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**Argentina and Brazil: Fiscal Harmonization and Subnational Sales
Taxation – State / Provincial VAT versus State / Provincial Retail
Sales Tax**

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THEME 1: “Fiscal Harmonization and Subnational Taxation – Value Added Tax”

“Argentina and Brazil: Fiscal Harmonization and Subnational Sales Taxation – State / Provincial VAT versus State / Provincial Retail Sales Tax”¹

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Introduction

In this paper the problem of “Dual Sales Taxation in a Federal Country” is discussed; and, particularly, “Sub-national VAT versus Provincial Retail Sales Tax” in “Federal/Provincial Sales Tax Coordination”, essentially thinking over two federations - Argentina and Brazil – with different institutional characteristics.

First, let me cite three blocks of basic references I recommend on this theme. In author’s alphabetic order, they are: 1) Bird, R. (2005), McLure, Jr., (2005) and Piffano (2003, 2005b) – for direct treatment of the issue -. 2) Cnosen (1987, 2002); McLure, Jr. (1997, 1999); and, Zodrow and Mieszkowski (2002) – about National VAT versus National Retail Sales Tax written when “fundamental tax reform” were discussed in USA - ; and, 3) Bird (1994, 1999); Bird and Gendron (1998, 2001); Keen and Smith (1996, 1999); McLure, Jr. (2000, 2005); Mintz, Wilson, and Gendron (1994), Piffano (1999b, 1999c, 2003, 2005b); and, Varsano (1995, 1999) – when Sub-national taxation and several variants of dual and/or provincial VAT were discussed -.

Discussion on this theme is rather complex because, beyond the theory, few country’s experiences are at hand to corroborate theories. Only Canadian case is perhaps the best (good?) example and Brazilian case (the bad one?), apart from the limited example of Argentina and India cases (not so good). The rest of federal countries have only one tier sales taxation (federal, not state or provincial) - of VAT type with some kind of revenue or tax sharing mechanism -, and USA with no federal sales taxation (only states RST)².

The Ideal Sales Taxation System

Relative to state sales taxation, McLure, Jr., (2005) sets out five characteristics of an “Ideal Sales Taxation System” – three economic, one administrative and one political - usually accepted by researchers and experts on taxation:

¹ Revised version of author’s presentation in the “Forum Fiscal dos Estados Brasileiros” (Foz do Iguaçu, Brazil, 2006) sponsored by Forum of Federations.

² For details see Bird, R. and Gendron, P. (2001). The authors also cite the particular case of Japan, a unitary country with some sort of piggy backing arrangement with the Prefecture (regional) level of government.

- 1) All sales to consumers should be taxed with a single rate
- 2) Sales to businesses should be exempt
- 3) Sales should be taxed under the destination principle
- 4) This three characteristics should be met at reasonable cost of compliance and administration
- 5) Each level of government should have the power to set its own tax rate

Let me introduce here some few considerations about this Ideal Sales Taxation System. To tax only value added or final consumption with a uniform tax rate and not to tax intermediate consumption is a principle of general acceptance in the academic world, except in presence of not taxable goods (like leisure). Ramsey; Corlett and Hague; Habegger; Meade; rules have recognized different treatment in tax rates on economic efficiency basis though, in practice, those principles or rules are not always followed. Instead VAT legislations in many countries have differential tax rates justified by equity reasons. In line with this rules, Ahmad and Stern (1991), discussing on the characteristics required to an ideal VAT, have pointed out that “...*An advantage that should not be claimed to VAT is uniformity. There is nothing in the logic of VAT that requires uniformity....*”.

Dealing with taxing (or not) intermediate consumption, there is some literature that has also advanced a different idea in case of firms that have market power. Myles (1989, 1996) has suggested that in case of firms vertically bounded when only one of them is imperfectly competitive, intermediate goods should be taxed with a specific tax rate. Later, Colangelo, G. and Galmarini, U. (2001) extended that recommendation to the case of an ad valorem (proportional) tax rate. The conclusion of this literature is that when intermediate goods have close substitutes, market power is weak, margin benefits are reduced and marginal cost pricing principle will perform in the economy. So, in that case, VAT is the best alternative. But in the opposite case, when intermediate goods have not close substitutes and firms have market power (oligopoly), to tax intermediate goods is efficient and VAT is not the best alternative. Anyhow, tax rate uniformity has been an objective pursued by tax legislation in many countries (EU, for example). The recommendation of rate uniformity - based on administrative reasons – has been also supported as a constraint to lobbies representative of the “rent seeking society” trying to obtain tax expenditure benefits.

Finally, dealing with the characteristic 5) – state or provincial autonomy to set the tax rate – it is necessary to point out that fiscal decentralization shouldn't mean fiscal anarchy. All federation requires an important amount of vertical fiscal and financial coordination. The absence of such coordination will provoke vertical negative externalities. Investment decisions can be affected by a non-coordinated action of governments. Especially in presence of tax policies on concurrent tax bases, accumulation of tax rates may leads to an important tax burden, with no necessarily similar effect on all economic activities. Depending on tax rates, tax bases, exempts, tax financial allowances, etc., there will be inefficiencies and horizontal inequalities, in case of such lack of harmonization between both levels of government.

Any government that seeks to increase tax revenues by increasing its own tax rate certainly will face a natural economic limit to this objective. That limit depends on the tax rate-

elasticity of revenues. According with the well-known Laffer's curve, if the tax rate-elasticity of revenues is positive, a tax rate increase will increase revenues. But, the opposite will happen when that elasticity is negative. In that case, a tax rate increase will reduce revenues. If two levels of government converge simultaneously to burden the same tax base, tax rate determination of each level will probably imply reciprocal pecuniary externalities. These reciprocal pecuniary externalities beg for the consent of a certain consolidated tax burden. According with this analysis, a limit to the exercise of provincial autonomy in what is considered usually the main characteristic of an Ideal Sales Taxation System must be recognized.

