The Shared Value Added Tax.

How it works and why it is the Best Tool for Optimal Fiscal Federalism in Countries with Consumption Based Taxes

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1. Introduction.

The aim of this paper is to describe the way the *Shared* Valued Added Tax (*SVAT*) works and show that is a useful tool to replace inefficient provincial taxes and to achieve fiscal federalism, particularly in countries with consumption based taxes. In countries such as Argentina and Brazil it serves to replace inefficient and inharmonic (between provinces) origin based taxes. In Argentina, it is the best option to replace the main own-source revenue of provincial governments: the gross receipts (ingresos brutos) tax. This in turn, will allow gradual decentralization of the Federal VAT and achieve a better fiscal correspondence.

From another perspective, we can say that if we want a federal country to achieve fiscal correspondence through non-distortionary taxes, that discourages cheating or tax-wars between provinces or taxpayers, that is easy to administer and definitely easier than all other variants of provincial VAT's, the alternative is the SVAT.

Additionally, if at the moment of regime change, the provinces collected some kind of tax, the GRT in Argentina or the ICMS in Brazil, would be politically feasible to change if provinces will not loose much tax revenue with the replacement. If there were other or no provincial taxes before the change, it would be politically feasible if at least guarantees a similar tax revenue per capita among provinces. The solution to this is the SVAT coupled together with the "Equalization" (Canadian type) transfer from the Federal Government.

Even though in the economic literature, it is easy to find opinions that the VAT should not be applied for provincial use, but should be set for the federal level, in our opinion this form of Value Added Tax, not used yet in any country, serves and is one of the best to be utilized at the local level. Ricardo Varsano (1995, 1999) Ricardo Fenochietto (1998), Richard Bird (1999) and Charles McLure (1999)¹ have expressed similar opinions.

As we describe in this paper, the SVAT has a lot of comparative advantages versus the gross receipts tax and other taxes proposed to replace it. First, the most important advantage of this tax resides in the way it treats sales among subjects that are residents in different provinces, because it solves the problem of interjurisdictional sales. Besides it is neutral, it enables to know accurately the tax incidence in the product's costs, applies the criteria of destination, does not need local customs, allows rebating in exports, it can be used without problems from the first stage, facilitates cross checks, it is easily to determined and facilities administration tasks.

The paper is organized as follows.

Before analyzing the functioning of the *Shared* VAT, we complement the Introduction in Section 1.1 with a brief comment about federal and unitary countries and the current system of Revenue-Sharing or Coparticipation in Argentina. In Section 1.2 we analyze its lack of fiscal

¹ Varsano. Ricardo: A tributação do Comércio Interestadual: ICMS versus ICMS Partilhado. Texto para Discussão N° 382, Instituto de Pesquisa Econômica Aplicada, Brasilia, Setembro de 1995. Fenochietto, Ricardo: El IVA compartido: Una Herramienta Util para el Reemplazo del Impuesto sobre los Ingresos Brutos y la Descentralización de Tributos ·31 Jornadas de Finanzas Públicas, Córdoba, Argentina. 24 al 27/8/98, pag. 151. Bird, Richard: Rethinking Tax Assignment: The Need for Better Subnational Taxes, April 1999. Mac Lure, Charles: Protecting Dual VATs from Evasion on Cross-Border Trade: An Addendum to Bird and Gendrom (1999).

correspondence. Finally, since the solution to the problem is fiscal decentralization, in Section 1.3 we review some principles related to that objective.

This introductory comments and descriptions show the importance of increasing the provincial tax bases solving the aforementioned problems and satisfying the enumerated principles. In this sense, the SVAT is the tax system that solves these problems and as shown in the next sections it also serves to replace inefficient provincial taxes and is of a simple implementation both for private and public sectors.

In Section 2, we analyze the need to replace the gross receipts tax as a previous step to tax decentralization. This is because the gross receipts tax is economically inefficient. Hence, we describe the different alternative consumption taxes on the basis of which we argument against the GRT and in favor of SVAT among the different alternatives and proposals to replace it in Argentina.

In Section 3 we study the functioning of the SVAT, its main advantages, how it complies with provincial autonomy (how exemptions can be implemented and how it allows provinces to set their own tax rate), the level of the federal perception tax, the treatment of interjurisdictional sales to final consumers, and the elimination of domestic customs.

In Section 4, having concluded that the SVAT is the best to replace GRT or other provincial taxes, we retake the issue of fiscal federalism and its use for achieving fiscal correspondence. We claim that first by replacing the distortionary GRT by the SVAT, and then gradually decentralizing the federal VAT, we can achieve our objectives. Furthermore, since it might be politically difficult to achieve the change of regime we explain how to compensate *producing* provinces when we change a mix (origin and destination) based tax by a destination based consumption tax.

Finally, we present the conclusions in Section 5.

1.1. Federal and Unitary Countries and the System in Argentina.

Before analyzing the functioning of the SVAT, it is useful to enunciate a series of principles and criteria to be considered while analyzing the different alternatives that exist regarding taxes at the federal and local level.

There are internationally two different systems regarding the level of government that has powers to impose taxes:

- a) The **unitary system**, according to which, taxes are imposed and collected by the central government, which is also in charge of the way such revenue will be spent.
- b) The **federal system**, according to which there are concurrent faculties between the central and local governments to levy taxes and decide the way to spend.

In the American continent, there are only five federal countries: Canada, the United States, Mexico, Brazil and Argentina.

In the particular case of Argentina, all government levels (federal, provincial and municipal) have constitutional tax powers to levy taxes² with certain limitations. Among these limitations, it should be pointed out the one set by section 9, Law N° 23.548, the Coparticipation Law (Official Gazette 7/1/88), by which the provinces, their municipalities and decentralized agencies commit themselves not to apply local taxes similar to the national ones assigned by the above named law.

Therefore some taxes are levied directly by the provinces (i.e. the gross receipts tax, car plates tax) and others are levied by the Federal government. Federal Taxes could be directly assigned to the Federal Treasury (i.e., the ones on foreign trade) or their revenues shared between the federal government and the provinces (they are the coparticipated ones: namely Value Added Tax, Income tax, local cigarette taxes, individual property tax, inter alia). In other words, there are a number of taxes that the provinces have given the federal government power of assigning and levying, so that afterwards they may be distributed by the federal government and between them both.

Among the taxes levied by the provinces, the gross receipts tax is the most relevant one in terms of its quantitative importance³. The economic inefficiency of this tax led the provinces, through the Fiscal Agreement of August 12th, 1993 to commit themselves to substitute it within the term of three years for a general consumption tax designed to secure tax neutrality and economic competitiveness.

1.2. Fiscal correspondence in Argentina.

In Argentina, the amount of coparticipated revenue is sufficiently high in comparison with Provinces'own revenue to assess that the tax system lacks almost entirely of fiscal correspondence.

The principle of fiscal correspondence relies on the basic postulate that establishes that taxpayers will voluntarily comply more with taxes levied by that level of government that provides them the services. It implies then, that each level of government must levy and collect the amount of taxes necessary to cover their expenditure.

Although, in Argentina the government system is federal and the expenditure is highly decentralized, since approximately 47% is spent at the local level, tax revenues are highly centralized: local governments only collect 24% of total revenue⁴.

Expenditure decentralization, that occurred in Argentina since the end of the 70s (especially expenditure in education and health), responded to a reasonable and logic international trend

² The Argentine Constitution, after the reform of 1994, has enacted the form in which the distribution of taxes imposed by Congress has to be made. In that respect, article 52, inc. 2°) of the Constitution establishes that: "Corresponds to the Congress to...Impose indirect contributions as a concurrent faculty with the provinces. Impose direct contributions for a fixed amount of time, proportionally equal in all the territory of the country, if it is demanded by defense, common security and the general well-being of the State. The contributions mentioned in this inc., with the exception of those that in part or as a whole are specifically assigned are coparticipable..."

³ This tax represents more than 50% of the total own revenue of the Provinces.

⁴ See **Propuesta de Reforma al Régimen de Coparticipación Federal de Impuestos en la República Argentina**. Poder Ejecutivo Nacional. Secretaría de Equidad Fiscal de la Jefatura de Gabinete de Ministros, 1999.

following the "subsidiary" approach to assigning expenditures. This fact, that the more decentralized the expenditure, the more efficient since it is in better conditions the mayor of the cities of Ushuaia or Tartagal to know in what and how to spend money (in paving streets, building schools, etc.), than the Minister of Economy of the Nation. It also can be affirmed that expenditure will be more efficient if the level of government spending it is the one raising it, which conduces us to tax decentralization.

Therefore, the major part of tax revenue is raised by the Federal Argentine Government, who distributes a part to the Provinces according to the sharing-revenue regime (Coparticipación Federal), in such a way that a large part of taxes are paid at a stage of government different than the one providing the public service, hence resulting in almost total lack of fiscal correspondence. This problem known also as vertical fiscal imbalance, can be appreciated in the case of Argentina in the following Table:

Jurisdiction	Expen	diture	Reve	enue
	\$	%	\$	%
Nation	41.175	53,4	54.573	76,1
Provinces	28.579	37,0	13.455	18,7
Municipalities	7.385	9,6	3.708	5,2
Total	77.139	100,0	71.736	100,0

 Table 1.0. Government Expenditure and Revenue in Argentina 1997.⁵

As the Table clearly shows, Argentina has very little of a federal country when referring to what level of government collects taxes. The principle of economic fiscal federalism rests on the fact that tax decentralization allows citizens residing in the jurisdiction of subnational governments (the Provinces and Municipalities) to choose the class and amount of public services that they want and so they raise the needed amount of taxes to finance them. In such a way, those who demand the government services are those who pay the taxes to finance them.

