax from a product consumed in a country (importer) would be taken as revenue of another (exporter). It would distort the ideal model of VAT-Consumption and would favor the net-exporting countries at the expense of the net importers. The first proposal was to clear on the basis of invoice, accounting all transactions. In the “definitive regime”, proposed in 1996 but still not implemented, the clear is done on aggregating consumption statistics.

The Canadian HST has a similar clearing system. As detailed in section 5.1, three Canadian provinces harmonized their Provincial Sales Tax with the federal VAT (GST), giving rise to the Harmonized Sales Tax (HST). It is centrally collected by the Canada Revenue Agency and the rate is 13%, 5% corresponding to the federal GST. The rest (8%) corresponds to the provincial part and is divided among the provinces according to their estimated taxable consumption.

The advantage of the Canadian HST over the Origin/Clearing system proposed in the EU is that in HST there is a federal institution that administers the federal/provincial harmonized VAT. This avoids a decrease in collecting incentives that could occur if each province administered the HST. As each province receives only a part of the total rate and this part is indirectly obtained by the estimated consumption, the collecting incentives tend to be weaker.

3.2.2 *Shared VAT and Compensating VAT (CVAT)*

In the wave of the tax reform in Brazil, Ricardo Varsano²⁷ proposed a shared federal/state VAT to unify the current Brazilian VAT-like taxes IPI (federal level) and ICMS (state level). In order to solve the federative problems concerning the consumption taxation of the country (detailed in section 4.2), he proposed a shared VAT system where the Union acts as an intermediary in transactions between two states. In an interstate transaction, the VAT would be collected in the origin state but the Union would “transport” the revenue to the destination state.

²⁷ VARSANO, 1995.

Suppose that the states' rate is 10% and the Union's rate is 5% and all the revenue belongs to the destination state²⁸. If Firm A in State I sells a product to Firm B in State II it will collect 15% to the Union and 0% to State A and will keep the credits relative to its purchases. Firm B has no credit relative to State I but has a credit of 15% relative to the Union. In the next transaction (supposing it is internal and not exempt), Firm B will collect 10% to State II and 5% to the Union. As a result, State A will have collected 0%, the Union will have collected its standard rate of 5% (15-10%) and State B will have collected 10% (the Union "transported" its parcel). Table II illustrates the example.

In internal transactions the state and the Union rates are the same as in interstate transactions, exports are zero-rated (both state and Union parcels) and in interstate sales to final consumers the whole revenue belongs to the origin state.

Charles McLure complemented the model and called it "Compensating VAT" (CVAT)²⁹. In his model, the states keep the power to fix internal rates, but the state VAT is completely substituted by the Compensating VAT in interstate transactions (see Table II).

The potential collection disincentive and the necessity of clearing concerning the CVAT parcel are avoided if CVAT is administered by a single agency (i.e: the federal tax administration). The problems³⁰ that emerge because of the difference between internal and interstate rates are softened fixing the interstate rate at broadly the average of the internal rates.

3.2.3 *Viable VAT (VIVAT)*

Based on the European Union reality, where there is a harmonized VAT but each member operates its own tax, without a federal tax authority, Keen and Smith proposed a model of a "Viable VAT" (VIVAT)³¹.

The proposal establishes a uniform intermediate rate (on transactions between registered companies inside the federation, both internal and inter-jurisdictional) and specific final rates fixed by each province (on sales to final consumers or non-registered companies). Due to the "catch-up effect", the total revenue will always be the same (the rate of the final transaction), no matter the intermediate rate (see Table II).

²⁸ By this model is also possible to share the state part between the origin and the destination states (i.e.: 7% to the origin and 3% to the destination).

²⁹ McLURE, 2000.

³⁰ The needs of refunds and the advantage to the final consumer of importing in a state of high rate are diminished.

³¹ KEEN, 2000.

The authors warn about the consequences of the difference between intermediate and final rates concerning refunds. They also observe as well the necessity of some form of clearing in order to distribute the revenue according to the jurisdiction of final consumption³².

All the three alternative approaches try to improve the standard model of VAT concerning inter-jurisdictional transactions, favoring the economic integration processes, in federal or in common market levels. The main virtue of the origin/clearing house is to avoid a break in the VAT chain guarantees symmetry between internal and external transactions. On the other hand, the mechanism of clearing can be very complex and inaccurate, and it can cause collection disincentives to the tax administrations. Shared VAT, CVAT and VIVAT preserve in some degree the VAT chain (comparing to standard destination system) and the provincial collection incentives, but violate symmetry. The focus of Shared VAT is to avoid frauds and minimize the scope of game-playing by the provinces. The price is that the provinces' autonomy is sacrificed. CVAT and VIVAT protect province autonomy allowing provinces to fix internal (CVAT) rates or final (VIVAT) rates³³. The table below compares the standard destination system to the alternatives approaches.

Table II - Destination system and alternative approaches of inter-jurisdictional coordination³⁴

Jurisd. (1)	Firm	Price (without VAT)		VAT	Destination (zero-rating)	Origin / Clearing House	Shared VAT (2)		CVAT (3)		VIVAT (4)
							State Parcel	Federal Parcel	State Parcel	CVAT	
I (Rate 10%)	A	Aquisition	0	Credit	0	0	0	0	0	0	0
		Sale	80	Debit	8	8	8	4	8	0	8
		Value-Add.	80	Net	8	8	8	4	8	0	8
	B	Aquisition	80	Credit	8	8	8	4	8	0	8
		Sale	200	Debit	0	20	0	30	0	24	20
		Value-Add.	120	Net	-8	12	-8	26	-8	24	12
II (Rate 15%)	C	Aquisition	200	Credit	0	20	0	30	0	24	20
		Sale	480	Debit	72	72	48	24	72	0	72
		Value-Add.	280	Net	72	52	48	-6	72	-24	52
	Total				72	72	48	24	72	0	72

- Notes: (1) Jurisdiction can be a state, a province or a country
(2) The State rate is 10% and the Federal rate is 5% in both jurisdictions
(3) The State rate is 10% (jurisdiction I) and 15% (jurisdiction II) and the CVAT rate is 12%
(4) The Intermediate rate is 10% and the Final rate is 15%

³² Consumption-type VAT, see section 2.3.

³³ To a more complete analysis, see KEEN, 2000, 14-17.

³⁴ Adapted from KEEN, 2000, p. 8.

4 THE TAXATION OF CONSUMPTION IN MERCOSUL

The Southern Common Market (“MERCOSUL” in the Portuguese abbreviation) came up with the signing of the Treaty of Asuncion by Argentina, Brazil, Paraguay and Uruguay³⁵ in 1991 and entered into force in 12/31/1994. Its main objective, as set out in the Article 1 of the treaty, is to create a common market with free movement of goods, services and factors of production, and to seek the adoption of a common foreign policy, the coordination of joint positions in international issues, the joint formulation of macroeconomic and sectorial policies and the harmonization of national legislations regarding a greater integration.

By establishing goals that go beyond the formation of a free trade area and achieve the bloc performance in the international trade, the formulation of joint policies, the harmonization and the freedom of movement, the MERCOSUL stands at a higher level of integration than a free trade area or a customs union, intending to constitute an effective common market. Just as the European Union but unlike NAFTA, MERCOSUL has international legal personality and owns institutional structure³⁶.

In terms of economic size, MERCOSUL is very far from EU and NAFTA. The total GDP of its members reaches US\$ 1.6 trillion. But in terms of area and population, the MERCOSUL has significant numbers, counting a total population of 240 million inhabitants. Like in NAFTA, one country has a disproportionate weight in relation to others. Indeed, Brazil accounted for 81.5% of GDP and 79.7% of the bloc population³⁷.

The fiscal burden in MERCOSUL members varies significantly, in a superior level than the variation of NAFTA members. At the lower end is Paraguay with 12.9% of GDP. Just above are Uruguay and Argentina, respectively 24.1% and 29.1%. At the top comes along Brazil with 36.2%. As Jimenez and Sabaiani refer, the growth of tax burden in recent decades was based in large part by expansion of VAT, which has become the most important source of revenue³⁸.

As it will be shown in the following sections, all the four MERCOSUL members possess in their tax systems indirect consumption taxes based on the value added model that are responsible for a very significant part of their revenue (from a 36.9% participation in Argentina to a 45.3% in

³⁵ In addition to these four members, MERCOSUL houses Bolivia, Chile, Peru, Ecuador and Colombia on the condition of “associated”. The acceptance of Venezuela as a full member is under appreciation by legislature of Paraguay.

³⁶ Established by the “Ouro Preto Protocol” (December 1994).