What I want to emphasize on this point is that "vertical tax competition" in a federation could result finally harmful, either from macroeconomic (the danger of decentralization?³) or microeconomic point of view, without a federal agreement on "tax room"⁴. This harmful result of vertical tax competition will be increased by weak accountability scenarios where political costs of setting the tax burden belonging to each level of government are hidden or not quite clear to constituency, as I will discuss later while mentioning the public choice point of view in case of indirect taxation. This is not the same to deny the benefits of "horizontal tax competition" that should be the natural consequence of autonomy for Sub-national governments to define the own tax rate, topic that I will return later. But this exercise of Sub-national autonomy should be constraint by a federal agreement with the central government relative to global tax burden in the economy.

Consequences of the characteristics of an Ideal Sales Taxation System

Some consequences of the announced characteristics of an Ideal Sales Taxation System should be mentioned. First, from characteristics 1) and 5) follow the need or convenience to adopt a common or uniform tax base legislation. A uniform tax base – plus only one or a single tax rate - would make possible to avoid distortions on relative prices. This is naturally the main constraint to tax policy autonomy for Sub-national governments.

Second, destination principle requires intermediate consumption be exempt, since though exports are free of tax, taxes on intermediate consumptions could not be rebated. As McLure, C., Jr. (2005) has pointed out, to allow exemptions to businesses (or registered vendors) is not really an administrative difficulty but rather the prevalent aim of governments to improve tax revenue.

Now, how to avoid fraud in intermediate and final sales differentiation, while trying to exempt intermediate consumption? The solution is concurrence (or dual) sales taxation and federal coordination with two possible solutions (the big question): Sub-national VAT or Provincial RST?

³ Prud'homme, R. (1995); Tanzi, V. (1995).

⁴ The agreement can be set through the "Fiscal Responsibility Law", or by the "Revenue Sharing System".

Problems with Sub-national VAT

Table 1 describes the principal Sub-national VAT's that have been introduced in some countries or suggested in the specific literature⁵. Due to space constraint, let me now make only a brief description of the difficulties of each variant of Sub-national VAT⁶.

Table 1
Taxonomy of the Sub-national VAT

Origin VAT	Destination VAT
Pure Origin VAT	Destination Deferred Payment VAT (European Union)
Modified Origin VAT (EU Commission)	Prepaid VAT (Poddar)
Restricted Origin VAT (EU Commission)	Viable Integrated VAT (VIVAT) (Keen and Smith)
Hybrid Origin-Destination VAT (ICMS of Brazil)	Dual VAT (Bird and Gendron)
	Partilhado VAT (Varsano)
	Compensating VAT (CVAT) (McLure)

- **“Pure” Origin VAT:**

- Intermediate consumption is taxed so it generates distortions in relative prices.
- Tax burden depends on the geographic localization of vendors (incentive to “tax wars” among states aiming to persuade investors)
- Border rebates are not possible. Exports are taxed and imports are exempt (anti export bias or pro import bias)

- **“Modified” Origin VAT:**

- A costly clearinghouse mechanism is necessary
- It generates incentive to fraud in origin of inputs and fraud in transfer payments between firms belonging to the same economic group.

⁵ The Appendix describes a brief explanation of each variant. As it will be seen later, in Canada there is another sales tax arrangement among the federal government and three provinces: the Harmonized Sales Tax (HST). For more details and complete taxonomy of Sub-national VAT, see Piffano, H. (2003).

⁶ See Piffano, H. (1999b), (1999c), and (2003) for more details and formal corroborations of possible distortions and fraud in Sub-national VAT's alternatives.

- **“Restricted” Origin VAT:**
 - Tax rate uniformity destroys the basic characteristic of the Ideal Sales Taxation System
 - It requires an interstate exchange information system to avoid fraud in tax credits
- **“Hybrid” Origin-Destination VAT:**
 - It has both types of difficulties (Origin and Destination) making possible tax war scenarios or, the opposite solution of tax rate uniformity set by the Central Government, destroys the basic characteristic of the Ideal Sales Taxation System
 - Allows “invoice sightseeing” frauds due to tax rate differentials among states⁷
- **Destination “Deferred Payment” VAT:**
 - Zero-rate treatment to export depends on a self-assessment basis that facilitates fraud in sales destination (“invoice sightseeing”)
 - Incentive to commercial wars due to tax rate differentials among states
- **“Prepaid” VAT:**
 - Exports among states are made under a “prepaid” mechanism in destination. This means a financial benefit to Sub-national governments in comparison with the Destination Deferred Payment VAT, but the incentive to fraud in sales destination is not eliminated.
 - Any merchant can buy a certificate in the state with lower tax rate.
- **“Viable Integrated” VAT (VIVAT):**
 - VIVAT tries to solve the problem of fraud in destination (in the geographical or territorial sense), but it doesn't solve the problem of possible fraud among final purchasers (or non-registered merchants) and to intermediate purchasers (or registered merchants), both type of economic agents naturally having certain geographical location.
 - As Bird and Gendron (2000) have pointed out, VIVAT changes one kind of enforcement asymmetry (dealing with intra or interstate sales) by other type of asymmetry (dealing with registered or non-registered merchants).
 - A clearinghouse mechanism is needed because states of destination admit fiscal credits for the tax levied in the origin state.
 - It is a suggestion made for the EU, where by the time being it is not possible to imagine a central government levying a dual VAT like in federal countries⁸.

⁷ See Varsano, R. (1995, 1999) for details on these frauds in case of Brazilian ICMS.

⁸ The suggestion was advanced to substitute the present Destination Deferred Payment VAT operating in the EU since 1993, forcing community fiscal administrations to create an on-line information exchange system (the VAT Information Exchange System or VIES). The system contains the registration of tax codes emitted in each country member and data on volumes of community interstate sales, trusting by this way in avoiding sales destination fraud already mention in this type of VAT. Actually, the Neumark Report had proposed a

- **“Dual” VAT:**
 - Similar to the Destination Deferred Payment VAT, performing in both levels of government at the same time (like in Canada).
 - Its supporters (Bird and Gendron) trust that unification of tax administration will solve all cross border trade problems.
 - They also warn about the necessary expertise and trust required to both tax administrations, federal and provincial. They don't believe this could be the cases of Argentina, Brazil, Russia and India.