1.3. Principles for tax decentralization. Minimum requirements for a subnational tax.

In other words, to diminish or eliminate the lack of fiscal correspondence in Argentina, it is necessary to decentralize taxes. When allowing for tax decentralization, some principles are desirable to commit to:

- 1) The **principle of benefit** must be applied in most cases to finance local public services (through the use of municipal user charges or toll charges to finance the building and maintenance of roads).
- 2) The **principles of equity, that holds that tax bases that are unevenly distributed among jurisdictions are** not appropriate for decentralization.

⁵ Source: Boletín Fiscal, IV Quarter 1997, Dirección Nacional de Coordinación con las Provincias from the Ministry of Economy of the Nation.

3) The **principle of efficiency**: decentralization does not have to affect industrial localization, what will most likely happen if corporate income tax were decentralized and jurisdictions apply different tax rates. With just one jurisdiction imposing a lower rate, economic agents would have a tax incentive to locate in that jurisdiction, the system will loose neutrality and there will be a welfare loss.

Also it is important to review the minimum requirements that a subnational tax must comply:

- 1) The **tax base should be relatively immobile**, to discourage its migration, as it is the case with the property (real estate) and automobile tax, that are usually local taxes as in Argentina.
- 2) The **tax yield should be predictable over time**, enough to cover local needs, and also should be elastic, in the sense that it should expand when expenditures increase.
- 3) The **tax burden should not be exported to other jurisdiction**, as it is the case with the gross receipts tax in Argentina, it should not be part of the cost of a good produced in one jurisdiction and consumed in another. In other words, citizens of Province A should not pay taxes to Province B, since this last Province would provide public services to its citizens and not the citizens of Province A.
- 4) As with all taxes, **subnational taxes should be perceived as fair** by taxpayers and should be easy to administer.

2. The need to replace the Gross Receipts Tax.

In the previous Section, we analyzed why we should increase the current tax base of the provinces, decreasing the coparticipation mass so as to achieve a greater fiscal correspondence. In this Section we explain why we cannot do that unless we replace the gross receipts tax.

In Argentina, the tax structure is heavily biased towards consumption taxes. At the federal level, the national VAT is the most important tax in terms of revenue, 40% of total revenue⁶, and

⁶Tax structure in Argentina 1993 – 1998 in percentages. Source: Secretaría de Programación Económica del Ministerio de Economía y Obras y Servicios Públicos from Argentina.

	1993	1994	1995	1996	1997	1998
VAT	38,47	38,12	40,46	42,72	41,34	38,48
Other Consumption	11,56	11,09	10,66	12,78	14,62	10,40
Taxes						
Income Tax	10,42	13,11	14,82	15,67	17,04	17,50
Social Security Taxes	31,19	30,53	28,58	23,63	21,43	26,90
Foreign Trade Taxes	5,96	6,31	4,84	5,71	5,56	5,20
Other	2,40	0,84	0,64	0,15	0,00	1,52
TOTAL	100,00	100,00	100,00	100,00	100,00	100,00

when considering total consumption type taxes they make up around 50% of total tax revenue for the Nation. At the local level, the GRT is the most important revenue source for provinces, accounting for approximately 55%⁷ of their own tax revenues. However, the GRT suffers from serious economic and legal deficiencies. In consequence, it will be inappropriate and inefficient to increase the provincial tax base with the GRT, much more inefficient than the national VAT whose base will substitute. Hence, the pretended fiscal correspondence could not be improved unless we first replace the gross receipts tax by a more efficient consumption tax.

In this Section, we then describe and analyze the following issues. First, the different types and economic characteristics of consumption taxes. Second, according to the first point why and how the GRT suffers from economic inefficiencies. Finally, we enumerate the principal proposals put forward to replace the GRT so that in Section 3 we can understand why the SVAT is the best replacement for the GRT.

2.1. Different alternative consumption taxes.

Before explaining the main objections to the GRT, it is important to remember the different existing alternatives regarding consumption taxes. In short, consumption taxes can be classified the following way:

- General (i.e. the ICMS in Brazil) or specific (i.e. the internal excise taxes in Argentina) whether they tax the totality of the goods and services or some selected ones. From the point of view of economic efficiency general taxes are preferred to specific taxes, because they are more neutral.
- 2) **Cumulative** (i.e. the gross receipts tax in Argentina) or **non-cumulative** (i.e. the Valued Added Tax), whether the tax paid in previous stages may or may not be deducted in later stages. The accumulation of taxes is a non-desired effect for economic efficiency basically because of two reasons:

1. The actual tax paid depends on the number of stages of the goods' production cycle, and

	1993	1994	1995	1996	1997	1998
Gross Receipts	56,09	56,30	55,47	54,78	55,71	56,47
Tax						
Sellos (Stamps	11,08	10,77	9,37	8,64	8,89	8,93
Tax)						
Others	32,83	33,53	35,16	36,58	35,39	34,60
	100,00	100,00	100,00	100,00	100,00	100,00

⁷ Total Provincial Tax Revenue. Source: División de Asuntos Fiscales del Ministerio del Interior. Argentina

2. It does not allow knowing exactly the incidence of the tax in the goods' cost at the moment of exporting, which means, according to the GATT rules that the tax cannot be refunded.

- 3) **Single-stage taxes** (i.e., the retail sales tax in the USA or the industrial production tax in Brazil or the excise taxes in Argentina) or **multi-stage taxes** (i.e., the Value Added Tax or the Gross Receipts Tax) whether applied on a single stage of the productive cycle or in more than one.
- 4) Regarding interjurisdictional sales one can apply the criteria of **origin-based** or **destination-based** tax depending if the tax is paid to the jurisdiction where the goods are produced or to the jurisdiction where such goods are consumed. This alternative admits in turn two variants: **deferred payments** or **offsets** (**clearing**) if the tax is paid directly to the destination jurisdiction or else the payment is anticipated to the origin who collect it on behalf of the destination. Although the principle of destination for equity reasons is the most appropriate for consumption taxation, both variants require a truly efficient fiscal administration, which makes the VAT to be usually discarded whenever choosing adequate taxes for decentralization purposes.

The economic inefficiencies of the GRT, severely criticized by doctrine since Adam Smith's time, made the provinces, through the Fiscal Agreement of August 12, 1993, commit themselves to replace it with another general consumption tax, which would tend to guarantee tax neutrality and economy competitiveness.

2.2. Main Objections to the Gross Receipts Tax (GRT).

The main objections to the GRT tax are:

- 1) It is **multiphasic** (since it is applied from the first stage of the productive cycle) and **cumulative** (because it does not allow deducting taxes already paid in previous stages). This, in turn, causes:
 - a) First, the **loss of tax neutrality**, since the effective and definite tax rate will depend on the amount of stages on the goods' productive cycle, so that it becomes an incentive for the integration of enterprises so as to reducing taxes to be paid. Thus, two identical goods can collect different amounts of taxes, should one good be manufactured by only one company and the other by several companies. It is not wrong for businessmen to want to integrate their companies, but it is wrong for them to do so only for tax purposes.
 - b) Second, the tax incidence in the cost of the product cannot be known with certainty, since it depends on the number of stages used in manufacturing each good, which is almost impossible to determine with a certain degree of accuracy. Due to the rules that regulate foreign trade, the tax cannot be refunded at frontiers, so it is included in the costs of export products, making the argentine goods to loose competitiveness at foreign markets.

- 2) Since in Argentina, there is no perception for this tax on imported goods, it becomes a **genuine subsidy for imported goods**.
- 3) Another of the criticisms to this tax is the recent **creation of domestic customs**⁸, something against Section 9 of the Constitution. With the intention of eliminating the accumulation of taxes, and because to the commitment to the Fiscal Agreement, the provinces exempted the first stage of the productive cycle from this tax but insofar as the enterprise or the exploitation was located within its boundaries, taxing the ones manufactured outside the province. Thus, identical goods manufactured at the same cost in different Provinces and consumed at the same place pay different amounts of this tax, if it is produced in the Province where it is consumed or in a third one; then the Gross Receipts Tax turns into a genuine "import duty".
- 4) This tax also **applies partially the criterion of origin**, and this criterion requires unification of tax rates, in order not to affect the location of companies. Although at present the tax rate is quite similar in most provinces, some differences do exist, as in the wholesale business, which has made some companies move, mostly from the Province of Buenos Aires to the City of Buenos Aires (which has lower rates).

2.3. Different proposals for the substitution of the Gross Receipts Tax.

Different proposals have been put forward to replace the Gross Receipts Tax, such as:

- 1) **Biphasic tax on wholesales and retail sales**. This alternative would not imply an important modification to the current system, considering the current exemptions on almost all the activities included in the first stage of the productive cycle. However, as explained before, the exemption of the first stage is limited and distorting, since it is only applied as long as the company is established within the jurisdiction and not outside of it.
- 2) A monophasic tax on retail sales. Its main advantage is that it is a nonexportable tax, whose main advantage with respect to the VAT, is that it does not require any type of refund. However, some criticism may be made to this tax, such as:
 - a) In Argentina, the market supply regarding the retail stage is not concentrated in a small group of large stores, as it happens in the United States of America, but on a large number of shops. Although this has started to change in the last years, the Tax Administration has difficulties because the collection would depend mainly on the behavior of a large number of small taxpayers.
 - b) It requires differentiating between retail sales and sales to final consumers. The tax should apply only to final consumers, so that a vehicle or a computer sold to a firm should not be taxed as it would become part of the good's cost with the undesired cascade effect. The difference, whether the sale is for a final consumer or not, opens the opportunity to evasion and would also interfere with tax administration.