³⁷ Data from United Nations Statistics Division (referring to 2007)

(<http://unstats.un.org/unsd/snaama/selectionbasicFast.asp> - last visited 02/02/2010).

³⁸ The collecting data refer to 2007 and was obtained in JIMÉNEZ & SABAINI, 2009, p. 24.

Paraguay, with intermediate percentages in Brazil and Uruguay). Brazil, however, is the country member with the most discrepant structure regarding the traditional VAT model.

Whereas Argentina, Uruguay and Paraguay have a single value added tax of national competence, Brazil has four indirect consumption taxes, two of them on the value added model. There are important differences on VAT laws from Argentina, Uruguay and Paraguay, especially referring to tax bases and rates, but the Brazilian case is far the most distinct.

4.1 Argentina, Paraguay and Uruguay

Argentina is an important case of success of VAT in federative countries. Indeed, the “*Impuesto sobre el Valor Añadido*” was implanted in 1973, and today represents 36.9% of the total revenue³⁹. It is a Consumption-type VAT, assessed by the tax credit method. Its revenue is shared with the provinces⁴⁰.

The chargeable event of the tax is the act of selling or import products, the rentals and the supply of services. There are several non-incidence cases (i. e. books, operations of life insurance and private retirement plans, and domestic and international transportation). Among the exemptions come along exports and natural water, bread and powdered milk sold to final consumers⁴¹.

The generic rate is 21% and there is a differential reduced rate of 10.5% (i. e. agricultural and cattle-raising products) and a differential higher rate of 27% (i. e. water, electricity, telecommunications and gas). The assessment is done considering the tax outside of its own calculation base.

As the Argentine VAT is a federal tax, there are no inter-jurisdictional coordination problems in the internal transactions, inside a province or among different provinces. On the exports, both on goods and services, the applied rule is the destination principle (unlike Paraguay and Uruguay that observe the origin principle on exports of services). Indeed, the exports are zero-rated, and it is allowed to use the credits from the previous stages, while the imports are levied.

Although Argentina does not have many of the Brazilian problems referring to VAT, the same does not occur concerning another consumption tax. Indeed, like Brazil, Argentina has a multi-stage cumulative tax, that levies on the turnover of firms and causes a strong cascade effect.

³⁹ JIMÉNEZ & SABAINI, 2009, p. 26.

⁴⁰ The Argentine tax structure, with the income tax and VAT in the federal competence is very concentrated on the central government, to the detriment of the 23 provinces that compounds the country.

⁴¹ BORDIN & LAGEMANN, 1997, p. 31.

This tax is in the competence of the provinces and produces approximately two thirds of their revenue.

Argentina has another two indirect taxes on consumption, both single-stages and selective: the tax on fuel, implanted in 1996 with collecting purposes, and the “internal tax”, that levies on tobacco, beverages, mobile communications, electronics and insurances, among other items. Like Brazil, Argentina also has a simplified tax system for small taxpayers (“*monotributo*”), which covers VAT, income and social security taxes.

As Argentina is a federative country, unlike Uruguay and Paraguay, the implantation of a centralized VAT is much more complicated. Although the country currently faces some problems concerning this tax, there is no doubt that its longevity and participation on the total revenue qualify the Argentine example as a demonstration of viability of a VAT in a federation, to be considered by the Brazilian neighbor.

In **Uruguay**, the VAT came in the wake of a broad tax reform in the early 1970s, in which indirect taxes weight in the tax system has grown⁴². The Uruguayan “*Impuesto al Valor Agregado*” has replaced several other consumption taxes (specific and general), and now is responsible for more than half of central government revenue⁴³ and 38% of total revenues⁴⁴. VAT finances almost a third of the social security of Uruguay⁴⁵, a country with a large contingent of retirees.

Like the Argentine VAT, the Uruguayan is a Consumption-type VAT that reaches a broad base. It is assessed by the tax credit method and its chargeable event is the circulation of goods, the supply of services and the import of products. In the international operations it follows the destination principle, with exoneration on the exports (and a rebate of the credits from the previous stages) and incidence on imports.

The non-incidence cases are listed in law and reach a number of goods and services, like fruit, milk, books, real estates, agricultural machinery, cigarettes, fuel, passenger transport, real estate rentals, banking operations and import of crude. There are also several exemptions. There are three rates: 23% (general rate), 14% (special rate – applied to staple food, medicines and hotel services) and 10% (meat and some products from meat). The assessment is done considering the tax outside its own calculation base.

⁴² MEIRELLES, 2000, p. 83.

⁴³ More precisely 54.7% of the central government revenue. Data from the Uruguayan tax administration (DGI – <http://www.dgi.gub.uy/wdgi/hgxpp001?6,4,152,O,S,0,MNU;E;162;2;MNU>); - Last visited 02/10/2010).

⁴⁴ JIMÉNEZ & SABAINI, 2009, p. 26.

⁴⁵ BORDIN & LAGEMANN, 1997, p. 28.

Besides VAT, Uruguay has another tax on consumption, the Specific Internal Tax, which has a single-stage incidence on tobacco and its products, vehicles, beverages, cosmetics and perfumes, electricity, lubricants and fuels.

In **Paraguay**, the implementation of the "*Impuesto al Valor Agregado*" has become the main change of a series of reforms in consumption taxes occurred in 1991, largely due to the formation of MERCOSUL. VAT is nowadays the most representative tax of the country, accounting for 45.3% of total revenues⁴⁶.

A national tax⁴⁷, the Paraguayan VAT has a broad base and fits on the Consumption-type VAT model. Its chargeable event befalls on sale of products and on supply of services (excluding the services that have a personal character and the ones that are supplied in a relationship of dependence). It is assessed by the tax credit method. There is a single rate of 10%.

The cases of non-incidence comprise several goods and services, like agricultural and cattle products in their natural state, real estates, fuels and petrol by-products, financial intermediation, products used on industrial, agricultural and cattle-raising products production cycles and import of crude oil. There are also several exemptions.

A peculiar aspect of Paraguay referring to its relationship with the MERCOSUL neighbors, which reflects in the VAT coordination, is the significant weight the trade of imports in the border cities has in the Paraguayan economy, especially with Brazil. Although imports are subject to the general VAT rate of 10%, there is a reduction in the calculation base for imported products to 20%, resulting in an effective rate of 2%. As sales to foreigners are exempt, the prices become very attractive to them, which nurture an intense border trade and open space to a veritable industry of illegal imports to Brazil. Meirelles explains such rates, the lowest of the MERCOSUL countries, because of the country's need to increase their industry and their importer vocation⁴⁸.

The same way as its partners, Paraguay also has an excise tax which levies on tobacco and its products, beverages, cosmetics and fuels, in a single-stage form. As a particularity of the Paraguayan case regarding this selective tax, Bordin and Lagemann note that the traditional penalty of the so-called demerit goods is not the case in Paraguay, where the rates for these products are low in relation to other countries (8% on cigarettes while Argentina applies a rate of 60%) and

⁴⁶ JIMÉNEZ & SABAINI, 2009, p. 26.

⁴⁷ Similar to Uruguay, Paraguay adopts the unitary state model, non-federative.

⁴⁸ MEIRELLES, 2000, p. 75.

disproportionate to other products (the rate of mineral water, for example, is 8%, while the whiskey is 3%)⁴⁹.

4.2 Brazil: vanguard, complexity and distortions

Although it is one of the pioneers in the implementation of VAT, Brazil has major problems in the field of consumption taxation, mainly due to distortions regarding the theoretical model of VAT. In order to comprehend such problems, it is important to recall briefly the implementation history of the Brazilian VATs.

The initiative to eliminate the cascade taxation from the National Taxation System by introducing the principle of non-cumulative taxation dates from 1956. However, the major change towards a non-cumulative system occurred as a matter of fact by the tax reform of 1965. It brought this principle into the Constitution and, on the wake of tax system rationalizing and codification, reformed both the Consumption Tax (of the Union) and the Tax on Sales and Consignment (IVC, of the states). The idea was to modernize the IVC, which was "*an outdated tax, in 'cascade', which causes inflation and makes the economic activity vertical, precludes the development of the federation and is technically incorrect*"⁵⁰, taking the VAT as a model.

The reform occurred, however, with vices, which emerged from the political-federative question. While the European model of VAT generated, as a rule, a single broad-based and federal tax, in Brazil three taxes, each one from a level of government, were created. The consumption base was fragmented vertically and horizontally, giving rise to the Tax on Industrialized Products ("*Imposto sobre Produtos Industrializados*" - IPI, federal), to the Tax on Circulation of Goods ("*Imposto sobre Circulação de Mercadorias*" - ICM, state) and to the Tax on Services ("*Imposto sobre Serviços*" - ISS, municipal).