- **“Partilhado” VAT (“Barquinho”):**
 - Assuming the relevant case - presence of final tax rate differentials among states - tax burdens on sectors' value added are different. As intermediate tax liabilities and fiscal credits cancel each other, tax burden and revenues of each State depends on the geographic determination of final sales. This gives rise to the incentive for fraud in sales destination.
 - To equalize tax burden in origin through the complementary federal tax rate is not sufficient. Allowing tax credit in destination by the federal level, the problem of the Destination Deferred Payment VAT is not resolved.
 - It requires considering each taxpayer's net liability situation with federal and provincial level of governments, and a rebate mechanism of both levels in cases of negative net tax burden.
 - It makes federal level of government to participate in a provincial tax administration problem without any incentive to do so. Perhaps, with a perverse incentive, dealing with the exploitation of a concurrence tax base.

- **“Compensated” VAT:**
 - To average sub-national tax rates for calculating the federal CVAT rate in case of cross border sales hoping to reduce tax rates differentials, does not solve the problem of fraud in destination.
 - Actually, intermediate consumption tax rate is not relevant, because liabilities and fiscal credits cancel each other. Incentive to fraud in sales destination will arise any time that final tax rate differentials are present.
 - Value added is burden with three different tax rates depending on where trade takes place or is registered (sales inside province of origin, sales to other destination state and interstates sales for final consumption in both provinces - corresponding to cross border purchases of final consumers).
 - Besides, tax revenue of the later makes necessary a clearinghouse mechanism.

“Restricted Origin VAT” for the EU. This implied the necessity to equalize tax rates. Difficulties to achieve this uniform tax rate induced to apply the destination deferred - payment VAT system “transitorily”.

The dual sales taxation and the “public choice” point of view⁹

One important issue dealing with Sub-national VAT, particularly the Dual-Partilhado-Compensating type, is the possibility of strategic behavior of governments exploiting the same common tax base. If the federal government pursues to equalize the tax burden in all jurisdictions, a strong incentive is generated to jurisdictions to set the tax rate at the maximum level that the national government considers convenient to set up. The solution that begs for harmonization of the two systems (National and Provincial taxation) seems to be troublesome when changing scenarios and characteristics of regional economies have to be taken into account. But to fix a uniform sub-national sales tax rate by the federal government, when this is possible by constitutional regulations, – no matter its level, whether the highest, the lowest or an average with a small admitted dispersion –, destroys the original reason of fiscal decentralization: sub-national autonomy to tax rate determination. Sub-national autonomy to determine the tax rate is crucial to tax competition among states or provinces. This competitive scenario allows Tiebout’s theorem to work for good. In principle, tax competition should not be qualified negative, when distortions are avoided by tax systems using uniform tax rates structures.

But governments competition for investment through tax incentives have been accused as welfare detrimental due to fiscal externalities among regions which would lead to too low tax rates and under-provision of public goods in equilibrium (“*race to the bottom*”)¹⁰. As Janeba, E. and Schjelderup, G. (2002) have pointed out, this view is in sharp contrast with Public Choice literature (Brennan and Buchanan, 1980; McLure, C, Jr., 1986) who argued that competition in general, and competition among governments in particular, is beneficial because it reduces government waste and disciplines politicians (reducing rents to politicians). The externality argument also forgets to take into account that distortions could be produced through the expenditure side of fiscal policy. When asymmetric provision of public goods is present and this asymmetric provision changes the economic equations of private investments, tax harmonization could not only be a non-sufficient condition but also a non-necessary condition for avoiding distortions through governments fiscal behavior¹¹.

The more elaborated literature on harmful tax competition has been supported on the basic assumption of economic distortion due to taxation on capital¹². Whether beneficial-Tiebout tax competition is higher than harmful tax competition or not, would depend on two kinds of parameters. On one side, the argument related to regional demand differentials (preferences) and, on the other side, the one related to excess burden of tax distortion on capital and the under provision of public good caused by the intention of local governments

⁹ Paragraph extracted from Piffano, H. (2003).

¹⁰ See Zodrow, G. and Mieszkowski, O. (1986); Wilson, J. D., (1986, 1999).

¹¹ On this aspect of fiscal harmonization see Piffano, H. and Porto, A. (1994).

¹² This assumption is linked to the usual type of local taxes (on real estate) financing local governments. For a survey of theories on tax competition, see Wilson, J. D. (2000).

trying to avoid capital flying away. An interesting recent paper of Brueckner (2004)¹³ has analyzed this problem using a simulation model. His conclusion is that depending on the parameters, tax competition could be beneficial or harmful.

Beneficial fiscal competition versus harmful fiscal competition is a permanent debate that will continue in the future, because apart from the validity of technical arguments, ideological conceptions and strong economic interests are behind the curtain. As it is known, EU pursues to improve tax harmonization among state members, reducing internal asymmetries in tax laws (for example, in those cases as Luxembourg, U.K., or Switzerland)¹⁴. At the same time, the EU is trying to persuade USA government to force the IRS to collaborate reporting EU State Members bank deposit interests paid to nonresident aliens¹⁵. Such regulation is strongly resisted by the American financial sector and many American political leaders, due to the possible negative impact on the investment flow to USA, country that have a lesser tax burden than the EU¹⁶.

However, I would like to stress that discussion on tax competition deals with “horizontal competition”, that is, meaning, “tax revenues belonging to the same level of governments”. “Vertical tax competition” in a federation (Nation versus Provinces), as it was already mentioned, will not only be naturally different to horizontal competition, but rather it could lead to inefficient and perhaps inequitable results, worsen in case of weak accountability scenarios dealing with constituency perception of the fiscal behavior of each level of government, especially in presence of concurrent indirect taxation, as I will discuss now.

Going back to accountability or transparency, a fundamental critic that could be formulated to the alternative of a sub-national VAT, and particularly any VAT system of the “dual” type, is that though the tax rate at each level of government can be identified by the corresponding tax law, tax “incidence” will be hidden to citizens. They won’t have a clear idea of the magnitude and destination of their contributions; especially which is the difference between fiscal residuals (sub-national and national). Though net fiscal balances (net liability) are individualized by each level of government, constituency perception of the corresponding tax-price of national and sub-national public goods will be unclear or confused, so the fiscal correspondence principle, the essential reason of tax decentralization, will be broken. Actually, who pays the net fiscal liabilities to each level of government is a trader or merchant. That is, legal taxpayers represent a small portion of the electorate and not all consumers and factors owners whose welfare are finally affected by the tax. From the economic point of view, VAT taxpayer can be considered as “withholder agent”, not taxpayers in the economic sense, because tax incidence will affect any economic agent directly or indirectly bound to the taxed transaction. Affected citizens (final

¹³ Brueckner mentions the basic literature on the topic, with reference to Oates (1972), Berglas (1976), Wooders (1978), and others.