⁸ This problem is better explained in Section 3.5.

3) The provincial VAT subject to the criterion of origin. One of the main disadvantages of this alternative is that it requires the rates of different jurisdictions to be the same. This brings about opposition from some provinces, due to the loss of tax power implied. If different jurisdictions levy different rates under the origin principle, the VAT would affect the geographical localization of firms, producing a *war on tax rates*, as a consequence of competition between the different subnational governments to attract productive activities through continuous reductions in tax rates. That can lead, as in Brazil with the ICMS, to the underfinancing of some States. In this country, the origin-based VAT produced another undesired effect, in fact a fraud known *as invoice sightseeing*. To the sales between registered traders of two different States, two different tax rates were levied (in general 7% or 12%, the lower to the Northern States, the poorest). This created the incentive to declare local sales and sales with higher rate jurisdictions as sales to fictitious customers in the lower rate jurisdictions.

Besides, in the case of interjurisdictional sales, since the customer of the buying state has to hold the fiscal credit as a tax collected for the other jurisdiction, the state of origin needs to compensate the state of destination for that credit, making it quite complicated for the administrations. This makes this alternative practically unfeasible in Argentina. It is hard enough to imagine how complicated would be to control a subject if he buys goods in all twenty-four (24) jurisdictions of the country.

4) **The Provincial VAT subject to the criterion of destination**. This alternative does not solve the problem of interjurisdictional sales. According to the principle of destination, the goods should leave the place where they were manufactured free from taxes, in order to be taxed by the jurisdiction where the goods are consumed. This implies that the goods manufactured in one province and sold in another, should be tax exempted in the first province. It would be very difficult, if not impossible, for the provincial administrations to control, without domestic customs, if the buyer really lives in another jurisdiction or not. This method requires extremely efficient administrations, which hinders its implementation.

3. The Shared Value Added Tax⁹.

After these considerations, it is the opportunity to explain the SVAT. In particular, in this paper we explain several of its aspects: its functioning, its main advantages, how it complies with provincial autonomy (how exemptions can be implemented and how it allows provinces to set their own tax rate), the level of the federal perception tax, the treatment of interjurisdictional sales to final consumers and the elimination of domestic customs.

3.1. How the SVAT works.

The "*Shared*"¹⁰ Value Added Tax owes its name to the fact that the tax system, is shared between the Nation and the States (this being its main characteristic) and has, in principle at least,

⁹ To get more details on this subject, see Ricardo Fenochietto (1998) op. cit.

¹⁰ This tax was proposed in Brazil to replace the federal specific IPI and the local general ICMS. To get more details on this proposal, see Varsano Ricardo (1995), op. cit.

two rates: one for the federal state and another (that would replace the gross receipts tax rate) for the provinces. Thus, to the VAT's present rate and to the same base another one is added, which is to be levied by the provinces, as shown in the example below:

Net Price	100
Federal VAT (21%)	21
Provincial VAT (5%)	5
Total	126

The buyer, in turn, will have two tax credits and will have to make two payments: one for the federal government and one for the province in which he is a resident.

It is a general, non-cumulative consumption tax and applies the principle of destination. One of the major advantages of this tax resides in the way it treats sales among subjects that are residents in different provinces, because it solves the problem of interjurisdictional sales.

The problem of interjurisdictional sales can be stated in the following way: if an individual lives in one jurisdiction and buys and/or sells in others, how do the provinces distribute the taxes among the ones where all those activities were performed. The two solutions actually enforced in Argentina are the multilateral agreement and the federal coparticipation. The former, in the case of the gross receipts tax turns out to be too complex and hybrid (since it applies both origin and destination together) but not because of this its a lesser solution. The latter is also a solution: not directly as the agreement, but indirectly. The federal government levies taxes in order to distribute whatever is collected, based on different criteria, between the federal government and the provinces.

The "Shared" VAT offers another solution different from the rest: in the case of interjurisdictional sales the Federal government collects all the taxes, (21 percent plus 5 percent) so the rate of the national tax increases, annulling the provincial tax. Thus, the product leaves the state of origin free of provincial taxes but taxed with a perception by the federal government, so that the taxes paid are practically the same whether the goods are consumed in that jurisdiction or "exported" to be consumed in another jurisdiction. This annuls the possibility, ever present in a consumption tax that applies the principle of destination, that a resident in the province of origin could give a domicile (an address) in another jurisdiction to evade taxes.

When the first sale is made in the state of destination, each jurisdiction will get its taxes: the nation 21 percent and the destination province 5 percent. The tax credit will be:

- 1) Of 26 percent for the federal tax which diminishes the incoming federal tax of the value added in its jurisdiction, and
- 2) Of 0 (zero) percent for the Value Added Tax of the destination state, which will increase the tax to be paid to this jurisdiction.

It should be pointed out, that by applying this method, **the federal government does not obtain greater revenues than the ones obtained through the present national VAT system**; in its role as "agent" between the state where production takes place and the state where consumption takes place, whatever excess burden collects first, is not collected later on.

The following example will help to understand better the working of this tax, always bearing in mind a rate of 21 percent for federal tax and 5 percent for the provincial tax:

1. Province A: a passive subject named S buys 2 (two) goods in Province A where he resides, from Producer P at \$100,00 each, and sells: good "1" in Province A and good "2" in Province B to subject SB at \$150,00 each:

A. Purchase Invoice for Manufacturer P for goods 1 and 2	Net Price Federal VAT Province A VAT Total	\$ 200,00 42,00 <u>10,00</u> 252,00
B. Sales Invoice for local sale of good 1:	Net Price Federal VAT Province A VAT Total	150,00 31,50 <u>7,50</u> 189,00
C. Sales Invoice for sale of good 2 to resident in Province B:	Net Price Federal VAT Total	150,00 <u>39,00</u> 189,00 ¹¹
D. VAT to be paid to the Federal government by Passive Subject S:	Tax debit (31,50+3 Tax credit Balance due	39) 70,50 <u>(42,00)</u> 28,50
E. VAT to be paid to Province A by Passive Subject S:	Tax debit Tax credit Credit Balance	7,50 (10,00) (2,50)
F. Total tax revenue for the Federal government through Subject S and supplier P's activity in Province A:	(42,00 + 28,50)	70,50 ¹²

G. Total tax revenue for Province A by activity

¹² Being the value added produced in this jurisdiction of: $2 \ge 150 =$ 300, the tax collected by the Federal government can be illustrated as follows:

total value added added value jurisdictional sales Total	$300 \ge 21\% = 63,00$ $150 \ge 5\% = \frac{7,50}{70,50}$
Accumulated fund in Economy	\$150 x 5% = 7,50

¹¹ In this case tax neutrality can be clearly seen, the price stays the same, independently of the jurisdiction where it is sold.

in said Province by Supplier P:	10,00
by Subject S :	0,00
Total	10,00

2. Province B: Taxpayer SB resident in Province B, besides buying good "2", buys a similar one, good "3" in thus Province to Supplier PB at the same price. Taxpayer SB sells them at \$ 300,00 each (one in Province C and the other in Province B).

H. Purchase invoice of good 2 in Province A	,		
This invoice belongs to point C in Province A	A:	Net Price Federal VAT Total	150,00 <u>39,00</u> 189,00
I. Purchase invoice in Province B of good 3		Total	189,00
to supplier PB:		Net Price	150,00
		Federal VAT	31,50
		Province B VAT	7,50
		Total	189,00 ¹³
J. Sales invoice in Province B:		Net Price	300,00
		Federal VAT	63,00
		Province B VAT	<u>15,00</u>
		Total	378,00
K. Sales invoice to subject residing in Provin	ce C:	Net Price	300,00
		Federal VAT	78,00
		Total	378,00
L. VAT collected for Federal government			
by subject SB	Tax debit (63,	. ,	141,00
	Tax credit (39	9,00+31,50)	<u>(70,50)</u>
	Balance		70,50
M. VAT collected for Province B			
by subject SB:		Tax debit	15,00
		Tax credit	(7,50)
		Balance	7,50
N. Total tax collected for Federal governmen	t		
a) in Province A:			70,50
b) in Province B : from	**	31,50	100.00
from	taxpayer SB	$70,50^{14}$	102,00

¹³ In this case too, tax neutrality can be clearly appreciated: the goods have the same tax burden independently of the jurisdiction where they originated.

¹⁴ Tax collected for the Federal government through the activity carried on in this stage can be explained as follows:

	8	\$
Value added :	by good 2:	150,00
	by good 3:	300,00
	Total	450,00
Federal rate		<u>x 0,21</u>

O. Total tax collected in the Provinces:

a) in Province A:			10,00
b) in Province B:	from supplier PB:	7,50	
	from taxpayer SB:	7,50	<u>15,00</u>
Total			25,00

3. Province C: the subject resident in Province C sells good "3" in that Province to a final consumer for \$ 400:

P. Sales invoice in Province C:	Net Price Federal VAT Province C VAT Total	400,00 84,00 <u>20,00</u> 504,00
Q. Valued Added Tax to be collected for the Federal Government:	Tax debit Tax credit Balance	84,00 (78,00) 6,00
R. Valued Added Tax to be collected for Province C:	Tax debit Tax credit Balance	20,00 <u>0,00</u> 20,00
S. Total tax collected for the Federal Government:		
a) in Province:b) in Province B:c) in Province C:Total		70,50 102,00 <u>6,00</u> 178,50
T. Total tax collected for the Provinces:		
a) Province A b) Province B c) Province C Total		10,00 15,00 <u>20,00</u> 45,00

U. Justification of taxes collected for the Federal Government and the Provinces:

1.- Value Added in the three Provinces:

Sub-total	94,50
Minus tax advanced in previous stage by Good "3"	(7,50)
Plus tax advanced in the present stage by Good "3"	15,00
Total	102,00

a) Province A:b) Province B:c) Province C: Total	2 goods at \$ 150,00 each by good "2" by good "3"	300,00 150,00 300,00 <u>100,00</u> 850,00
2 Tax collected for the Federal G	overnment :	
	850 x 21% =	178,50
3 Value Added Times provincial plus credit balance for Subject Total tax collected for the Prov	S in Province A	42,50 2,50 45,00
4 Accumulated fund 0 x 5% =	0,00	

3.2. The main advantages of the Valued Added Tax and the "Shared" Valued Added Tax.

Although it is not the main purpose of this paper to comment on the advantages of the Value Added Tax, it is important to point them out briefly, since this form of consumption tax, which sometimes is called "Shared" VAT is a value added type of tax too.