Further, new changes arose from federative disputes on revenue contributed to what an eminent tax expert called "taxation carnival"⁵¹. In the 1988 Constitution, ICM has gained the "S" letter and began to incorporate some specific services on its base (communications and interstate/inter-municipal transportation), and started to also tax fuels, lubricants and electricity (replacing specific taxes of the Union competence).

Outside the world of IPI, ICMS and ISS, two other consumption taxes came up in Brazil discreetly but became a powerful instrument of progressive increase in the tax burden with a

⁴⁹ BORDIN & LAGEMANN, 1997, p. 35.

⁵⁰ COELHO, 1998, p. 283.

concentration in the Union. They are the Contribution to the Social Integration Program and the Program for the Financing of Public Workers (“*Programa de Integração Social*” and “*Programa de Formação do Patrimônio do Servidor Público*” - PIS/PASEP), established in 1970, and the Contribution to Social Security Financing (“*Contribuição para o Financiamento da Seguridade Social*” - COFINS), established in 1991.

With an unstable legislation, which is plentiful of exceptions⁵² and is often contested in court, these taxes, in 1988, began to have the turnover of the firms (corresponding to the gross revenue) as their unique calculation base. Further, at the end of 2002, the principle of non-cumulative taxation, a constitutional principle that governs IPI and ICMS, reached part of the PIS/PASEP incidence via ordinary legislation. The tax thus began to have two different schemes: the non-cumulative, addressed to the larger companies, and the cumulative, to the rest.

On the one hand, this change meant a significant reduction in the space occupied by the cumulative effect on the consumption taxation in the country, which, according to Afonso and Varsano, encompassed one quarter of the total revenue in the country and was the bane of the Brazilian tax system⁵³. It also allowed the effective application of the destination principle on these taxes on external transactions, exempting exports and taxing imports, and thus ensuring the best conditions for the participation of Brazilian products in international trade⁵⁴. But on the other hand, it added more complexity to the already very complicated Brazilian tax system, as it left the non-cumulative imposition on consumption sliced into three different taxes. Moreover, to the dismay of the business class, the calibration of rates has produced an increase in the fiscal burden of approximately 18.75% for PASEP and 20.60% for COFINS⁵⁵.

Having traversed these tortuous paths, the consumption taxation in Brazil has remained with the following configuration: two taxes on value added (IPI and ICMS), two contributions on companies’ turnover with mixed incidence cumulative/non-cumulative (PIS/PASEP and COFINS) and a cumulative tax on services (ISS)⁵⁶.

⁵¹ BECKER, 1989, p. 89.

⁵² There are many economic activities that are not subjected to the non-cumulative regimen (i.e: banks and health plans), there are several cases of reduced and zero rates (i.e.: sales to the Free Trade Zone of Manaus, certain pharmaceuticals and chemicals) and there is some specific regimes with a single phase incidence (i.e: gasoline and alcohol), besides other exceptions.

⁵³ AFONSO & VARSANO, 2003, pp. 291 and 301.

⁵⁴ In the cumulative scheme the rebate of PIS/PASEP and COFINS on raw material of exporting products is done by the “presumed credit of IPI”, a complex and inaccurate system which is costly to the tax administration and to the taxpayer.

⁵⁵ In 2003 (Data from the annual collection report of the Brazilian tax administration - SECRETARIA DA RECEITA FEDERAL DO BRASIL, 2003).

⁵⁶ Not to mention the financial transactions tax (IOF) and the Contribution of Intervention the Economic Domain on Fuels (CIDE-Combustíveis), which are mainly regulatory.

IPI is in the Union competence and levies only the stages of industrialization of the economic chain (levies on industrialized goods, domestic and foreign). It is selective, with rates ranging in a large scale, according to the essentiality of the product⁵⁷. It is assessed on monthly periods, by the tax credit method. With regard to inter-jurisdictional coordination, IPI follows the criterion of destination as the place of occurrence of the chargeable event, both for domestic and international transactions.

ICMS, in turn, is in the states' competence and levies on products and on services of communication and inter-municipal and interstate transportation, in the entire economic chain. It has the greater share on the Brazilian tax burden and constitutes an important source of revenue for states and municipalities (the states share the collection with them). The interval of its rates is much narrower than in IPI, ranging from 7% to 25%, while the standard rate is 17%. The assessment is done on monthly periods by the tax credit method. Each of the 27 Brazilian sub-national units⁵⁸ has its own ICMS legislation, which gives them significant autonomy though the Senate and the National Policy Council⁵⁹ have the function of maintaining the national integrity of the tax.

Unlike IPI and all VAT implementation discussed in this work, in ICMS the tax is inside its own calculation base. Diverting also from the VAT-Consumption model, the compensation mechanism of ICMS follows the "physical credit" (instead of the standard "financial credit")⁶⁰. Another distortion towards model is the usage of presumptions to establish the calculation base of ICMS on the several cases of forward substitution⁶¹. In some ways it is like the tax loses its "*ad valorem*" nature and becomes independent from the value of the goods.

Regarding the inter-jurisdictional coordination, ICMS adopts the destination principle to the international transactions and to the interstate operations in which the purchaser is not a registered taxpayer. In the inter-state operations between registered taxpayers there is a mix between the origin and destination principles that aims to better distribute the revenue. The states that are traditionally

⁵⁷The cigarette rate is 330% while the butter is 0%. Note that excise taxes normally levy on fuel and telecommunications, which is not the case of IPI. For this reason the rates of ICMS on these products are higher.

⁵⁸ Brazil has 26 states and one federal district.

⁵⁹ **Confaz**: a council constituted by representatives of the Ministry of Finance and from each sub-national unity.

⁶⁰ In the "physical credit" system, only goods for resale and the inputs that are physically incorporated in the produced goods entitles a tax credit. In the "financial credit" system, the possibilities are much broader, also encompassing, for example, goods for the fixed assets, for use and consumption, and electricity. It is important to note that the legislation has been changing in order to approximate the tax to the financial credit system (i.e.: the credit for purchases of capital goods has become possible by the Complementary Law 87/1996 – known as "Kandir Law").

⁶¹ The forward tax substitution (or progressive) is a mechanism used in ICMS which transfers to the economic agent positioned in the early stages of the production / circulation chain the responsibility to pay the tax of agents located at a later stage. It anticipates the occurrence of the chargeable event, subverting the multi-stage and proportional incidence of VAT. Instead of several incidences and a number of taxpayers, there is a single incidence and a single taxpayer. The calculation base is presumed, no matter what value the economic agent can fix to its products. The process of collection

net importers (which are the less developed) receive a greater parcel of the tax collected. In these operations, if the purchaser is from a state from North, Northeast or Mid-Center regions or from Espírito Santo state, the rate is 7%. If it is from a state from the South or Southeast (except for Espírito Santo), the rate is 12%.

In the case of interstate transactions with electricity, oil, lubricants and liquid and gaseous fuels derived from oil, there is a constitutional rule that excludes the incidence of ICMS. Thus, states that export these products have no revenue on interstate sales, and the whole revenue goes to the importer state. As a matter of fact, this rule implements the pure principle of destination on such transactions. This is a very significant mechanism of revenue adjustment since the products involved in this exception produce a very significant ICMS collection.

PIS/PASEP and COFINS are federal taxes that levies on the turnover of companies, in a cumulative or non-cumulative way, depending on the size of the company. If the company assesses the income tax by the “real profit” scheme (the larger ones), the non-cumulative system is obliged. If not, the cumulative system can be adopted. In the non-cumulative incidence, the assessment does occur by the traditional method of tax credit (tax on tax), characteristic of almost all the implementations of VAT in the world. It is done by applying the rate of each of these contributions on the monthly turnover of the company, discounted credits corresponding to goods, services, raw materials and expenditures incurred in the month, in a mix of tax credit and subtraction methods. In terms of inter-jurisdictional coordination, PIS/PASEP and COFINS follow the same pattern of IPI and ICMS, adopting the principle of destination and taxing imports⁶², with no incidence on exports. The revenue of PIS/PASEP and COFINS is not shared with the states.

Finally, the ISS is a local tax that levies on a comprehensive range of intermediate and final consumption services. Its incidence is multi-stage and cumulative. It represents 2.12% of total revenues and has succeeded (in 1965) the previous “Tax on Industries and Professions”.

In this myriad of taxes on consumption, the incidence on the value added (IPI, ICMS and the non-cumulative part of PIS/PASEP and COFINS) accounted for 34.45% of the total amount of taxes collected in the country in 2008, while the cumulative incidence (ISS and the cumulative part of PIS/PASEP and COFINS) represented 5.99%⁶³, a percentage still quite significant⁶⁴.

and control becomes much simpler, but the loss of neutrality is expressive.