¹⁴ EU commissioner for the single market has been also negotiating with Liechtenstein, Andorra, San Marino, and Monaco sharing information and withholding taxes mechanisms.

¹⁵ The temporary suspended IRS REG-133254-02 proposed by the Clinton Administration is now waiting for a final government decision on this EU intention.

¹⁶ It is argued that this initiative is not needed to enforce US tax law and it will undermine USA economy’s performance by causing capital to flee the American banking system estimated about \$2.3 trillion invested in U.S. financial institutions, though the regulation only applies to a portion of that money.

consumers and factors owners) will have little information or transparency about the opportunity cost linked to their demands for public goods to the corresponding level of government¹⁷. R. Bird has made me a critic on this assertion citing the good experience of the federal VAT and Quebec Subnational VAT in Canada that we will see later. Bird thinks that people knows which government receives each tax. Anyhow, in a paragraph of his paper (Bird, R. 2005) he suggests that concurrence in many taxes – like in Canada with concurrence in sales and income taxation – weakens accountability principle.

Lack of transparency in fiscal affairs produces “fiscal illusion”¹⁸. This phenomenon prevails if constituency systematic misperceives tax burden. The effect of separation of taxing and spending decisions has been analyzed by Winner, S. (1983), who has demonstrated that this characteristic of most representative democracies may promote fiscal illusion and contribute to increase government expenditure. The influence of tax framing as a cause of fiscal illusion was also analyzed more recently by Tyran and Sausgruber (2000) in an interesting paper combining the comparative experimental market approach (Smith et al., 1982) with an experimental voting study (Palfrey, 1991). Authors show and confirm John Stuart Mill hypothesis (1848) that the tax burden associated with an indirect tax (which incidence is “hidden” in goods prices) is systematically underestimated, whereas this is not the case with an equivalent direct tax¹⁹. They show that voter’s fiscal illusion makes them approve a tax-redistribution proposal, which is not in their material self-interest. Though there exist mixed finding of the Leviathan effect advanced by Brennan and Buchanan (1980), the literature on the issue is not conclusive (Oates, W. 1985); neither the effect of fiscal accountability on the size of government (Lassen, D. D., 2001; and Dusek, L. 2002). But Becker and Mulligan (1998) find that tax systems that are more efficient i.e. induce less economic distortions, lead to larger governments. Indirect taxation using VAT, like some proposal of fundamental tax reform in the U.S.A. have suggested, produce welfare improvements *if* government expenditure “*is given*”. But unfortunately efficient tax systems, which rely on broad-based taxes with fairly flat rate structures, are associated with

¹⁷ Sub-national public goods costs will always be hidden to citizens when all prices (on final and intermediate consumption) are affected by the combine dual VAT (federal and sub-national), with different tax rates in each jurisdiction. Relative prices of intermediate and final goods and services of interregional trade in the common market should necessarily be affected by this different tax burden (incidence) on regional values added. These tax burdens on regional values added will not necessarily coincide with the nominal or legal tax rate structure in each jurisdiction due to the tax burden shifting phenomenon. Tax incidence will depend on the legal tax rate structure, on the changing market conditions along the business cycle, on the characteristics of the production / consumption chain of each type of goods and services and on the characteristics and property right structure of regional resources. Where, when, on whom individual welfare should have dual VAT burden be located? Who knows? Nobody knows! That’s why VAT – due to revenue engrossing capacity and incidence invisibility – are characteristics attractive to many politicians. Wicksellian connection will be at least seriously weakened.

¹⁸ For a survey on the issue see Oates, W., 1988.

¹⁹ John Stuart Mill (1848) says: “Perhaps...the money which [the tax payer] is required to pay directly out of his pocket is the only taxation which he is quite sure that he pays at all...If all taxes were direct, taxation would be much more perceived than at present; and there would be a security which now there is not, for economy in the public expenditure”. Juan Bautista Alberdi (1854) had also suggested this idea saying: “...indirect taxation is the most abundant in fiscal revenue... superior in comparison to all other taxation...” It is the most easy because it is imperceptible its payment to taxpayer, that he usually does with the price he pays for the good he consumes. He (taxpayer) pays the tax in the price of the good he bought with pleasure, and naturally he pays it without the unpleasantness that causes any isolated (tax) payment...”

larger governments **because resources availability changes politician's behavior**. It would make them increase public expenditure in excess²⁰.

Kenny and Winer (2001) find out that tax composition varies with the nature of political regime. Socialist countries tend to make more use of corporate sale, sales and excise tax sources than other regimes, due to greater ease with which the activity of businesses can be monitored, a stronger ideological interest in taxing businesses, or a reduced need to use taxation on individuals to accomplish social goals. They find that repressive governments rely less on personal income taxation, possibly because this tax source requires a higher degree of voluntary compliance than other forms of taxation. From the individualist freedom perspective, VAT can be seen as less intrusive than Income Tax, but at the end could be more harmful to individual welfare and liberty²¹.

At last but not least, Persson, Roland and Tabellini (1997, 2000) and Persson and Tabellini (1999) identify the effects of political institutions on the size of government, in particular whether a country is presidential or parliamentary. They find that presidentialism increases political accountability, which in turn decreases the size of government.