The best way of summarizing these advantages is quoting Sjijbren Cnossen¹⁵ who wrote: "The recent universal introduction of the value-added tax (VAT) should be considered the most important event in the evolution of tax structures in the last half of the 20th century. Since the late 1960s, the VAT has become the main consumption tax in 105 industrial and developing countries. Although the specific reasons for adopting the VAT differ from one country to another, the main argument been that a properly designed VAT raises more revenue with lower administrative and economic costs than with other broadly based consumption taxes. A well-designed and administered VAT does so in a highly neutral fashion. Unlike the income tax, it does not influence the forms or methods of doing business. The tax bill is the same for the product made in the corporate or noncorporate sector, with capital-intensive o labor-intensive technology, or for one made by integrated or specialized firms. The VAT also ensures neutrality in international trade by freeing exports of tax and treating imports on a par with domestically produces goods (destination principle). Clearly, these tax attributes are important in an interdependent, competitive world."

The above mentioned paragraph has been taken out from an article where the author describes what the Valued Added Tax is like in the 105 countries where it is in force. In none of them, is a "Shared" Valued Added Tax used, this being the principal disadvantage for its enforcement, the lack of experience and comparative legislation. According to Cnossen there are approximately 80 countries throughout the world that have not adopted the Valued Added Tax. Half of them are islands on the Caribbean Sea and Oceania. The most notorious example of a country that does not use this type of tax is the United States of America. In spite of this, there are proposals such as Heckman, Lochner and Taber (1999) that advocate a flat consumption tax for the US since

¹⁵ Cnossen, Sijbren: Global Trends and Issues in Value Added Taxation. International Tax and Public Finance, 5, 399-428 (1998). Kluwer Academic Publisher, Boston. Manufactured in The Netherlands.

contrary to popular beliefs, this will improve the earnings of both capital and labor in the long run¹⁶. This is an important issue since most critics of the use of the Shared VAT as a tool for tax decentralization, as we will see later, claim that it is better to "copy" the US model, where Income Tax is the "shared" tax and the most important in terms of total revenue there, and the US consumption tax is only a State tax. If the progressive income tax in the US should be changed for a flat consumption tax, then the US should also study a system of shared consumption taxes. In Argentina, we already have the advantage that the consumption tax is the most important in terms of revenue.

After this brief summary of the advantages of the Valued Added Tax it is now the turn to highlight the ones of the *Shared* Value Added Tax, most of which are summed up in Cnossen's writing:

- 1) It is a **neutral tax** (as long as it has only one rate and does not acknowledge too many exemptions).
- 2) From the taxpayer `s point of view **it is easily determined**. The mechanism of debit subtraction against credits is the same as the current Federal Valued Added Tax in force in Argentina which makes its implementation easy. It reduces the paperwork for those individuals included in the multilateral agreement that at present have to make up to twenty four tax declarations, while the *Shared* Valued Added Tax will demand from individuals who buy in different jurisdictions and sell in one of them, only one tax filing. A decline in the tasks of the taxpayers regarding their tax burden comes as a result of not having to include purchases or to make filings in jurisdictions where they only bought goods.
- 3) **It facilitates administration tasks** because of cross-controls between liable parties. It will encourage the realization of joint efforts between the Federal and Provincial administrations with the pertinent cost reduction. Likewise, since it is applied from the first stage of the production cycle, it does not only anticipate revenue but also since in that stage we find big industries, it allows for the concentration of audit efforts.
- 4) Regarding international trade it enables to know accurately the tax incidence in the product's cost at the moment of export, so that it can be refunded by the Provinces that decide to do so, according to the GATT's rules.
- 5) **It applies the principle of destination,** more appropriate for a consumption tax than the principle of origin, typical of a production tax. Even though it applies this criterion it does not need compensations or credit clearing between the different administrations.

Also, by applying the destination principle, the *invoice sightseeing* effect disappears. In fact, the tax rate to be levied is the one corresponding to the State where it is consumed, with the exception of distance sales that we analyze further on.

6) It facilitates a gradual decentralization of tax revenue increasing provincial autonomy.

¹⁶ Heckman, Lochner and Taber (1999), "Estimating and Evaluating Human Capital Policies in a General Equilibrium Environment", Working Paper.

3.3. The "Shared" Value Added Tax and its adequacy for Provincial autonomy.

Provincial autonomy within the SVAT system implies that each Province can determine the essential aspects of their own provincial tax. To implement it, it is necessary to fulfill the following steps:

- a) First, there must be a federal law to establish the object, the subjects, the Federal rate, the exemptions (although it would be better if they did not exist), the tax base and the federal perception rate. The selection of the Chamber which is in charge of discussing the treatment of this law deserves a separate comment: because it is about imposing a tax it should be discussed in the House of Representatives, but since it deals with the distribution of Provincial tax revenues it has to be discussed in the Senate. This is an inconvenience at present in Argentina since practically most of the sanctioned laws that establish taxes in recent years take into consideration the destination of tax revenues, so that aside from being laws that determine taxes they are true Coparticipation agreement laws.
- **b)** Second, each jurisdiction should approve its own tax law where it would set provincial rate or rates and introduce modifications considered necessary in the federal law regarding the object, the subjects, tax base and exemptions. Although it is more convenient, in order to clarify and simplify the tax system, to introduce the least possible changes, the best way to exercise autonomy is for the provinces to have absolute powers in order to set their own regulations referred to the provincial portion of this tax.

In this Section we will analyze the autonomy in setting tax rates and the autonomy in setting exemptions.

3.3.1. Provincial SVAT rates.

The example illustrated in Section II was used to explain the way this type of Valued Added Tax works. An easy example was chosen for didactical purposes; of few goods, and provincial perception rates, uniform and equivalent to 5 percent.

Nevertheless, nothing prevents Provincial rates from varying among different jurisdictions. In this way, each Province could set its own rate keeping its tax autonomy. In other words, each Province could decide the level of provincial expenditure to have.

Regarding the provincial tax rate, each jurisdiction should be able to determine it in whatever level it chooses, including zero, instead of setting a maximum and minimum rate. Although this could lead to a great variability in rates, we believe provincial autonomy must always prevail, and should not be subject to limitations. On the other hand, experience referred to the gross receipts tax shows that their overall rates do not differ greatly amongst the provinces.

3.3.1.1. Determination of the level of the federal perception rate.

If the provincial tax rates were similar, the federal perception rate should be similar to them. If they were not similar, **the amount of the perception tax must be established according to the weighted average of all the provincial rates and the consumption of each jurisdiction**.¹⁷

The following example will help to understand the procedure to calculate the perception rate:

Province	Consumption	Provincial Tax	Potential Tax
		Rate	Revenue
1	20	2.5%	0.50
2	100	3 %	3.00
3	130	3.5%	4.55
4	50	3%	<u>1.50</u>
	300		9.55

Thus, the perception rate must be: 9.55 / 300 = 3.18%

This rate should be updated from time to time in order to introduce the modifications that could take place in the provincial rates. In order for the system to be clear and simple, it is better for this to be done once a year, but if needed this term could be reduced when the rate gets out of range in a preestablished percentage.

It is to be expected, through the experience with the gross receipts tax that there will not exist much dispersion between this average and the maximum and minimum provincial tax rates.

But if this does not happen, and the federal perception rate gets far from the maximum, there would be an incentive when a sale is made to a final consumer within the province that set this maximum rate, to declare that the sale was made in another province paying the lower rate of perception. Nevertheless, this possibility is limited for two reasons:

- a) Taxpayers acting in this way will not be able to use the credit of the provincial tax when the product was bought.
- b) For retail stores, the possibility of declaring a large number of sales to other jurisdictions is almost nil.

On the other hand, should the perception rate be too far from the minimum, it will be an incentive to declare sales made in other jurisdictions as if made to final consumers in the province with the lower rate. But this, too, shall be discouraged:

- a) Because it will not be possible to deduce expenses for freight paid for transporting merchandise to other jurisdictions.
- b) Since the amount of interjurisdictional sales will be higher than the sales to final consumers, it is not that easy to disguise wholesale as retail sales. Besides, it is necessary to have facilities that justify the amount of retail sales. There is nothing against

¹⁷ Since when the system begins, the revenues from interstate sales would flow to the Federal Government, and not give rise to credits and refunds, some "fund" would remain that we assume it is distributed back to the Provinces in some fair manner.

presuming, as it is done through the present VAT legislation, that a sale is a sale for final consumers when the amount is consistent with market uses and customs.