⁶² Not all expenditures of the companies are entitled to credit, as is the case of the value of hand labor paid to individuals. On the other hand, the law allows credit on purchases for the fixed assets that are used for the production of goods for sale or for provision of services, which in IPI is not yet a reality and in ICMS is done in parcels.

⁶³ Data were extracted from the annual collection report of the Brazilian tax administration (SECRETARIA DA RECEITA FEDERAL DO BRASIL, 2009, pp. 25 and 36). Note that the aggregation was made in a different way

It should be noted finally that Brazil has a streamlined system for collection of taxes for small and medium firms, which joins several taxes (called "SIMPLES" which means "simple").

4.2.1 Problems concerning economic integration

Fiscal federalism is one of the great difficulties involving VAT. Since it first appeared in a unitary country like France, the tax faces difficulties in the implementation on a federation. The Brazilian case is exemplary in this matter, as, though Brazil has been at the forefront of the implementation of tax on the value added in the world, after more than forty years, the main problems of VAT come from the federal question. The challenge that makes the idea of a tax reform that "implant" a VAT in Brazil recurrent is to ensure a uniform tax, rational and tight in a republican federal structure, in which the subnational units maintain some degree of fiscal autonomy. Fortunately, there are successful examples in this realm, like Germany and Argentina.

The best technical solutions for the federal integration of VAT are not always viable politically. Arrangements due to political disputes may withdraw from the tax its best features, reducing its neutrality and efficiency, and encouraging tax evasion.

As a matter of fact, since the implementation of VAT in Brazil, in late 1960s, consumption was sprayed as a tax base as mentioned before. Aside from the daunting complexity caused by the existence of five taxes on consumption, including three non-cumulative, horizontal disputes between states was a major wound on consumption taxation in Brazil. Pressed by the need to develop their economies and generate jobs, states were launched to the so-called "tax war", by granting benefits on the ICMS to attract productive investments. This has occurred by creative financial incentives⁶⁵. Although the Finance Policy Council (CONFAZ), which includes representatives of federal and state finance administrations, has the function to avoid such distortions, these benefits are granted without the approval of the Council, as required by law.

Besides harming the collection of the states as a whole, which is very bad at a time of fiscal crisis, this practice produces a strong interference in strategic decisions of the companies, fiercely attacking the neutrality of the tax system. In the medium term everyone loses, as the widespread of

comparing to the totals presented in the report as "Taxes on Goods and Services – Non-Cumulative" and "Taxes on Goods and Services – Cumulative". The reason is that the first item does not include IPI on cars, beverages and tobacco nor the ICMS on automobiles, beverages, tobacco, fuels, electricity and telecommunications (separated as "selective" because they have increased rates), while including taxes whose base is not the consumption (CSLL-Presumed Profit, IRPJ-Presumed Profit and others).

⁶⁴ This aggregation does not consider the "Simples" revenue.

⁶⁵ An example of such incentives is the credit of 75% of ICMS on the account of the taxpayer on the payment date.

the practice makes the revenue fall generally and the fiscal stimulus loses its power to attract investments.

Moreover, the multiplicity of rules increases the complexity of the tax, making its administration more difficult and raising the costs for taxpayers, also favoring evasion. Although to a lesser extent, the same happens with the municipalities.

The clearest example of distortion of the nature of VAT due to federative issues is the differentiation of rates according to region, introduced previously. For instance, a company from Sao Paulo that sells a product to a company in the state of Amazonas will collect 7% of ICMS to the state of Sao Paulo. The company of Amazonas is entitled to make a credit corresponding to the 7% collected to Sao Paulo and when it sells its product internally in Amazonas, it will collect 17% for the state of Amazonas. So Sao Paulo gets 7% and Amazonas 12%. But if the operation was reversed, Amazonas would get 12% and Sao Paulo would get 7%.

Such differentiation, despite the economic and political reasons it is based on, encourages tax evasion, reducing the collection and affecting the neutrality of the tax. It is quite easy to simulate an operation with a different destination jurisdiction (which has an obviously lower rate), when what actually happens is a local operation, especially when it is a final consumer purchase.

Another example is the refusal of some Brazilian states to rebate debts collected for other states. Take the case of inputs for manufacture of an export product purchased by an industry in State A from a company located in State B. The industry collects ICMS on these inputs to State A, and makes a credit of the tax collected and ends getting credits in excess because of the exemption on its outputs (exported). State B collects nothing and still has to rebate the tax credits that went to State A. Due to the refusal to rebate, the exported product will come with certain tax burden, generating competitive distortions.

5 THE TAXATION OF CONSUMPTION IN NAFTA

The North American Free Trade Agreement (NAFTA), subscribed in 1992 and entered into force in January 1st 1994, brings together United States, Canada and Mexico in a free trade area. Its main objective is to “eliminate barriers to trade in, and facilitate the cross-border movement of,

goods and services”⁶⁶. Unlike the European Union, NAFTA does not create a set of supranational government bodies and does not establish a body of laws that are superior to the national laws.

It is the second economic bloc in terms of GDP (US\$ 16.1 trillion⁶⁷), the first in terms of area and it has a total population of 440 million inhabitants⁶⁸. Inside the bloc, the United States has a huge weight in relation to the other members, concentrating 85% of the GDP. As an effect of the treaty, Mexico and Canada are among the three main external trade partners from the U.S., second only to China in imports.

In terms of taxation, the three NAFTA members show great discrepancies. The fiscal burden related to GDP ranges from 19.8% (Mexico) to 33.3% (Canada), leaving the U.S. in an intermediate position (28.3%)⁶⁹. The taxation on consumption also presents significant variations in the country members of the bloc, not only in representativeness in relation to the total fiscal revenue but also in structure. Whereas Mexico has a more centralized structure, with a federal VAT fairly orthodox and the goods and services taxation representing more than half the total revenue, the U.S. has single stage taxes levying sales on retail in state and local levels and income is the main tax base (taxes on goods and services account for only 16.2% of the total revenue). In an intermediate position, Canada presents a more modern consumption tax model, with VATs in federal and provincial levels. In this country consumption represents 23.5% of the total revenue⁷⁰.

5.1 Mexico and Canada

Among the three NAFTA members, **Mexico** is the one that presents the most adherent taxation model on consumption to the dominant model in the contemporary world, having a federal level wide base VAT (“*impuesto al valor agregado*”) complemented by an excise tax that levies on alcoholic beverages, soft drinks, fuel and tobacco products, among other items. There are neither subnational taxes on consumption nor local taxes.

Introduced in 1980, as a replacement from a single stage sales tax (“*impuesto a las ventas*”)⁷¹, the Mexican VAT levies on sale of goods and supply of services (including imports),

⁶⁶ Article 102 of the agreement.

⁶⁷ Data from United Nations Statistics Division referring to 2007 (<http://unstats.un.org/unsd/snaama/selectionbasicFast.asp> - Last visited 02/02/2010).

⁶⁸ Data from OECD (Organization for Economic Co-Operation and Development), referring to 2007 (<http://stats.oecd.org/Index.aspx> - Last visited 01/25/2010).

⁶⁹ The average of OECD countries is 36.1%. Data from OECD referring to 2007 (<http://stats.oecd.org/Index.aspx> - Last visited 01/25/2010).

⁷⁰ The revenue data was obtained from OECD and is from 2007 (<http://stats.oecd.org/Index.aspx> - Last visited 01/25/2010).

⁷¹ Besides the federal sales tax, the Mexican VAT replaced thirty others federal excise taxes, and about four hundred

besides the granting of temporary use or enjoyment of goods. It accounts for 41.8% of the Mexican revenue⁷².

There are only two VAT rates: a general 15% rate and a 10% rate when the operations are carried out by residents from border regions inside their region or in the case of imports with selling inside the border region. The rate is not included in the price and the law establishes several exemptions, some of them being entitled to use the credits from the previous stages (i. e.: animals and vegetables, foods, drugs, exports, etc.) and others not entitled to credit (real estate, homes, free services, etc.)⁷³. The tax is assessed by the tax credit method and follows the destination basis in the determination of the occurrence place of the chargeable event.

Canada, in turn, has a conformation of consumption taxation rather unconventional and complex, perhaps reflecting its cultural and economic internal disparities, especially the strong autonomy of the province of Quebec⁷⁴.

Basically, there is a federal VAT (Goods and Services Tax - GST) and single stage sales taxes in the provinces (Provincial Sales Tax – PST), operating in parallel. In some provinces, PST was unified with GST, giving rise to the Harmonized Sales Tax (HST), which follows the VAT model. The provinces of Quebec and Alberta have exceptional situations, out of GST/PST and HST. In Alberta there is no tax on consumption⁷⁵, while Quebec has a provincial consumption tax, which is multi-stage and non-cumulative and that was not unified with GST. Unlike the U.S., there is no local sales tax.