Tax rate differentials in most VAT legislations – always opened to lobbies influences - are another source of administrative complexity and cause of evasion. Though justified by equity considerations, this rate legislation and many other administrative rules to avoid evasion like withholdings and advanced payments on presumptive basis have contributed to aggravate income distribution²², complicate revenue administration and weak tax

²⁰ R. Bird has also made his critic on these findings, citing new literature written by Dusek, J. in 2003 and also Slemrod, J. in 2005 that concludes that more expending leads to higher taxes and not the reverse. Anyhow, literature on agency problems of representative democracies is extensive on the possible outcome of government behavior trying to increase public expenditure when the political cost to do it is low; in chronological order: Henderson, J. M. (1968); Niskanen, W. (1971); Oates, W. (1972); Barro, R. (1973); Nordhaus, W. (1975); Romer, T. and Rosenthal, H. (1980); King, D. (1984); Abrams, B. and Dougan, W. (1986); Schwab, R. M. and Zampelli, E. M. (1987); Dougan, (1988); Rogoff, K. and Sibert, A. (1988); Persson, T. and Svensson, L. (1989); Rosenthal, H. (1990); Alesina, A. and Tabellini, G. (1990); Tabellini, G. and Alesina, A. (1990); Alesina, A. and Drazen, A. (1991); Case, A. C., Hines, J. R. and Rosen, H. S. (1993).

²¹ Barnes, J. (2001) while commenting the “ideological underpinnings” of fundamental tax reform proposals, makes an interesting review of “leftwing” and “rightwing” arguments in favor of or against to consume-based taxation versus income taxation. Representatives from the rightwing position seem to rely too much on arguments such as “intrusiveness” and high rates of the Income Tax “that threaten individual freedom” (as Barnes quoted from Hall and Rabushka, 1985, on this later assertion). Surprisingly, rightwing supporters seem to ignore how Socialist and Unitarian is a consume-based tax like the VAT, where all population pay taxes without knowing whom to, where, when and why they are compelled to do so, due to the unknown tax incidence. On the other wind, leftwing supporters don't realize how difficult Income Tax could be to enlarge revenue collection for distributive policy objectives, particularly in a worldwide competitive scenario.

²² IMF experts (IMF, 2000) have estimated that 45% of VAT revenue forgone by equity considerations benefited the richest 30% population and only 15% benefited to the poorest 30%. In Argentina, FIEL (1998) using Feldstein (1972) “distributive characteristic of goods”, has estimated that 58% of VAT expenditure due to some reduced tax rates (on meals and drugs) has benefited the upper 40% richest families. In Italy, Liberati, P. (2001) has estimated the distributional and welfare effect of two legislative changes in VAT in 1995 and 1997, that fulfilling the EU directive, reduced to three the number of tax rates. Using two approaches - the Feldstein distributive characteristic of goods and the marginal dominance method (Mayshar and Yitzhaki (1995, 1996) - demonstrated that a simpler “two tax rate” structure would have improved welfare even more. That is, a more proportional or uniform VAT is better for enhancing income redistribution objectives.

enforcement. Of course, sub-national VAT legislation couldn't modify the national tax rate structure and anyhow it would increase revenue administrative difficulties.

In case of indirect taxation, Federal VAT – Provincial RST alternative at least allows a more clear identification of tax sources between federal and provincial governments. That is, a more effective performance of the Wicksellian connection. Of course if invoices on final consumption were identified by the sub-national VAT rate, this would operate as a RST in the final stage. But this identification is not sufficient due to the possible upstream and interregional incidence (through burden translation forward and backward and along regions) of all different sub-national VAT tax rates that partially burden value added of each stage in concurrence with the federal VAT (including the effect on the welfare of citizens living in regions with no sub-national sales tax at all!). If we add to that influence frauds in destination caused in cross-border-trade (naturally without border controls), distortions and lack of visibility for constituency would be superlative.

Anyway, problems faced with all sales taxation alternatives lead to consider direct and personal taxation superior to indirect and real taxation, including RST! Finally, dealing with the accountability issue: it is probably that more accountability could not explain in some cases larger governments, as same authors have concluded. Moreover, perhaps more transparency may lead to improve lobbying activities and government expenditure, as Ladd, H. F. (1998) has reported in case of tax expenditure exposition in public accounting. But, that is not the main point. Perhaps constituency preferences will lead to vote big governments, if politicians make a good job! Or to consent to assign subsidies to some sectors due to national prestige or whatever. But the relevant point is that constituency should have transparency about the cost they are bearing when voting for and why a specific fiscal offer. This is the basic principle of democracies.

Some final remarks on Sub-national VAT Problems

“Sub-national” VAT has problems not present in case of the “National” VAT, basically because, in the former, cross border trade control is absent, consequently, tax burden rebate is not possible (Pure Origin VAT); tax administration is complex and costly, without avoiding possible frauds (Modified Origin VAT); or costly and provoking a clear incentive to sales destination frauds (all kind of Destination VAT). Pure Origin VAT incentives tax wars and inhibits cross border tax rebates, leading to an anti exports / pro imports bias. Modified Origin VAT makes possible the invoice sightseeing phenomenon in input acquisitions and frauds in transfer payments, requiring a costly clearinghouse mechanism. Destination Deferred Payment VAT has the incentive to fraud in sales destination, like also the Partilhado VAT, the CVAT, and the Prepaid VAT have. That is, all kind of Destination VAT - dual or not dual - in case of no cross border trade control. While VIVAT thought for the EU, doesn't fit to our federal countries.

The alternative of dual taxation in case of Federal and State VATs – though its support by authors I particularly respect and admire like Richard Bird – I think no convenient for countries like Argentina and Brazil. Maybe Professor Bird would recognize me some credit on this opinion, basically due to his assertion in the paper written with Gendron in 1998. Federal VAT is not administratively designed to trace the territorial destination of sales

within the federation. From administrative grounds, Federal VAT can be considered as an Origin VAT, because sales are accounted in vendor legal residence, that is, where net liabilities are computed, no matter the geographical destination of sales within the federation. Therefore, to operate a Sub-national VAT, a different and complicated information system is needed to avoid avoidance and evasion.

At least but not last, all dual VAT leaves an open door to strategic behavior of both levels of governments trying to maximize its tax revenue coming from the same tax base, inducing to vertical or reciprocal negative pecuniary externalities; weakening the fiscal correspondence principle and contributing to create fiscal illusion scenarios.