The possibility of declaring local sales as sales to other jurisdictions or sales to other jurisdictions as local sales, in a destination based tax is of a totally different nature than the problem known as *"invoice sightseeing"*, to which we referred in Section 2.3 while analyzing the functioning of the origin VAT. The inconveniences it created in Brazil, where the existence of two different rates and sensibly lower to the local rates to tax interjurisdictional sales, induced some firms to declare local sales or sales to a high rate state as made in the lower rate states. **Because the SVAT is a destination VAT, the tax is always paid where the good is consumed, no matter if the invoice "sightsees" all Provinces, the tax is collected where the good is consumed (with the exception of distance sales).**

Concluding, it is expected that there will not be a great difference between the maximum and minimum provincial rates, but if it is the case, the possibility of evasion by choosing a fictitious sale market would be almost nonexistent.

3.3.2. Exemptions.

As we explained, fiscal federalism couldn't be limited to the possibility of determining different levels of tax rates, it must go further beyond. Here we consider the autonomy to set exemptions.

It should be stressed that from the economic point of view it is more convenient if the taxes are general and do not include any exemption. In this particular case it would be better if local and federal taxes did not include them. Not only would this make the tax more neutral but also the system would be simpler and more transparent.

But as provincial tax autonomy must prevail, it might be the case that one of the provinces exempts some goods and services from the local tax that are indeed taxed by other jurisdictions and by the federal tax. So it is necessary to analyze the procedure that should be followed in these cases. It is necessary to understand that since it is a tax that applies the principle of destination, the exemption will be enforced only when the good is consumed in the jurisdiction with the local exemption. For example, if Province A is the only one that frees good 1 from being taxed, the exemption will apply when the goods are consumed in Province A regardless of where they were produced. Good 1 shall bear the tax of Province B if it was consumed there, even though it was produced in Province A and vice versa. Where Good 1 produced in Province B but consumed in Province A it shall be freed of local taxes. **The application of the principle of destination not only implies to tax exports at zero rate, but also giving the same tax treatment to imported goods and to domestic production.**

The above statements can be summarized in the following way: Suppose Province A does not tax good 1; Province B taxes good 1

Place of Place of Treatment

Manufacturing	Consumption	
Prov. A	Prov. A	Exempt
Prov. A	Prov. B	Taxed
Prov. B	Prov. A	Exempt
Prov. B	Prov. B	Taxed

The following example will help to understand how the perception rate works regarding exemptions. A subject SA residing in Prov. A makes 2 units of good 1, whose consumption is tax exempt in Prov. B but taxed in Prov. A. No materials are needed to produce them. Subject SA sells both items at \$ 100 each; one in Prov. A and the other in Prov. B to registered trader SB. The latter makes another good 1 and sells both (the one he bought and the one he manufactured) at \$150 each. The federal tax rate is of 21 percent, the perception rate is 5 percent and Prov. A's tax rate is 4.5 percent.

1) Province A:

A. Local sales invoice:	Net Price	100.00
	Fed. VAT	21.00
	Prov. A VAT	4.50
	Total	125.50
B. Sales invoice to taxpayer SB:	Net Price	100.00
	Fed. VAT	21.00
Fed.	VAT perception	5.00
	Total	126.00

2) Province B:

C. Purchase invoice to taxpayer S	SA: Net Price	100.00
(sales invoice of 1) B.)	Fed. VAT	21.00
Fed. VA	AT perception	5.00
	Total	126.00
D. Sales invoice N° 1 in Prov. B	Net Price	150.00
D. Sales involce iv 1 in 110v. D	Fed. VAT	<u>31.50</u>
	Total	181,50
E. Sales invoice N° 2 in Prov. B	Net Price	150.00
	Fed. VAT	31.50
	Total	181.50

3) Justification of taxes collected:

For the Federal Government:

through Fed. Taxes:	Prov. A 21+21= Prov. B 31.50 + 31.50-21 Total	42.00 <u>42.00</u> 84.00				
	Prov. A: 100+100 = 200x 0.21 = Prov. B: 150+150-100=200 x 0.21= Total	42.00 42.00 84.00				
Perception VAT: total interjurisdictional sales 100x 0.05 = Perception Prov. B = (Total						
Accumulated f	Fund in the economy $0.00 \ge 0.05 =$	0.00				
To jurisdictions: Prov. A	: consumption 100 x 0.045 =	4.50				
Prov. I	3: tax exempt consumption 300 x 0=	= 0.00				

3.3.2.1. Exemptions in the Federal and Provincial SVAT tax on Provincial intermediate transactions.

We must now analyze what would happen if a good is exempted from federal taxes but not from provincial taxes, and the different combinations that might come up. The way in which final consumers are dealt with is not included here, since it will be a subject of the following section.

As it happened with the tax rate levels, it is important to differentiate those activities that are exclusively local from those that may, at some point, develop interjurisdictionally. The first group is made mainly of services, some of which are currently taxed with differential rates (cafés, restaurants, discos, beauty shops, etc.). Regarding this type of activities, nothing keeps the provinces from exercising their fiscal autonomy in an extensive way, as much in rates as in exemptions. But in reference to the second class of goods and services, it is advisable to have tax coherence, in order to achieve a high level of simplicity and clarity.

The chart below considers all the alternatives that might come up, some of which may produce some inconveniences, which will be analyzed accordingly:

Prov		Federal		Place of	Place of		Treatment	
Α	B		Nº	Manufacture	Consumption			
						Fed.	Prov.	Federal
								Perception
Т	Т	Т	1	A	А	Т	T (A)	
			2	А	В	Т		Т

			3	В	А	Т		Т
			4	В	В	Т	T (B)	
Т	Т	Е	5	А	А	Е	T (A)	
			6	А	В	Е		Т
			7	В	А	Е		Т
			8	В	В	Е	T (B)	
Е	E	Т	9	А	А	Т	Е	
			10	А	В	Т		T or no T
			11	В	А	Т		T or no T
			12	В	В	Т	Е	
Е	E	Е	13	А	А	Е	Е	
			14	А	В	Е		E
			15	В	А	Е		E
			16	В	В	Е	Е	
Т	E	Т	17	А	А	Т	T (A)	
			18	А	В	Т		Т
			19	В	А	Т		T or no T
			20	В	В	Т	Е	
Т	E	Е	21	А	А	Е	T (A)	
			22	А	В	Е		Т
			23	В	А	E		E
			24	В	В	E	E	

Note: T means taxed, E means exempted. Under the last column called Treatment, there are three categories: Fed. that means Federal and corresponds to the Federal VAT, Prov. means Province and refers between parentheses to the Province that impose a tax on the good, and finally Federal Perception, refers to the flat rate that is perceived by the Federal Government (transitorily) from sales made between Provinces.

The first group of alternatives (lines 1 to 4) does not present any doubts, since it is about products taxed by all three jurisdictions. In the Treatment Provincial column whatever is written inside the parenthesis shows the jurisdiction that should tax the sale.

The second group, where both provinces tax a certain good and the Federal Government exempts it, shows the inconvenient with imposing the Federal perception rate in the case of interjurisdictional sales (lines 6 and 7), because it concerns goods taxed by the provinces but exempted by the Federal Government. In other words, if an individual sells only goods exempted from federal taxes, and does not file the VAT to the Federal Government, when making a sale to another jurisdiction, it should collect the perception and turn it over to the Federal Government; otherwise this would be an incentive for the seller to report domestic sales as interjurisdictional in order to evade local taxes. In other words and **according to the methodology of this tax, a tax must be paid: either the provincial tax or the federal perception tax.** This creates an additional incentive for the elimination of exemptions in the federal tax. Although this is a rare situation in the current Argentine legislation, we propose three different alternatives to solve the problem:

a) That the federal perception be collected. The main problem that might arise in this case is the destination of the federal perception, because its nature is to replace the interjurisdictional provincial VAT, and because it should not remain in the Federal Government's coffers¹⁸.

¹⁸ The procedure through which the State distributes among the provinces whatever it collects, may, in these cases, have two (2) variants. First, the province of destination should admit the collection as tax credit versus the Federal perception tax, charging it to the Federal Government afterwards. This alternative would, without doubt, complicate the tax's

- b) That instead of collecting the federal perception, the seller collects and deposits the provincial tax of the jurisdiction of destination. The disadvantage this has is that it would difficult the taxes' administration in the province of destination, because it would have to control subjects residing elsewhere.
- c) That the tax be deposited in the jurisdiction of origin. The problem that arises here is the treatment to be given to the future sales of that good in the jurisdiction of destination: should the tax deposited previously in the jurisdiction of origin be considered or not as fiscal credit. Allowing fiscal credit would demand a clearing between the provinces, and the contrary would imply paying the tax twice, that is, accumulating it and establishing internal customs for the sake of taxes.

In case a), a system of distribution of the Federal perception collected by the Federal Government should be implemented among the provinces. This is the best system in case the good transits through more than two jurisdictions. Case b), where the tax is paid to the jurisdiction of destination, by the subject that made the sale in the jurisdiction of origin, in our opinion, should not be considered because of two reasons:

- a) First, because it will only be acceptable if the good transits only trough two provinces; being very difficult that the exporter in the province of origin knew at the moment of the sale if the good would be consumed where he sold it or if it would be sold in a third province.
- b) Second, because it is possible to accumulate provincial tax since the exporter in the province of origin would not have tax credits to deduct from the VAT of the destination province.