The federal GST was introduced in 1991, in place of a federal single stage tax, levied on manufacturers, in an attempt to increase the competitiveness of this sector, by removing the existent cumulative effect in its taxation. Its implementation was difficult and had a huge political cost⁷⁶. The several exemption cases (i. e. domestic financial services and childcare), zero-rating (i.e. medical devices, prescription drugs and basic groceries) and refunds (i. e. new housing, schools and

local taxes.

⁷² CIAT, 2009, p. 3.

⁷³ CIAT (Inter-American Center of Tax Administration): Taxation Data Base – Descriptions of the Tax Systems. (http://www.ciat.org/index.php?option=com_wrapper&Itemid=169&lang=en - Last visited 02/5/2010)

⁷⁴ Quebec is the only Canadian province that is francophone prevailing and has important cultural differences comparing to the other provinces. It has a strong political sovereignty sense.

⁷⁵ Alberta is the richest Canadian province, with large oil reserves.

⁷⁶ Bird and Gendron observe that GST implementation has contributed significantly to the virtual elimination of the ruling Conservative Party from Parliament. By the way, the authors present an interesting analysis of the hard path towards the Canadian federal VAT, which is exemplar in such a process. As a conclusion, they say that the GST worth the effort, although it could be better, more comprehensive, especially considering the New Zealand model introduced only a few years later (BIRD & GENDRON, 2009, pp. 3-18).

hospitals) are also results from the political pressures, with negative consequences in the neutrality and complexity of the tax.

The Canadian GST uses the invoice-credit method and follows the destination principle. With a rate of 5%⁷⁷, the tax covers the entire Canadian territory, but has a different guise in the ten Canadian provinces, according to its relationship with the provincial tax on consumption.

In the provinces of British Columbia, Ontario, Saskatchewan, Manitoba and Prince Edward Island GST and PST live together independently, without any form of coordination, what could be expected considering that the first is multi-stage and non-cumulative and the second one is single-stage in retail level and has a much narrower base. The GST is operated in a centralized way by the Canada Revenue Agency, while each PST is administered by its own province. As pointed out by Bird and Gendron⁷⁸, each PST has its own tax base and its own tax rate (ranges from 5%, in Saskatchewan, to 10%, in Prince Edward Island). Although the PSTs are retail sales taxes, there is a considerable taxation on business inputs, besides the taxation over services being rather limited.

As for the three small provinces from east Canada, New Brunswick, Newfoundland and Labrador and Nova Scotia, there is only one tax (HST). It is a VAT model tax, which levies the same base as GST and is centrally collected by the Canada Revenue Agency. The rate is 13%, 5% corresponding to the federal GST and 8% corresponding to the provincial part. This part is divided among the provinces according to their estimated taxable consumption. Each province has some autonomy as it can establish extra zero-ratings and refunds other than GST's. Despite the fact that this tax-sharing system reduces the fiscal autonomy of the participating provinces, what has been appointed as a rejection argument by the provinces⁷⁹, British Columbia and Ontario may abandon their PST and adopt this model this year (July)⁸⁰.

Finally, Quebec has a unique and curious arrangement in the fiscal federalism field. It was the only province that followed the federal government movement in 1991 and replaced its single stage sales tax by a provincial VAT. But it not only kept its own consumption tax but assumed the federal GST administration. As a matter of fact, the Quebec Sales Tax (QST or, in the Quebec official language, "*TVQ - Taxe de vente du Québec*") is separate but harmonized with GST, in a "dual-VAT" system. Besides the rate (QST is 7.5% and includes GST in its base⁸¹), there are some

⁷⁷ When the GST was introduced, the rate was 7%, but it was reduced in 2006 by the Conservative government. The 5% rate is uniform in all provinces (it is inside the HST rate in the provinces that adopt HST).

⁷⁸ BIRD & GENDRON, 2009, p. 3.

⁷⁹ McLURE, 2005, p. 9.

⁸⁰ British Columbia will have a different HST rate from the other provinces (12%).

⁸¹ As the GST is included in the QST base, QST effective rate is 8.025% and the total rate (GST + QST) is 15.025%. The inclusion of the federal tax in the base of the provincial tax, besides increasing its effective rate, has the advantage

minor differences on zero-rating and refunds. Both taxes are collected at the point of sale and their amounts are shown separately on the invoice.

In terms of inter-jurisdictional coordination, the exports are zero-rated (from GST, QST, HST and PST), while the imports are levied and collected by the Canadian customs.

In the case of interprovincial operations, although the framework seems complicated because of the several GST-PST-QST-HST combinations, the logic follows the destination principle. So, in a selling where the destination province is in the HST group, the seller, no matter what province it is registered in (HST group, PST or Quebec or even Alberta), will collect the HST (on full rate, federal + provincial) to the Canada Revenue Agency and will not collect the provincial tax from its origin (PST or QST). If the destination province is from the PST group or is Quebec, it will collect only the GST, leaving to the buyer to collect the destination provincial tax (PST or QST), if it is the case⁸².

When it comes to services, in the scope of the HST, the definition of the local where the taxable event occurs as being the place where the service is performed (“place of performance”) puts these operations into the origin principle, regardless of being the service supplier a registered company or a final consumer and of the place where the service is actually used.

Despite of its complexity, the Canadian model provides an important benchmark in the discussion about the implementation of VATs in federal countries. It demonstrates in practice the possibility of a standard invoice-credit destination-based VAT to work well in non-uniform decentralized structures, even though with the coexistence with single-stage cumulative taxes. As a matter of fact, the heterodox Canadian case shows the feasibility of evolutionarily construct a more up to date consumption tax system from a technical and political situation very unfavorable, where sub-national units with a high degree of autonomy possess single-stage sales taxes which they resist to reform.

Rather than spend decades searching for a single consensual model, agreed by the central government and the provinces, Canada implemented a system in which a national VAT coexists with very unlike sub-national situations. According to Bird and Gendron, the usage of this twenty years old quite successful system has shown that the maintenance of single-stage taxes grieves only the very provinces that opt for this path, without making the operation of a federal VAT unfeasible.

of stimulating the province to fiscalize the federal part, reducing the risk of lack of fiscalizing interest by the provinces, as occurred in Mexico (TAIT, 1988, 157).

⁸² If the buyer is non-registered, should collect the tax in the self-assess way. But if it is registered, it has the option of leaving the taxation to the next operation.

In the same way, the option for a sub-national VAT subordinate or independent from the federal VAT and the choosing of a decentralized administration also do not invalidate the system, as long as there is a common basis⁸³. In the scope of NAFTA these findings are very significant as they evince the possibility of such a system succeeding in the United States, a country whose tax on consumption is founded on single-stage state taxes on retail and which is characterized by strong state sovereignty.

5.2 United States: the sub-national single-stage imposition and its difficulties

Whenever one talks about the extent of VAT penetration in the world, the United States is presented as a major defection. Indeed, the fact of the largest economy in the world does not adopt a more modern tax whose virtues are widely recognized cause some strangeness. However, it is easy to perceive the difficulties in reforming the U.S. taxation on consumption if one considers that: (1) the United States is a federation comprising fifty states with broad autonomy; (2) resistance to an overly strong central government is a striking feature of the country's history dating back to its formation as an independent nation and (3) the single-stage retail sales tax for decades has been an important revenue source not only to the state governments but also to the local ones⁸⁴.

Even starting from the reference of the Brazilian tax system, complicated and with several deficiencies, the complexity of taxation in the United States draws attention. Due to the autonomy granted by the U. S. Constitution for the creation of taxes by the states and given the lack of a federal Law that provides parameters for the state taxes, there are, ultimately, 51 different tax systems.

In the taxation of consumption, focus of this paper, this reality is particularly evident. Indeed, the U. S. possesses 45 independent state RSTs^{85 86}, as well as thousands of local sales taxes, many of which collected as add-ons to state taxes. The tax basis varies significantly, particularly with respect to services, historically little taxed by RST, but whose base has been extended in recent years as an alternative of revenue increasing by some states. The rates present important variations too (2.9% the lowest, in Colorado, and 8.25% the highest, in California). The procedures of the tax

⁸³ BIRD & GENDRON, 2009, pp. 19, 49 and 50.

⁸⁴ In a great part of the American states, the RST was introduced in the decade of 1930, during the great depression, as an alternative of revenue facing the losses of collecting the income and property taxes and the increasing of states spending (NELSON, 2008, pp. 1-7).