This review of problems could explained why few countries have at present implemented the Sub-national VAT: the Province of Quebec in Canada and Brazilian states (ICMS), though IMF international VAT review (IMF, 2000) mentions the example of some Indian states that have also implemented sales tax systems with VAT characteristics. Also William Fox (2003) mentions two USA states cases, Michigan and New Hampshire, levying variants of an origin-based VAT as part of their business tax structure. Bird (2005) cites the Louisiana case as an “hybrid VAT-RST”, that allows fiscal credit at the final stage (unregistered entities) for taxes imposed in purchases made in previous stages (wholesalers); so the sale tax in this latter case is treated as an “advance payment”. Finally, in Latin America Bird and Gendron (2001) mention the proposal of the Mexican federal government in 1999 – that it was not implemented - to allow states levy a VAT with a 2% tax rate.

Problems and solutions with the RST

Now let me consider problems usually mentioned of the Retail Sales Tax. At least three main problems are usually under discussion:

- 1) Many sales to business are taxed
- 2) Many sales to consumers are exempt
- 3) As tax evasion is concentrated at the final stage of the production – consumption chain, tax administration face a difficult scenario for tax compliance control

I think that present administrative and informatics’ technologies make possible to find out solutions to those problems. In countries like Argentina, where Federal VAT is already operating, coordinating Provincial RST with Federal VAT makes possible and easy to exempt businesses for the provincial sales tax.

All registered firm in the Federal VAT – that uses the fiscal credit mechanism for purchases of inputs – would be exempt for the Provincial tax. Now, is the differentiation of registered and non registered firms a difficulty? No, it’s not at all; invoices A and B differentiation required by the present Federal VAT make it possible. Anyhow, a uniform tax base for VAT and RST – derived from the Ideal Sales Taxation System – is now also required to

facilitate the Federal VAT fiscal credits and RST exemptions mechanisms and evasion control in final consumption sales²³.

What are the advantages of the Provincial RST in case of coexisting with the Federal VAT? First, the suggested mechanism of exempt all sales to registered businesses in the Federal VAT makes unnecessary to distinguish local sales or purchasers from out of state sales or purchasers, the big problem of Sub-national - Destination VAT. Second, intermediate consumption would not be taxed avoiding the high cost of the fiscal credit mechanism in the Provincial tax administration. Third, Provincial RST could extend its tax base incorporating services. Fourth, compliance cost would be reduced in comparison with the Sub-national VAT alternative, particularly in case of small businesses, as Bird, R. (1994) has pointed out.

Complementary solutions for small businesses could be a “Modular Specific Tax” (excise), the “Flat Tax” solution, or the “Monotributo” (Unified-tax) solution (like the one operating at the Federal level in Argentina)²⁴.

Is the suggested solution possible for Brazil?

As you obviously already now, ICMS is a state or provincial tax. It is an hybrid origin-destination VAT that has difficulties of both types of VAT: a) it incentives fiscal wars and produces distortions; b) it makes possible frauds in cross border trade, tax tourism and invoice sightseeing; c) it creates financial difficulties to states due to admission of fiscal credits for purchases made in others states; and, d) it reduces state autonomy due to Union Congress regulations on interstate sales. Opinions begging for a change are generalized in professional and academic worlds, and also among politicians. Many Brazilian colleagues have made important contributions trying to find out a solution but neither of them has got general acceptance²⁵.

Now, how could Brazilian politicians – particularly the local or state ones – face the political decision of letting the Union have its own Federal VAT – I mean a general one, not the present one (IPI)? And, how could Brazilian politicians – particularly those belonging to the rich, industrial or developed states – face the other political decision of changing the present State ICMS by the State RST?

I dare to suggest as a viable political and technical solution a **Federal General VAT operating on the basis of a tax sharing mechanism under the “devolution principle”**

²³ See Bird and Gendron’s comment to this requirement cited later in foot note 37, while analyzing Canadian experiences in sales taxation.

²⁴ Comments on modular specific taxes for subnational governments can be found in “Nota 13” in Piffano, H. (2005a); and its application in Latin America in González, D. (2002).

²⁵ A reduced list of this contributions cited in Bird and Gendron (2001); McLure, C. E. Jr., (1993); and, Piffano, H. (1999), in chronological order is: Longo, C. (1990), Afonso, J. (1996), Silvani, C. and dos Santos, P. (1996), Serra, J. and Afonso, J. (1999), Varsano, R. (1999, 2000); Afonso, J. and Mello, L. (2000). Besides, contributions of experts like Purohit, M. (1994); Shome, P. and Spann, B. (1996); and, Villela, L., Barreix, A. y Taccone, J. (Ed.) (2003).

(in origin) and to introduce the RST at State or Provincial level, complemented by an equalization transfers mechanism for poor states.

As from the administrative point of view the Federal General VAT would operate like an “Origin VAT inside Brazil” – because tax revenue should be accounted in vendors legal residence place or where liabilities are computed – those “production bias states” would not lose money by the change, due to the “devolution principle” in origin of the federal tax sharing mechanism²⁶. Besides, this mechanism generates a big incentive for states to collaborate with the Union in evasion control of their taxpayers, because any marginal increase in revenues would go back to the state. It also minimizes the harm on accountability principle, contrary to the alternative revenue redistributive mechanism, operating at present in Argentina.

On the other hand, “consumption bias states” would gain using the RST taxing final consumption, complemented by an equalization transfers system financed by part of the Union quota of the tax sharing mechanism²⁷.

Marginal decisions on Provincial RST general rate would allow reasonable tax room for states political power on tax policy (autonomy). Therefore, Brazil would need a Constitutional reform containing both institutions.

Tax administration costs derived to the Union would be low by transferring the present ICMS states registration files. Cost of administration for states would be reduced to the correspondent retailers’ portion of the taxpayer’s universe. Compliance cost would be also reduced and naturally lower than the one that would derive from the dual VAT alternative.

Anyway, tax reform in Brazil should find substitutes to federal taxes like Cofins (contribution to social security, partially accumulative), which is not shared with the States. On the other side, Argentina needs to substitute revenues obtained from two bad taxes: Impuesto a las Transacciones Financieras (in this case, shared with Provinces) and Retenciones (tax on exports, not shared). Tendency to create not-shared taxes by central governments is usual in our countries. Though independent tax autonomy should be naturally necessary for central governments tax power, the same way that states or provinces have their own tax power, tendency should be to simplify tax systems levying taxes like VAT or Income Tax. On the contrary, recent tendency has been to create taxes with an easy revenue administration characteristic, usually causing excess burden, due to government anxiety to improve tax revenues and, consequently, tax burden, to cope with

²⁶ Notice that devolution would be made in correlation with the place where liability is administratively accounted, that is, in the origin state. Therefore, this proposal should not be understood as a tax sharing system with devolution on the basis of real retail sales or consumption “estimates” in each jurisdiction, like the HST system operating in three provinces of Canada, which is a different method with naturally different revenue results for each state.