The third group of alternatives does not show problems regarding the fact that the province of origin exempts the sale, because it would not be necessary, in this case, for the Nation to collect the Federal perception. There is still another aspect that needs to be analyzed: What would happen if the good were taxed in a third province "C"? Would that be an incentive for a registered provincial taxpayer in "C" jurisdiction *to go* to province "A" or to province "B" to make purchases without having to pay the tax of "C"? In principle, it would not because while making the first sale at "C" he will not have tax credit and the tax collected by "C" would be the same, regardless of the province in which the good was bought. Nevertheless, if the sales refer to durable goods, the financial advantage would be considerable enough, to choose the place of purchase based on tax advantages, and then the tax becomes less neutral. In comparative legislation, referring to registered durable goods, the solution can be obtained depositing the tax for the jurisdiction where the good has been registered, which in the case mentioned above would bring a partial solution to the problem.

The fourth group of alternatives, where the same good is tax exempted in the three jurisdictions, does not present inconveniences, except if the good is taxed in a third province. For the taxpayers, the purchase of goods in the exempted province represents merely a financial advantage, but for final consumers it means a substantial one. In this case, the coordination would be a must among frontier provinces with cities nearby.

administration. Another possibility would be, that the Federal Government distributes it among the provinces through some type of mechanism, as for example, the level of net sales in each province.

Regarding the fifth group of alternatives, in line 18, we find the following problem: since the good is taxed in the province of origin and tax exempted in the province of destination, the commercial trade between both provinces must be overtaken by the federal perception tax, because if not, it would become an incentive to declare domestic sales as sales carried out in another province, to avoid domestic taxes. The case in line 19 admits two alternatives: first, the interjurisdictional sale is reached by the federal perception, and second, it is not.

Regarding the sixth group, the situation in line 22 (similar to that of lines 6 and 7) shows the following problems: if the seller does not pay the interjurisdictional federal perception he could evade the taxes stating domestic sales as being carried out in another province. Therefore, the more viable solution, as we explained in the case of lines 6 and 7, is that the taxpayer pays the federal perception rate, and in order to do that, he should enroll and make a filing.

Regarding the case explained in line 23 the problem is not so serious. Since the good is exempted in the jurisdiction of origin, there is no reason for the federal perception tax not to be collected and the tax entered, at the moment the sale takes place, in the province of destination.

Summarizing, in the previous chart the criteria which holds that the federal perception rate should be collected every time a good is taxed in the province of origin, while if it is exempted in that jurisdiction, it would not be necessary. As one can observe, except in lines 14,15 and 23, where the good is exempted in the place of manufacturing, the rest of the cases show the interprovincial trade as always taxed. The difference between them and the example in line 10 is that, in the latter, the good is taxed by the federal tax and that facilitates the collection of the perception, creating a true incentive to eliminate exemptions. In other words, the federal VAT law could state that the federal perception should always be collected in the cases of jurisdictional trade, except in the case of goods exempted in the jurisdiction of origin that are also exempted from federal taxes.

It is important to reiterate that, if there were exemptions, it would be better for these to be common to all, in order to clarify and simplify the system, as much for the administrations as for the taxpayers. But if there were exemptions, the problems would be limited to a small group of goods and services, should we consider the current Gross Receipts Tax legislation and the Federal VAT Law.

3.4. Tax treatment of interjurisdictional sales to final consumers.

One might ask which should be the treatment applicable to sales made to a final consumer residing in another province. Two different situations should be distinguished. First, that the buyer crosses the provincial borders; suppose then that taxpayer A residing in Prov. A crosses the provincial border and buys the good in Province B. In this case, the tax should be paid to Province B, considering as taxable event the sale of the goods upon delivery. It would be difficult both for the taxpayers and the administration that the sale be taxed in the Province where the taxpayer resides or charged with the federal perception rate. This is because in each sale to a final consumer the buyer's place of residence should be checked and because it would facilitate evasion allowing individuals to pretend residing in another province that has a lower tax rate, or a provincial rate, where the sale was made, higher than the federal perception rate.

The second situation that can occur is with distance sales, through ordinary mail, telephone, Internet or TV offerings. In this case the freight payment to the Province where the goods are consumed would be documented, so we can offer three alternative (suboptimal) solutions to deal with these problem:

- a) First, to give these sales the same treatment given to interjurisdictional transactions between registered traders; that is to tax them with the federal perception rate (apart from the federal rate that always applies). The problem is that the Federal Government would accumulate provincial revenue, since the registered trader does not exist to compute this as tax credit.
- b) Second, to apply the rate of the Province of destination; that is where the buyer resides. This is not a practical solution since we would come back to the problem existing with the gross receipts tax where a registered trader making long distance sales should file as many tax returns as jurisdictions where he sells.
- c) Third, to apply the rate of the Province of origin; that is where the seller resides. This solution violates the principle of destination, hence should be used only as an exception.

The three alternative solutions, as shown, present inconveniences. The solution in a) should be the first to be rejected to avoid one more task to the Federal and Provincial governments that should have to arrange a formula to distribute the accumulation of revenue in federal arks. We propose a "viable" solution that combines the proposals b) and c): up to some level of sales the criteria of origin is applied and up to that level the criteria of destination. It is a very reasonable solution for this type of sales. In fact, when the consumption tax is designed around the principle of destination, it is very difficult to control consumption goods delivered by mail. Hence, it is reasonable that when a registered trader makes few sales of this type to be taxed by the Province where the seller resides. In turn, if the level of sales is large enough, it is justifiable for the destination tax administration to collect and control the tax, even when the seller resides in another Province.

3.5. The "Shared" Value Added Tax and the elimination of domestic customs.

One of the main advantages of **the "shared" VAT is that it does not require domestic customs,** which are expressly prohibited by section 9th of the Argentine Constitution. Instead the VAT either of origin or destination but of the "clearing" version would make these customs necessary. Even though it is accepted that a cumulative and multistage tax as the gross receipts tax does not need them, experience indicates that after the Pacto Fiscal Federal of 1993 (Fiscal Federal Pact), although it was not its intention, domestic customs have been organized. In fact, with the intention of avoiding accumulation of taxes and its undesired effects the provinces agreed through the Pacto Fiscal Federal to free productive activities from this tax. However, most jurisdictions grant this exemption to the extent that industrial plants are located in their own territories, taxing the goods produced elsewhere.

It can be clearly seen that:

- 1) It creates lack of tax neutrality: two identical goods produced in different provinces and consumed in the same province would have a different cost on account of their origin and of the taxes levied on them, thus failing to comply with the "destination" criterion according to which "domestic" and "imported" products should be given the same treatment.
- 2) In fact it has been created, for fiscal purposes, a domestic custom: **payment of gross receipts tax is equivalent to an actual "import duty"** since the tax must be paid to the extent that goods are produced outside the province involved.

4. The SVAT and Federal Coparticipation of Taxes.

In this Section, having concluded that the SVAT is the best to replace GRT or other provincial taxes, we retake the issue of fiscal federalism and its use for achieving fiscal correspondence. We claim that first by replacing the distortionary GRT by the SVAT, and then gradually decentralizing the federal VAT, we can achieve our objectives. Furthermore, since it might be politically difficult to achieve the change of regime we explain how to compensate *producing* provinces when we change a mix (origin and destination) based tax by a destination based consumption tax

The government level that renders the service, for efficiency and equity reasons, should collect taxes. In this way the taxpayer shall be more willing to contribute than to evade taxes. It also becomes an incentive for local administrators to be more efficient regarding expenses due to the fact that they have to bear the political cost of levying taxes. It would be more advisable to reduce evasion and render the same service at a lower cost, spending less, before enforcing new taxes or increasing the old ones.

Another advantage of the "Shared" VAT is that it **facilitates a gradual decentralization of** tax revenue. It allows increasing the provincial tax rates in the same proportion that the federal tax rate decreases and the coparticipation mass accordingly is reduced.

The present coparticipation system is quite complex due to different modifications endured and also because most of the taxes have a particular distribution system, enforced by its own law¹⁹. The treatment of the new Coparticipation Federal Law set forth by article 6 of the Chapter on Temporary Provisions of the Argentine Constitution paves the way to the enforcement of a shared VAT which, aside from being the best tool to substitute the gross receipts tax maybe useful to increase gradually the taxes levied by the provinces, in the proportion that the federal rate decreases.

Needless to say, the fact that decentralization can be achieved gradually through this tax makes it very attractive so the change is not so traumatic. In this way it can be established a transition period with a gradual increase in the provincial tax rate (and decrease in the federal) until achieving the desired goal.

¹⁹ This seems to be against what the Argentine Constitution declares, because while the Coparticipation Law must have as Chamber of origin the Senate (art.75 cl.2) the initiative on tax laws concerns the House of Representatives (art. 52). Thus, the laws that set taxes should not include aspects dealing with distribution.

4.1 The equalization transfer: Useful not only to allocate efficiently and equitably the coparticipation mass but also to compensate "producing" provinces.

One of the main political problems that is usually claimed against the replacement of the Gross Receipts Tax for another consumption tax based on the principle of destination, is that the so called "producing" Provinces²⁰ would be damaged because of loss in tax collection.

Some solution had to be found in order to attenuate the problem. The solution appeared with the so called *"equalization transfers"*, which consists of a specific mechanism, well known in Canada, by which the Federal Government transfers or coparticipates the collected resources with the states²¹.

The equalization is the tool that enables to balance the provincial tax base, guaranteeing each province a minimum level of potential resources per citizen, that is, guarantees fiscal equity with full economic efficiency.

Since in the case of the "Shared" VAT the tax base is the aggregate consumption in the economy, the procedure consists of:

- a) Determining the aggregate consumption and its distribution by Province.
- b) Determining the per capita consumption of the country and the per capita consumption of each province.
- c) Comparing the per capita consumption of the Nation with the corresponding in each $Province^{22}$.
- d) Finally, the Federal State should transfer each province that has a per capita consumption less than the standard consumption, the result of applying the average tax rate to difference determined in c).