⁸⁵ Notice that in addition to 45 states, also the District of Columbia (DC) has a RST. Only Alaska, Delaware, Montana, New Hampshire and Oregon do not have a RST.

⁸⁶ For simplicity, all these taxes will be designated simply as "RST".

administrations also vary, not only among states but also among the thousands of local governments.

Aside from this framework of dispersion related to RST, the states of Michigan and New Hampshire have consumption taxes of unusual conformation. Michigan has, in parallel to RST, a variation of VAT, calculated by the addition method, called the Single Business Tax (SBT). And New Hampshire, which is one of the five states that has no RST, taxes companies with a turnover above a certain value with a multi-stage tax on business activity, with a rate of 0.25%, called Business Enterprise Tax (BET)⁸⁷.

Finally, the RST is not the only consumption tax collected concurrently among more than one government level⁸⁸. Both the union and the states have excise taxes, generally assessing upon alcohol, tobacco, fuel and telephony.

Generically, RST has been assessed upon all sales of tangible personal property not specifically exempted and upon the services enumerated on the statutes. As a tax focused on the final consumption, it exempts intermediate transactions, like “sales for resale” and sales from ingredients and components used in manufacturing. This complicates a lot the tax because the exemption is based on the intended use of the product. Beyond that, what is generically referred to “retail sales tax” or “sales and use tax” is actually two technically different taxes: the “retail sales tax” itself and the “use tax”, which is chargeable every time that the RST has supposedly been charged but has not been collected⁸⁹.

In terms of revenue, the RST is in the third place in the ranking, accounting for 10.31% of total national revenue⁹⁰ and is the main source of revenue for most states, representing barely more than half of the revenue from some of them. The federal excise tax is not very representative, accounting for 2.2% of total revenues.

In the inter-jurisdictional transactions, the RST adopts the destination principle, with an exemption on the exporter state but full incidence in the importer⁹¹. As long as RST is subject to the

⁸⁷ SCHENK & OLDMAN, 2001, pp. 475 and 476.

⁸⁸ Outside of consumption taxes, the income tax is another remarkable example of concurrence in tax base by different levels of government (federal, state and local).

⁸⁹ The taxes have different chargeable events: sale and use. The most common cases of incidence of the "use tax" are (1) the use of a product originally purchased for resale (and because of that was purchased with an exemption from RST) and (2) the use by consumers of a product purchased from another state and exempt from RST in the state of origin because it is interstate sale (see references to Supreme Court decisions later).

⁹⁰ It is second only to income tax and the tax on payroll.

⁹¹ See footnote 89.

cascade effect, the tax, that has been accumulated earlier on the production chain and is hidden, ends up overtaxing the exports.

Due to the high burden of collection given the complexity and variations among the states, the U. S. Supreme Court said in *Quill vs. North Dakota*, in 1992, that states cannot currently require out-of-state sellers to collect and remit sales tax unless it has a physical presence in the state⁹². As a result, there is a significant disadvantage of the traditional retail (“brick-and-mortar stores”) for remote sellers (by internet, mail order, or telephone). There is also considerable loss of revenue, currently estimated at US\$ 15 billion annually⁹³, and at an increasing rate, given the advancement of e-commerce.

Concerned with these losses, from the year 2000 states have joined forces to create a kind of uniform sales tax, called the Streamlined Sales and Use Tax (SST). It is based on an agreement which the Member States adhere to and whose rules they have incorporated in their legislation. As stated in the Agreement text, the SST purpose is “to simplify and modernize sales and use tax administration in the Member States in order to substantially reduce the burden of tax compliance”. The main lines of action to achieve this aim are uniformity of the tax base and centralization of collecting at state level.

The expectation of the Member States (22 have already entered the SST) is that since they have made tax collection simpler and less expensive for retailers, the U. S. Congress can adopt a federal legislation that applies to the products and services sold by remote sellers. Until this happens or the Supreme Court revises its decision due to the achieved simplification, the adherence to the collection of SST in remote purchases is under a voluntary system, which is happening in a small proportion⁹⁴.

Due to the problems of consumption taxation in the U.S., the reform of the system has long been debated⁹⁵. The discussion is of great interest to anyone engaged in studying the phenomenon of consumption taxes because it brings up the major issues surrounding the topic⁹⁶.

⁹² In 1967 the U. S. Supreme Court ruled in this direction (*National Bellas Hess vs Department of Revenue*). The decisions were based on the violation of the “Due Process Clause” (*Bella Hess*) and of the “Commercial Clause” (*Bella Hess* and *Quill*) from the Constitution (NELSON, 2008, pp. 2-6 and 2-7).

⁹³ Data from the Streamlined Sales Tax Governing Board (<http://www.streamlinedsalestax.org> - Last visited 02/10/2010).

⁹⁴ This is what the Streamlined Sales Tax Governing Board itself acknowledges. It records a total of 1.156 retailers that have collected over \$300 million in sales tax for the Streamlined states.

⁹⁵ There are several reform proposals, among which the Unlimited Savings Accounts, National Retail Sales Tax/FairTax, Combined VAT and Income Tax. To an analysis of the proposals, see DALSGAARD, 2005.

⁹⁶ For further studies, see BIRD & GENDRON, 2009; McLURE, 2005 and SHENK, 2001.

As Bird and Gendron suggest, the Canadian experience of introducing a federal VAT harmonized with sub-national VATs in some provinces and with no harmonization with RST in others, which was discussed earlier, can be used as a basis for reforming the American system. The current U. S. situation is similar to that existing in Canada when VAT was implemented.

The options of some subnational units to maintain their RSTs do not preclude the operation of a federal VAT. The administration at the sub-national level and the states autonomy to set tax rates do not also invalidate the system. Of course, the parallel existence of local RSTs in the United States makes the situation more complex, but does not preclude a reform in this direction, since these taxes may have parallel existence if not incorporated or harmonized with state tax.

The key to the modernization of tax on sales in the United States, with the creation of a wider federal tax, VAT like (or even RST like), parallel to state taxes, is the definition of a common tax base, no matter even if the state taxes are modeled after the VAT or RST⁹⁷.

If the base is uniform, both taxes can be coordinated and administered together, if desired. While states lose their autonomy in determining the basis of their taxes (i.e. be obliged to include the services), they can keep the administration and fix the rates. Exercising this way, Bird and Gendron observe the possibility of the United States to conduct this process in stages towards a dual VAT system, allowing states to keep their taxes in the current fashion, but offering support and cooperation to those who harmonize their bases.

6 THE TAXATION OF CONSUMPTION IN THE EUROPEAN UNION

The European Union (EU) constitutes the most advanced form of economic integration among countries. It is not just a common market but also an effective coalescing around a single market with one currency. Gestated along for more than four decades, the EU took shape as a single market since the Treaty of Maastricht, in 1993, in the pre-existing European Economic Community. Meeting today 27 Member States, the European Union is institutionally characterized as a supranational organization relatively independent, with their own bodies (i.e. Parliament, Council, Commission and Court of Justice) and own laws, which may take precedence over national laws.

The EU is the largest economic bloc in the world, with a US\$ 17.6 trillion⁹⁸ GDP and a population of 500 million inhabitants. Within the bloc, countries with greater economic weight are

⁹⁷ McLURE, 2005, p. 21.

⁹⁸ Data from the United Nations Statistics Division (referring to 2007).
(<http://unstats.un.org/unsd/snaama/selectionbasicFast.asp> - Last visited 02/02/2010).

Germany, United Kingdom and France. The tax burden of the member countries shows significant variation, as Romania and Slovakia are the members of the lowest tax burden (29.4% of GDP) and Denmark among the highest (48.7%)⁹⁹.

One cannot talk about European integration without referring to the fundamental role played by the harmonization of the indirect taxes in the long path of economic integration trodden by EU members. A single market implies free circulation of production factors (goods, services, capital and persons), which can only be achieved by tax harmonization, particularly in the scope of the consumption taxation.

In the early days of the EU, the Treaty of Rome, which established in 1957 the then "European Economic Community", laid the foundations for what is now the community VAT system. The treaty not only demonstrates the concern for free transit of goods and the willing of implementing a mechanism to avoid discriminations regarding consumption taxes, but also sanctions the harmonization principle of indirect taxes¹⁰⁰.

Nevertheless the reality then was the existence of several cascade taxes on the members, what was incompatible with the great integration project. As a result, in 1967, the First Directive made mandatory the adoption of the French model VAT to all the members, while the Second Directive had already presented the basis to what would come to be the common VAT system.

As Clotilde Celorico Palma mentions, a new phase of the harmonization is established with the approval of the famous Sixth Directive¹⁰¹ in 1977. This law comes along to establish the creation of a common harmonized system of VAT, a true European code of VAT, regulating how the members should rule the rights and the duties related to this tax in their legislations and establishing a uniform tax base.