²⁷ The Federal General VAT, due to its larger tax base, would allow Union to obtain enough revenues to substitute present IPI, Cofins and get additional revenues to finance the equalization transfers system and the devolution portion to origin states. I suggest as possible agreement - which needs obviously be calibrated on statistic estimations - a Federal General VAT of 7% - 10% and leaving a marginal autonomy in state sales taxation (RST) of 10% – 5%, with a top consolidated tax burden of 17%.

acute financial needs. Unfortunately, once government creates these “bad taxes”, a strong incentive arises in subnational governments seeking to share their revenues, rather than eliminate them, making politically troublesome to substitute them afterwards.

The challenge to find out a substitute to these bad taxes in cases like Brazil is important, as Table 2 shows. Also it is for Argentina, as Table 3 will show in the next point.

Table 2
Brazil: Tax Burden and Tax Structure by Level of Governments
(% of GDP)

Level of Government	2004	2005 *
Total	35,91	37,70
<hr style="border-top: 1px dashed black;"/>		
Union	25,04	26,38
Income Tax	6,24	7,02
IPI	1,28	1,37
Social Security	5,31	5,64
COFINS	4,39	4,56
PIS/PASEP	1,10	1,12
Others	6,72	6,67
States	9,36	9,73
ICMS	7,83	8,13
Others	1,53	1,60
Municipalities	1,52	1,59
ISS	0,55	0,61
IPTU	0,51	0,52
Social Security	0,18	0,18
Municipal Taxes	0,17	0,17
Others	0,11	0,10

* Estimated.

Source: Afonso, José Roberto R. y Meirelles, Beatriz Barbosa (2006).

In % of GDP, Brazilian COFINS represent an equal participation than two Argentinean bad taxes: “Impuesto a las Transacciones Financieras” and “Retenciones” (tax on exports), as we will see next.

The suggested solution of a dual sales taxation for Brazil - Federal VAT and State RST – that I had suggested for Argentina in the 90’s (see Piffano, H., 1999a)²⁸, and later also

²⁸ The solution recommended for Argentina is not a “tax sharing” mechanism with devolution in origin approach, because the present “revenue sharing” (“*coparticipación federal de impuestos*”) is mainly a interjurisdiction redistributive system that makes unviable a reform out of this general sharing system that contains approximately 85% of total consolidated tax revenue of the country (see Tables 7 and 8 coming forward).

suggested for Brazil by the Fiscal Affairs Department of the IMF²⁹, would facilitate tax harmonization within the Mercosur. In turn, Argentina should change the present Provincial Turn Over Tax (Impuesto a los Ingresos Brutos) by the proposed Provincial RST. After these changes, both countries will be in condition to coordinate Federal and Provincial sales taxation intra and inter countries, on the basis suggested earlier. After that, to undertake the informatics harmonization, setting a robust information exchange system to fight against regional evasion and avoidance maneuvers.

Tax evasion: the importance of work division and coordination in sales tax administration

Tax evasion is really a problem in many Latin-Americans countries as we will see next. At present two important domestic Federal VAT problems are faced by the federal tax administration:

- 1) Fraud in tax credits (“invoice factories”);
- 2) Underground activities and evasion at the final stage of the chain (retail level).

Tax credit mechanism control is or should be a basic duty of Federal Administration, due to the coverage of all transactions in the economy³⁰. Underground activities and tax compliance control of final sales (retail level) is or should be the basic responsibility of State or Provincial Tax Administrations, due to the closer situation of the State or Provincial government and taxpayers.

Let’s see in Table 3 some figures on tax evasion in Argentina.

Table 3
ARGENTINA: Tax Burden and Tax Evasion

<ul style="list-style-type: none"> • Consolidated Tax Burden (2004) (% GDP): 27% <ul style="list-style-type: none"> – VAT 7% – Income Tax 5% – Provincial Taxes 4% (Turn Over Tax or Ingresos Brutos 2,6%) – Municipal Taxes 0,4% • Consolidated Tax Evasion 30% - 40% (depending on the source) <ul style="list-style-type: none"> – VAT: 33% (Llach); 30% (Libonatti-FIEL); 24,8% (AFIP) – Income Tax: 51% (Llach); 45-50% (Di Gresia) – Social Security: 50% (Bour-FIEL); 39% (Llach) • Some statistic comparisons (% GDP): <ul style="list-style-type: none"> – Tax Evasion: MAX 10,8% - MIN 8,1% – Tax on Exports (Retenciones) + Tax on Finance Transac 4% – Operative Surplus (Resultado Primario) 4%

Sources: FIEL, 2000, Llach, J., et al, (2005); AFIP (2005).

²⁹ See IMF Fiscal Affairs Department (2000).

³⁰ On the federal tax administration role in dual sales taxation see Piffano, H. (2004).

Figures of tax burden and evasion give a clear idea of the problem. The comparison that is shown at the bottom of the table makes possible to arrive to the following conclusion: if Argentinean tax revenue administration could reduce tax evasion half of the Minimum estimation, that is, from 8% of GDP to 4% of GDP, that can be considered acceptable in “normal” countries, it would be consequently possible to eliminate the two present “bad taxes” (*Retenciones* and *Impuesto a las Transacciones Financieras*), maintaining without change the present operative surplus (*Superávit Primario*).

Now let’s see in Table 4 an international comparison.

Table 4
VAT Tax Evasion and Productivity Indexes

• Argentina	0,33 (2004: 7% / 21% = 0,33)
	0,36 (2004: 7% / 19,5% = 0,359)
• Uruguay	0,34
• Mexico	0,30
• Bolivia	0,28
• Canada	0,32 – 0,37
• Chile	0,49
• Spain	0,52
• Israel	0,54
• New Zealand	0,67
• Portugal	0,71

Sources: Silvani y Brondolo, FMI (1993); Ebrill, et al, FMI, (2001).