The next chart will help to understand the above mentioned procedure:

Α	В	С	D	Ε	F	G	Н	Ι	J
Prov.	Consumption	Tax	Impos	Population	Provincial	Consumption	Provincial	Average	Equalization
	\$	Rate	ed Tax	Number	Per Capita	Per Capita to	Consumption	Tax Rate	Transfer
				Of People	Consumption	equalize ²³	to equalize		
		D/B	B x C		B/E		GxE		НхI
Ι	Ci	ti	t _i x C _i	N_i	C _i / N _i	Max(0, C/N -			
						C_i / N_i		Т	E_i

²⁰ They are called in that way because of their low consumption relative to production, since most of its inhabitants obtain their income there, and then go to the big urban centers for spending.

²¹ For Canada equalization transfers see: **Courchene, Thomas**: Towards a Federal- Provincial Fiscal Pact, 1998.

 $^{^{22}}$ This method allows to consider not only the standard, that is the media, but another level as well: for example, the higher quartile, the lower quartile or the maximum consumption.

²³ It is the difference between the average country consumption and the average provincial consumption, only when the latter is inferior.

1	36,00	3,00 %	1,080	324	0,1111				
2	32,00	2,50 %	0,800	304	0,1053				
3	6,00	2,80 %	0,168	61	0,0983	0,0063	0,3843	0,0267	0,0103
4	4,00	3,10 %	0,124	42	0,0952	0,0094	0,3948	0,0267	0,0105
5	2,00	3,20 %	0,064	22	0,0909	0,0137	0,3014	0,0267	0,0081
6	1,00	3,00 %	0,030	12	0,0833	0,0213	0,2556	0,0267	0,0068
7	0,50	2,60 %	0,013	1	0,5000				
8	20,00	2,40 %	0,480	200	0,1000	0,0046	0,9200	0,0267	0,0246
9	8,50	2,10 %	0,179	86	0,0988	0,0058	0,4988	0,0267	0,0133
Total	110,00	2,67 %	2,938	1052	$0,1046^{24}$				0,0736

The equalization formula in per capita terms can be written simply as:

(1) $E_i/N_i = Max (0, t * (C/N - C_i/N_i))$

Where Province i receives a per capita equalization transfer E_i / N_i to compensate for the lower potential tax collection in comparison to the average (for all Provinces) per capita potential tax collection.

In this case the average provincial tax rate is computed as the weighted average of the tax rates times the tax base (consumption) in each province:

(2)
$$t = \sum t_i C_i / \sum C_i$$

It can be clearly seen that the equalization is:

- a) **Equitable,** since the only provinces that receive equality transfers are those provinces with a per capita consumption lower to the average one, in this case \$ 0,1046.
- b) **Efficient,** from the economic point of view, since the aim is to level the tax base. Therefore, the amount transferred is independent from the amount collected. If the province makes the necessary efforts to increase the collection, reducing the evasion level, it shall keep on receiving the same amount from the Federal State.
- c) **Neutral**, the decision where to produce and where to consume shall not influence the amount of taxes the province shall receive from the State.

It is a criteria about transferring Federal State resources to the provinces, which has absolute advantages regarding other criteria used before, because it becomes a strong incentive for the provinces to lower the evasion of local taxes, since what is leveled is the tax base and not the tax collection.

One "political" disadvantage that the implementation of the SVAT (or any other provincial consumption tax) has in countries with great dispersion among provincial tax bases is that provinces with relatively low final consumption versus relatively high local production would have a lower

²⁴ It is the average country consumption = 110 / 1052 subjects = 0,1046 per capita.

relative total and per capita tax collection than if a local production tax were implemented (as the gross receipts tax case in Argentina). Moreover, the SVAT collection may not suffice to cover the total expenditure of all or any of the provinces. In such a case, as in Argentina, Canada or Australia, provincial taxes live together with a coparticipation mass collected by the federal government and distributed to the provinces according to some formula. In fact, the SVAT scheme is useful to assign fiscal responsibilities to provinces that otherwise would receive all or most of their income from revenue raised by the Federal Government. Hence, in most countries the decentralization of taxes would not suffice to cover provincial expenditures, and some devise has to be set to distribute the coparticipation mass in a non-distortionary way²⁵. We claim that at least a partial solution to both of these problems, the political one and the distribution of the coparticipation mass trying to incentive fiscal federalism is given by the equalization transfer, similar to the one implemented in Canada.

The equalization transfer allows provinces with low consumption per capita to compensate to the level of the **average** or standard consumption per capita of the country for tax collection purposes, and hence no province, especially no poor province would have less consumption tax per capita than the "average" or "standard" province.

To prove the claim that the equalization transfer will solve at least partially the distribution problem, we will assume there are two typical Provinces, Province A and Province B. Province A produces good 1 and Province B produces good 2. Since it is not our main focus here to examine the distortionary characteristic of "cascading" of the gross receipts tax, we assume there are not intermediate sales between these provinces or within each province. Finally, we suppose there is no investment in any of the Provinces. Then, the Gross Provincial Product (GPP) in each Province would be:

(3)
$$GPP^{A} = C_{1}^{A} + C_{2}^{A} + (C_{1}^{B} - C_{2}^{A})$$

(4) $GPP^{B} = C_{1}^{B} + C_{2}^{B} + (C_{2}^{A} - C_{1}^{B})$

Note that in equations (3) and (4), the sum of the first two terms on the right represent the total Consumption of both goods in the Province in question, and the term in parentheses represents exports minus imports of the goods. We used this expression to characterize what is known, at least in Argentina as "producing" Province versus "consuming" Province: if the term in parenthesis is positive we are in the presence of a "producing" or "exporting" Province, and if it is negative in the presence of a "consuming" Province.

The sum of equations (3) and (4) is the total GDP of the country (assuming only these two provinces:

(5)
$$GDP^{A} = C_{1}^{A} + C_{2}^{A} + C_{1}^{B} + C_{2}^{B}$$

²⁵ There is not an optimal formula to distribute the coparticipation mass in order to promote fiscal federalism, and optimal incentives for provinces and the Federal Government. In the case of Argentina, the current distribution is fixed in time and space since 1988 and does not follow in practice any rationale of efficiency or even redistribution. In fact, this scheme has shifted almost all the responsibility to collect taxes to the Nation and to spend to the Provinces, generating a very poor fiscal correspondence.

The revenue collected in each Province on their provincial value added tax would be:

(6)
$$VATR^{A} = v^{A}(C_{1}^{A} + C_{2}^{A})$$

(7) $VATR^{B} = v^{B}(C_{1}^{B} + C_{2}^{B})$

Where $VATR^{i}$ is the revenue from the VAT in Province i, and v^{i} is the VAT rate in Province i, where i = A, B.

If they instead of collecting VAT they continue collecting Gross Receipts Tax, under the current legislation in Argentina it can be proved that this tax amounts to tax approximately one half the production of the Province plus one half the consumption of the same Province²⁶. In such a case, then the revenue collected from the GRT in each Province is approximately the following:

(8) GRTR^A =
$$\frac{1}{2} \{ g^{A}(C_{1}^{A} + C_{2}^{A}) + g^{A}(C_{1}^{A} + C_{1}^{B}) \}$$

(9)
$$\operatorname{GRTR}^{B} = \frac{1}{2} \{ g^{B} (C_{1}^{B} + C_{2}^{B}) + g^{B} (C_{2}^{A} + C_{2}^{B}) \}$$

Where GRTRⁱ is the revenue from the GRT in Province i, and gⁱ is the GRT rate in Province

Without loss of generality, we can assume a total revenue neutral exercise, and equality of rates between Provinces and taxes such that $\sum VATR^i = \sum GRTR^i$, and $v^i = g^i = t$ for all i.

i.

Hence, with all these assumptions we have isolated what we wanted; that is the matter of "distribution" of each type of taxes between the Provinces.

It has to be true when there are only two Provinces, from equations (3) and (4), that if one of the Provinces; assume A, is a "producing" Province, then the other is a "consuming" Province, because of the opposite sign (and value) of the terms in parentheses of those equations, that represent the net position in interprovincial trade. If A is a "producing" Province then $(C_1^B - C_2^A) > 0$.

Then we can prove that province A looses revenue and that province B gains revenue (in exactly the same amount of the lost of A) when switching from the GRT to the VAT with equality of rates. Let's calculate then, the difference in revenue for each Province:

(11) VATR^B - GRTR^B =
$$t(C_1^B + C_2^B) - \frac{1}{2} \{ t(C_1^B + C_2^B) + t(C_2^A + C_2^B) \}$$

²⁶ Each province in Argentina sets their own rate and tax basis for the Gross Receipts Tax. However, there are several agreements either between them , or between them and the Nation to coordinate and set some common rules. One of the Agreements, is among the Provinces, and it is the Multilateral Agreement signed in 1997, that sets the way on how to distribute the tax among the Provinces. Article 2 of that Agreement states roughly that one half of the tax should be applied to expenses in the producing Province and one half of the tax on expenses in the consuming Provinces.

$$= -\frac{1}{2} t (C_2^{A} - C_1^{B}) > 0.$$

Hence form a political economy point of view, Province A will oppose the change and B favor it, if this were the only issue affecting the choice²⁷.

Although it is possible to find many solutions to this change in distribution of tax collection between the Provinces, some of them might involve calculating terms such as those of equations (10) and (11) but with 24 jurisdictions, which is very impractical.