In the EU there is not a VAT from the community¹⁰². Each one of the 27 Member States has its own VAT with its own legislation. The community law, however, rules not only the obligation of each state having a VAT in its tax system but also sets standards to be observed in national laws. Doing that, it establishes the so-called "harmonized VAT".

⁹⁹ Data from European Union (referring to 2007) (http://ec.europa.eu/taxation_customs/taxation/gen_info/economic_analysis/tax_structures/index_en.htm - Last visited 02/05/2010).

¹⁰⁰ FALCÃO, 2003, p. 6.

¹⁰¹ Sixth Directive 77/388/CEE, from May 17, 1977.

¹⁰² Even so, the Sixth Directive reserves to the EU part of the amount of VAT collected in regional operations, to finance its operation.

In 1991, in another significant advance, the Sixth Directive was modified to suppress all the fiscal formalities on intra-Community borders, besides progressing in rate harmonization (creation of minimum and maximum percents to the normal and reduced rates, in a system of “percentage bands”). These changes have occurred in the wake of the establishment of a transitional regime, which should have to continue just until the end of 1996 but remains until today.

As José Xavier de Basto refers, the physical inspection at customs posts on borders was replaced by documentary and accounting inspection performed by national authorities working in close cooperation¹⁰³. The collaboration, indispensable to reduce the risk of fraud is done through a system (VIES – Vat Information Exchange System) in which the Member States can cross their information in order to check the transactions reported by taxpayers.

Thus, the EU maintained the classical regime of destination in intra-Community transactions among taxpayers from distinct countries but abolished the fiscal frontiers between them. Within the national space and in intra-Community sales to final consumer the followed principle is the origin. In the outer Community, the rule is pure destination (exports are zero-rated and imports are taxed normally). Finally, the VAT on a purchase made within the European Union by a person or entity from outside the bloc is subject to refund, if requested.

After several scattered changes that had taken place for almost thirty years, the Sixth Directive was rewritten in 2006 in order to consolidate in a single text the regulation of the community VAT. Thus, the Directive 2006/112/EEC has become the new European VAT code. Besides establishing the VAT regime in internal transactions of Member States, among Member States and with countries from outside the Community, already addressed, the new Directive establishes other definitions that are worth pointing out.

The Article 2 of the Directive sets the taxable transactions, comprising (1) the supply of goods and services for consideration within the territory of a Member State by a taxable person acting as such, (2) the intra-Community acquisition of goods and (3) the importation of goods, besides other specific factual situations. The interpretation of the scope and limits of these concepts is given by subsequent articles of the Directive.

The “supply of goods” is defined in Article 14 as “the transfer of the right to dispose of tangible property as owner”. Electricity, gas, heat and refrigeration are explicitly treated as tangible

¹⁰³ In “*A adoção do sistema comum europeu de Imposto Sobre o Valor Acrescido (IVA) em Portugal*” (SARAIVA FILHO, 2007, p. 116).

property. On the other hand, the “supply of services” is defined in the Article 24 in “*contrariu sensu*” as “any transaction which does not constitute a supply of goods”.

The taxable person is defined in Article 9 as “any person who, independently, carries out in any place any economic activity, whatever the purpose or results of that activity”. The chargeable event occurs when goods or services are supplied and products enter into the Community.

Regarding rates, Articles 97, 98 and 99 provide that Member States should apply a standard rate (at least 15%) and, optionally, one or two reduced rates (at least 5%), applicable only to a restricted list of goods and services or in temporary situations defined by the Directive.

The taxable amount is set by Article 72 and subsequent articles and includes taxes, duties, levies and charges (excluding the VAT itself) as well as incidental expenses, such as commission, packing, transport and insurance costs, charged by the supplier to the customer. The calculation follows the credit-invoice method and the scope of credits is given by Article 168 and subsequent clauses.

It is important to mention that, like other VAT systems, the European VAT legislation allows a differential treatment to small enterprises (Member States can simply exempt the very small enterprises).

Outside VAT, regarding other indirect consumption taxes, there is a common system of special excise taxes that levy on manufactured tobacco, alcoholic drinks and mineral oils. The Member States can, however, maintain other unharmonised taxes on these products (i. e. green taxes), and others, such as vehicle registration or road taxes, fees, etc., provided they do not constitute either a turnover tax or a barrier to trade¹⁰⁴.

Another noteworthy law in terms of harmonizing of consumption taxation, especially due to the advancement of information and communication technology in the last few years, is the Directive 2002/38/CE, which deals with radio and television broadcasting and services provided by electronic means. Francisco Javier Sánchez Gallardo presents two remarkable considerations about the Directive. The author points out that, before the rapidly advancing technology, which makes unstable the concepts, the rule chooses to present concepts exemplary, “*numerus apertus*”. He also states that the Directive contains a condition that, to be considered electronic service, is not enough to reach the borrower by electronic means (i. e. an opinion sent by e-mail). Indeed, the service

¹⁰⁴ EUROPEAN COMMISSION, 2000, p. 18.

should involve intrinsically an electronic component or technology, with minimal human intervention¹⁰⁵.

6.1 The “carousel” fraud: a major problem of the current destination system

As mentioned in section 3.1, one important challenge the EU tax administrations faces is the so-called “carousel fraud”. It is an organized fiscal crime in which criminals take advantage of the destination regimen in intra-community transactions to “steal” the VAT component of a product. They evade the VAT in an import (that as mentioned before comes VAT-free due to the destination principle) and sell the product with a VAT parcel that had failed to collect.

Simon Wilson describes the fraud, also known as “missing trader intra-community” (MTIC) fraud, explaining it in its simplest form and in more complex variations. Basically, a criminal obtains a VAT registration to acquire goods from a trader in another country within the EU. The transactions are VAT-free because of zero-rate on exports and the importer should levy the tax (reverse charge). But the goods are “sold on at a higher, VAT-inclusive price, but the seller disappears without paying the tax”¹⁰⁶.

The same goods circulate several times (hence the term “carousel”) and the harm to the collection is double: not only the importer evades its tax but the re-exporter gets a refund under a never-paid VAT. The more sophisticated forms of the fraud evolve large chains of companies and virtual transactions.

According to valuations of some Member-States, the amount of losses caused by the carousel fraud is around 2% to 10% of the whole net revenue of VAT and can reach 200 billion euros¹⁰⁷.

6.2 The goal of unifying the European tax space by the origin principle

The idea of implementing the origin principle in the transactions between the member-states has existed since 1963 with the *Neumark Report*. It was resumed in 1996, with the proposition of a “definitive regime”. This pattern turns indifferent the tax treatment in terms of the purchase destination, no matter if it is inside a Member-State or outside, creating a truly unified European tax space. On an intra-Community purchase, the seller would always levy the VAT with the local rate,

¹⁰⁵ In “*La tributación en El IVA de las operaciones de comercio electrónico*” (SARAIVA FILHO, 2007, pp. 424-427).

¹⁰⁶ WILSON, 2006.

¹⁰⁷ SARAIVA FILHO, 2007, 590.

without another formality, meanwhile the buyer would abate the amount of VAT paid in wherever EU part in its normal VAT declaration¹⁰⁸.

The European Commission shows didactically the differences among the current system and the proposed:

Imagine a typical week in the life of manufacturer A in Spain. In addition to selling in Spain, A sells goods to retailer B in Portugal and buys raw materials from C in Italy. A is also attempting to break into the Greek market and sends out a representative, Mr. X. In Greece Mr. X incurs accommodation, travel, repair and printing costs on which he has to pay VAT like any other consumer.

Under the present VAT system, A must check that B is liable for VAT. A then sells to B free of VAT, and sends a declaration to the Spanish authorities. A must prove that the goods have actually left Spain. A buys raw materials from C without VAT but must also declare and deduct VAT at the rate applying in Spain (and B does the same for purchases from A). Mr. X cannot deduct the expenses he incurred in Greece on his normal VAT declaration in Spain, but has to submit a separate application for a refund in Greece under the 8th VAT directive. Under the proposed new system each trader applies VAT at the local rate without any other formality and each trader deducts the VAT paid anywhere in the European Union on his normal VAT declaration.

It is important to notice that without a form of redistribution of income, the proposed scheme would favor the net-exporting countries at the expense of the net-importers (the poorest). This happens because part of the tax from a product consumed in a country (importer) remains in the revenue of another (exporter), creating distortions towards the ideal model of VAT-Consumption. The systems of revenue compensation (“clearing house systems”, see section 3.2.1), designed to address this problem, never proved able to generate consensus among Member States regarding the reliability of clearing and the simplicity of operation.

Therefore this evolution has become a merely long-term goal. As António Carlos dos Santos mentions, the EU postponed the project of switching from the destination principle to the origin, adopting a strategy of enhancing the common VAT system through the simplification of the fiscal obligations in cross-border operations, the consolidation of the existent rules (reformulation of the Sixth Directive), and by a more uniform application of the Community legislation. These measures intend to widen the regime of “single window” (characterized by the existence of a single place of taxation in the community space) as well as the situations of replacement of the taxable person by the final consumer on the payment of the tax (“reverse charge”)¹⁰⁹.

¹⁰⁸ EUROPEAN COMMISSION, 2000, p. 15.

¹⁰⁹ In “*Implicações do processo de integração de Portugal na Comunidade Européia nas políticas fiscal e orçamentária*” (SARAIVA FILHO, 2007, p. 227).

7 CONCLUSION

The VAT is the best form of consumption taxation in order to achieve tax neutrality, both internally and externally. It faces problems, however, under processes of economic integration, both in a federation and in a common market. Researchers and tax administrations have been dealing with this issue and alternatives approaches have emerged. Shared VAT, CVAT and VIVAT are new theoretical models that try to address the limits of the traditional destination system, especially those concerning frauds, game-playing, symmetry and VAT chain preserving.

In the practical field, the European Union is in the vanguard of consumption tax integration. Its common VAT system achieved a high degree of coordination and harmonization when a European VAT Code was approved (Sixth Directive and now Directive 2006/112/EEC) and when the fiscal borders were abolished. Even though the 1996 proposition of a “definitive regime” that creates a truly unified European consumption tax space under an origin/clearing house system is a distant goal, many other smaller integration advances have been taken.

In the other studied blocs the situation is much more delayed. By one hand harmonization on consumption taxation is not even on the agenda. By the other, the main members of MERCOSUL and NAFTA (United States and Brazil) has still a long way to go in order to internally integrate its internal tax space. It seems to be difficult to open space to discuss external integration. Fortunately, Argentina and specially Canada are very positive examples. Both federations, the first has an effective VAT in federal level and the second is managing complicate political issues and is advancing its consumption tax integration through a complex but creative formulation.

It is not possible to conceive an effective process of economic integration, both internally in a federation and in a common market, without a reasonable degree of tax harmonization. Federalism cannot be an unbridgeable obstacle to the construction of an integrated and more neutral tax space. It is possible (and absolutely necessary) to conciliate harmonization with autonomy¹¹⁰. The permanent discussions about tax reform should consider this. Both theoretical studies and practical international experiences can give important subsidies to this issue.

¹¹⁰ REZENDE, 1999, pp. 17-18.

REFERENCES

- 1 AFONSO, José Roberto R.; VARSANO, Ricardo. Reforma tributária: sonhos e frustrações. **Reformas no Brasil: balanço e agenda**. 1. ed. Rio de Janeiro: Nova Fronteira, pp. 289-324, 2003.
- 2 BECKER, Alfredo Augusto. **Carnaval tributário**. 1. ed. São Paulo: Saraiva, 1989. 122 p.
- 3 BINS, Luiz Antônio. **A tributação de consumo no Brasil**. Monografia de especialização. UNB, Curso de Especialização em Integração Econômica e Direito Internacional Fiscal.1999. 151 p.
- 4 BIRD, Richard M.; GENDRON, Pierre-Pascal. **Sales taxes in Canada: The GST-HST-QST-RST System**. 2009. 53 p.
- 5 BORDIN, Luís Carlos Vitali; LAGEMANN, Eugênio. Tributação no Mercosul. **Tributação em Revista**, Brasília, n. 20, p. 25-44, Abr/Jun 1997.
- 6 EUROPEAN COMMISSION. **Tax policy in the European Union – Europe on the move**. Luxemburgo: Office for Official Publications of the European Communities, 2000. 43 p.
- 7 CIAT – Inter-American Center of Tax Administration. **Tax Collection Observatory - 2009**. Available at http://www.ciat.org/index.php?option=com_content&task=blogcategory&id=108&Itemid=206&lang=en. Accessed in: 02/20/2010.
- 8 COELHO, Sacha Calmon Navarro. O Imposto sobre Produtos Industrializados e o direito à compensação de créditos presumidos. **Grandes questões atuais do direito tributário**. São Paulo: Dialética, p. 279-312, 1998. 2 v.
- 9 DALSGAARD, Thomas. U.S. **Tax Reform: an overview of the current debate and policy options**. International Monetary Fund, July 2005. 29 p.
- 10 DERZI, Mizabel Abreu Machado. A necessidade de instituição do IVA no sistema constitucional brasileiro. In: BALTHAZAR, Ubaldo César. **Reforma tributária & Mercosul: a instituição do IVA no direito tributário brasileiro (Org.)**. Belo Horizonte: Del Rey, 1999. p. 17 a 30.
- 11 FALCÃO, Maurin Almeida. **A experiência da harmonização tributária europeia para o Mercosul: o exemplo do Taxa sobre o Valor Agregado - TVA**. 26 p.
- 12 JIMÉNEZ, Juan Pablo; SABAINI, Juan Carlos Gómez. **El papel de la política tributaria frente a la crisis global: consecuencias y perspectivas**. Montevidéo: CEPAL – Comisión Económica para America Latina y el Caribe, 48 p., Mai 2009.
- 13 KEEN, Michael. **VIVAT, CVAT and all that: new forms for Value-Added Tax for federal systems**. International Monetary Fund: 2000. 19 p.
- 14 McLURE Jr, Charles E. **Implementing subnational Value Added Taxes on international trade: the Compensating VAT (CVAT)**. Kluwer Academic Publishers: International Tax and Public Finance, 7, p. 723-740, 2000.

- 15 McLURE Jr, Charles E. **Coordination State Sales Tax with a Federal VAT: Opportunities, Risks, and Challenges**. Stanford University, 2005. 24 p.
- 16 MEIRELLES, José Ricardo. **Impostos indiretos no mercosul e integração**. 1. ed. São Paulo: LTr, 2000. 173 p.
- 17 MUSGRAVE, Richard A. **Public Finance in theory and practice**. 5. ed. New York: McGraw-Hill, 1980. 627p.
- 18 NELSON, Bruce M.; COLLINS, James T.; HEALY, John C. **Sales and Use Tax Answer Book (2009)**. Chicago: CCH, 2008.
- 19 REZENDE, Fernando. Globalização, Federalismo e Tributação. **Planejamento e Políticas Públicas**, Brasília, IPEA, n. 20, p. 4-18, Dezembro 1999.
- 20 SARAIVA FILHO, Oswaldo O. de Pontes; VASQUES, Sérgio; GUIMARÃES, Vasco Branco (org.). **IVA para o Brasil – contributos para a reforma da tributação do consumo**. Belo Horizonte: Fórum, 2007. 664 p.
- 21 SCHENK, Alan; OLDMAN, Oliver. **Value added tax: a comparative approach**. New York: Transnational Publishers, 2001. 716 p.
- 22 SECRETARIA DA RECEITA FEDERAL DO BRASIL. **Carga Tributária no Brasil – 2003**. Available at <http://www.receita.fazenda.gov.br>. Accessed: in 02/20/2010.
- 23 SECRETARIA DA RECEITA FEDERAL DO BRASIL. **Carga Tributária no Brasil – 2008**. Available at <http://www.receita.fazenda.gov.br>. Accessed in: 02/20/2010.
- 24 SHOUP, Carl S. The Value Added Tax and developing countries. **Research Observer**. Washington: The World Bank, Number 2, July 1988. p. 139-156.
- 25 SMITH, Adam. **An inquiry into the nature and causes of the wealth of nations**. New York: Random House, 1937. 976 p.
- 26 STIGLITZ, Joseph E. **Economics of the public sector**. 3. ed. New York: W. W. Norton & Company, 1999. 823 p.
- 27 TAIT, Alan A. **The value added tax: international practice and problems**. Washington: International Monetary Fund, 1988. 450 p.
- 28 TANZI, Vitto. Globalization and the Work of Fiscal Termites. **Financial&Development**. Washington: International Monetary Fund, Volume 38, Number 1, March 2001.
- 29 VARSANO, Ricardo. A tributação do comércio internacional: ICMS atual versus ICMS partilhado. **Texto para discussão nº 382**. Brasília: IPEA, Setembro 1995. 14 p.
- 30 WILSON, Simon. How carousel fraud is putting the VAT system in a spin. **MoneyWeek**. London: August 2006. Available at <http://www.moneyweek.com/personal-finance/how-carousel-fraud-is-putting-the-vat-system-in-a-spin.aspx>. Accessed in: 03/15/2010.