The equalization transfer; however, allows to compensate the "producing" Provinces through the general coparticipation mass (derived from National taxes) without altering the incentives for each Province to take care of their own revenue collection, since it is calculated on the tax base and not on the actual tax collected. Let's then, calculate the equalization transfer from equations (1) and (2) to this case, assuming N=1 in each Province:

(12)
$$E_{A} = Max [0, t * \{1/2(C_{1}^{A} + C_{2}^{A} + C_{1}^{B} + C_{2}^{B}) - (C_{1}^{A} + C_{2}^{A})\}]$$
$$= Max [0, t/2 * \{(C_{1}^{B} - C_{2}^{A}) + (C_{2}^{B} - C_{1}^{A})\}]$$
(13)
$$E_{B} = Max [0, t * \{1/2(C_{1}^{A} + C_{2}^{A} + C_{1}^{B} + C_{2}^{B}) - (C_{1}^{B} + C_{2}^{B})\}]$$
$$= Max [0, t/2 * \{(C_{2}^{A} - C_{1}^{B}) + (C_{1}^{A} - C_{2}^{B})\}]$$

Under these assumptions, of equal population, and only two Provinces, one Province will receive the transfer and the other not. Note the main results that we were claiming: **the first term of the equalization transfer to province A, if effective, is exactly equal to the loss in its revenue from switching to the VAT.** If $C_1^A = C_2^B$, then the transfer is exactly equal to the loss in revenue. If $C_1^A < C_2^B$, then the transfer is higher than the loss in revenue from the tax switch, because it means that the province A is not only a "producing" Province, but that its consumption per capita of its own production good is lower than the other province consumption of its producing good. In other words, it compensates additionally if the "producing" province consumes relatively little of its own good. If it consumes relatively more (to Province B own's good consumption) the transfer is less than the loss in tax revenue.

When there are more than two provinces, equations (3) to (11) generalize straightforwardly adding the corresponding terms or equations of the additional provinces. For instance, equations (10) and (11) that express the difference in revenue between a VAT and a GRT with equal rates will always be equal to $\frac{1}{2}$ times the tax rate times the negative of the trade balance for that Province.

However, equations (12) and (13) change more than a simple generalization of terms. In the first place, if the transfer where positive, it will be 1/n, where n is the number of Provinces, times t, the tax rate, and hence it will generally be lower than with only two provinces. In the second place, it depends again on the loss of switching taxes (but as mentioned before divided by n and not by 2), hence it means that on this term it will only as most compensate partially for the loss of revenue.

²⁷ In fact, we took part in the discussions of the change of the GRT for a VAT in Argentina in 1999, and the most opponent Provinces on this issue where those claiming to be "Producing" Provinces.

In the third place, there are more terms, which compare own consumption of goods with the other provinces that again can increase or decrease the transfer.

As a general conclusion on this issue we can say that the equalization transfer tends to compensate partially for the loss in tax revenue when switching from GRT to VAT. This compensation could be greater than the loss in the case that the "producing" province is also a relatively "low consumption province especially of the good it produces. The total compensation (equalization transfer) can be lower or even nonexistent for the "producing" province if it has a relatively high consumption, especially of its own good.

In other words, without the equalization transfer, all producing provinces will protest with the change in tax regime. With the equalization transfer, the provinces that will still complain will be less and specially those that reunite two conditions: being a producing province and have higher than average relative consumption, especially of its own goods. These two conditions, although they can happen together it is not very probable, because it needs on one hand that the province be a net exporting province, but on the other hand that consumes relatively more than others, for which many times it will need to import goods and reverse the trade balance.

5. Conclusions and critical analysis.

We showed the way the *Shared* Valued Added Tax works and how the VAT can be imposed at the provincial and federal level. In the particular case of countries with local and inefficient consumption or production taxes and with a tax structure with a large share of consumption taxes such as Argentina or Brazil, a properly designed SVAT is a practical and efficient alternative to impose neutral taxes in both levels of government.

Additionally, if the countries present a lack of fiscal correspondence, the SVAT permits a gradual decentralization of taxes in exchange of the corresponding shared-revenue mass.

In Argentina, the amount of coparticipated revenue is sufficiently high in comparison with Provinces'own revenue to assess that the tax system lacks almost entirely of fiscal correspondence. The principle of fiscal correspondence relies on the basic postulate that establishes that taxpayers will voluntarily comply more with taxes levied by that level of government that provides them the services. It implies then, that each level of government must levy and collect the amount of taxes necessary to cover their expenditure.

Although, in Argentina the government system is federal and the expenditure is highly decentralized, since approximately 47% is spent at the local level, tax revenues are highly centralized: local governments only collect 24% of total revenue.

Then, we should increase the current tax base of the provinces, decreasing the coparticipation mass so as to achieve a greater fiscal correspondence. But it is impossible to do so without replacing before the Gross Receipts Tax (GRT), because as we explained in the text it is a very inefficient tax. It is multiphasic and cumulative, produce loss of neutrality, it is impossible to know the tax incidence in the cost of the product, the tax cannot be refunded at frontiers (so it is included in the costs of export products), it is a subsidy for imported goods and applies partially the

criterion of origin (this criterion requires unification of tax rates, in order not to affect location of companies).

It is important to point out that the only way in Argentina to achieve fiscal correspondence is trough consumption taxes. They are the most important in quantitative terms, represented at federal level the 50% of total revenue of the Nation and at local level approximately 55% of their own tax revenue.

We conclude then, that of all the alternatives, **the Shared VAT** is the best one to substitute the GRT and it is optimal to achieve fiscal correspondence in countries with consumption based taxes because:

- 1) One of the major advantages of this tax resides in the way it treats sales among subjects that are residents in different provinces, because it solves the problem of interjurisdictional sales.
- 2) It is a **neutral tax** (as long as it has only one rate and does not acknowledge too many exemptions).
- 3) From the taxpayer `s point of view it is easily determined.
- 4) It facilitates administration tasks because of cross-controls between liable parties.
- 5) Regarding international trade it enables to know accurately the tax incidence in the **product's cost** at the moment of export, so that it can be refunded by the Provinces that decide to do so, according to the GATT's rules.
- 6) **It applies the principle of destination,** more appropriate for a consumption tax than the principle of origin, typical of a production tax. Even though it applies this criterion it does not need compensations or credit clearing between the different administrations. Also, by applying the destination principle, the *invoice sightseeing* effect disappears.

7) It facilitates a gradual decentralization of tax revenue increasing provincial fiscal autonomy.

8) Provincial autonomy within the SVAT system implies that each Province can determine the essential aspects of their own provincial tax. This tax helps provinces obtain a higher level of tax autonomy in accordance with our federal form of government. Federalism should not limit itself to the possibility of determining the level of tax rates, it must go further behind. We understand that the tax treatment has also been solved in the case where local laws grant exemptions on goods taxed by the federal government or other provinces. Since it is a tax that applies the principle of destination, the exemption will be enforced when the goods are consumed in that jurisdiction only.

One "political" disadvantage that the implementation of the SVAT (or any other provincial consumption tax) has in countries with great dispersion among provincial tax bases is that provinces with relatively low final consumption versus relatively high local production would have a lower relative total and per capita tax collection than if a local production tax were implemented (as the gross receipts tax case in Argentina). The Canadian type "equalization transfer" not only solves

partially this problem, but it is also efficient, equitable and neutral. It is relatively easy to calculate provincial consumption; that is the tax base, and so the SVAT can and should be applied together with the equalization transfer in countries with the characteristics of Argentina or Brazil.

The equalization is the tool that enables to balance the provincial tax base, guaranteeing each province a minimum level of potential resources per citizen, that is, guarantees fiscal equity with full economic efficiency.

We leave for a future agenda the analysis of other related aspects of the SVAT: The issue of its tax administration, if it is better to have dual or shared administrations, or the solution the SVAT offers to the credit balances either for exports or for interjurisdictional sales.

6. References.

- **Bird, Richard**: Rethinking Tax Assignment: The Need for Better Subnational Taxes, April 1999.
- Dirección Nacional de Coordinación con las Provincias from the Ministry of Economy of the Nation, Boletín Fiscal, IV Quarter 1997.
- **Cnossen, Sijbren:** Global Trends and Issues in Value Added Taxation. International Tax and Public Finance, 5, 399-428 (1998). Kluwer Academic Publisher, Boston. Manufactured in The Netherlands.
- Courchene, Thomas: Towards a Federal- Provincial Fiscal Pact, 1998.
- **Fenochietto, Ricardo**: El IVA compartido: Una Herramienta Util para el Reemplazo del Impuesto sobre los Ingresos Brutos y la Descentralización de Tributos ·31 Jornadas de Finanzas Públicas, Córdoba, Argentina. 24 al 27/8/98, pag. 151.
- Heckman, James J., Lance Lochner and Taber (1999), "Estimating and Evaluating Human Capital Policies in a General Equilibrium Environment", Working Paper.
- Mac Lure, Charles: Protecting Dual VATs from Evasion on Cross-Border Trade: An Addendum to Bird and Gendrom (1999).
- **Poder Ejecutivo Nacional. Secretaría de Equidad Fiscal de la Jefatura de Gabinete de Ministros**: Propuesta de Reforma al Régimen de Coparticipación Federal de Impuestos en la República Argentina, 1999.
- Varsano. Ricardo: A tributação do Comércio Interestadual: ICMS versus ICMS Partilhado. Texto para Discussão N° 382, Instituto de Pesquisa Econômica Aplicada, Brasilia, Setembro de 1995.