Revenue Productivity Indexes [(Tax revenue/GDP)/Legal tax rate] of VAT in countries cited in Table 4, show two groups: the first one, where Argentina is included, has low productivity indexes, that is, high evasion (or perhaps possible tax base exclusions); while the second group higher productivity indexes. These, of course, are National VAT data, that’s why Brazil is not included in the list. Uruguay, another partner of Mercosur, has a low productivity index like Argentina.

The general tax rate of the Argentinean Federal VAT (21%) is very high according to international experience. Only three groups of countries have higher rates: a) the Nordic countries, with a strong socialist tradition like Denmark, Sweden and Finland (22%-25%); b) some countries of the former Soviet Union, like Ukraine or Byelorussia (23%-28%); and, c) the two Latin American countries – MERCOSUR partners - Uruguay (23%) and Brazil (with a consolidated tax rate of 20,48% or 21,95%, depending on the state). It is usually suggested that the maximum level in sales taxation shouldn’t be higher than 10%. Concurrence on the same tax base that burdens value added more than twice that maximum, makes clear the necessity of an agreement on “tax room” mentioned before.

Figures of Table 3 and 4 show that there is much work to do in the field of evasion and I suggest that Sub-national governments have an important role to perform in that task. In

this fight, retail sales are particularly important to control because at this stage begins the “up stream black/underground chain” or partial informality of many transactions³¹.

Problems in Sales Tax Coordination

Some problems could arise from specific or special treatments in some activities (tax base definitions; tax rate differentials)³². This is perhaps the most important effort of harmonization to work on, though we are thinking of two different taxes: the National VAT and the Provincial RST. As we have already said, uniformity in tax base is the basic aim to obtain an effective coordination between federal and provincial level of government dealing with evasion and avoidance behavior (particularly for businesses fiscal credit mechanism and final consumption frauds). Consensus must be reached through the National VAT base and similar provincial RST base definition. Agreements on tax rates should be obtained on the basis of the definition of a global or consolidated tax burden.

Though the effort to make for harmonization seems to be enormous, international experience shows that anyhow “dual sales taxation” can be possible. The Canadian case brings about a wide variability of modalities in sales taxation. As Bird and Gendron (1998) have suggested, Canadian case is an interesting “laboratory of experiences” on this field.

Let’s see the Canadian case in Table 5³³.

Table 5
The Canadian Case in Sub-national Sales Taxation

<ul style="list-style-type: none"> • One Province without Sales Taxation: Alberta ^(a) • One Province with Sub-national Dual VAT: Québec (QST) ^(b); Federal (GST) ^(c) • Three Provinces with Harmonized VAT (HST): Newfoundland and Labrador, Nova Scotia y New Brunswick • Four Provinces with Retail Sales Tax (RST): British Columbia, Saskatchewan, Manitoba, y Ontario • Another Province with Retail Sales Tax (RST) applied to the GST-inclusive tax base: Prince Edwards Island
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(a) Also Territories: Yukon, Northwest Territories, y Nunavut have no sale tax. (b) Quebec Sales Tax. (c) Goods and Services Tax.

Sources: Bird and Gendron (1998, 2001); McLure, C. Jr. (2005); Bird (2005).

³¹ In Argentina many vendors usually ask buyers if they need the invoice or not. Naturally, sale price change with the answer. The Argentine revenue service (AFIP) makes constant publishing campaigns trying to convince final consumer to ask for the invoice in every purchase they make.

³² States in USA have recently undertaken the “*Streamlined Sales Tax Project*” (SSTP), seeking to harmonize retail sales taxation. McLure hopes that this Project achieves enough simplification and makes possible to override the Supreme Court decision in Quill, commented later. For details of the SSTP, see McLure, C., Jr. (2005), and Hellerstein and Swain (2004) cited by McLure.

³³ In Bird, R. (2005) can be found details of this sales taxation concurrence and an international comparison.

This laboratory of experiences brings about an important conclusion: coordination in sales taxation is technical and politically possible in a federal country. The challenge is to find out the best among all alternatives in each case. And let me now be clear on my proposal. What I am suggesting here is that “dual sales taxation” is possible, but this is not the same to say that “dual VAT” or “dual any kind of sales tax” is recommendable especially thinking of characteristics of our countries. As I have already advanced, my proposal is to coordinate Federal VAT with Provincial RST. I suggest that this is not only possible but also the best dual alternative in sales taxation for federal countries.

Municipalities

Municipalities should also be part of the effort of harmonization. Sales taxation at this tier has spread out in many countries. Use Taxes in USA or “Tasas de Abasto” in Argentina, and other traditional taxes, like the “Tasa de Seguridad e Higiene”, applied on the same tax base than the RST or the Turn Over Tax (Ingresos Brutos), should be substituted by other benefit based taxes (real estate taxes included) complemented with provincial and federal transfers. But real federalism process seems to be different to this suggestion. Also in Brazil, while states levy the ICMS to communication services and intermunicipal and interstate transport services, municipalities levy the ISS (Tax on Services) on a variety of services – industrial, commercial and professional services – on a gross receipts basis. Lack of harmonization of both taxes produces accumulation and distortions that affect exports³⁴.

Table 6 elaborated from Dexia and World Bank data shows some comparative figures of local governments’ size – measure through the ratio between expenditure and GDP –.

Thought perhaps at present municipalities are no important in some federal countries, this is not necessarily the tendency observed in our countries. Local governments are “increasing important” from economic and political point of view. But, from international experience, it’s true that the relative importance of local governments is low, particularly in federal countries. Fiscal decentralization process took place mainly towards state or provincial levels, not to local governments³⁵.

Now, Brazilian local governments have a higher size than Argentinean Municipalities, though even lower than Canada. This fact would give rise to the question of why to worry about it.

The point is that though Argentinean local governments size is at the bottom of the Federal countries list, and much more near to figures belonging to Unitarian countries of the bottom list, they have an average fiscal correspondence index – ratio between own resources and total expenditures – of 0,48 that is higher than most similar indexes of all the countries listed in Table 6, except Sweden (0,54) and France (0,52), according with Dexia data. Obviously this is due to the little size of local budgets. But if local government size

³⁴ For details see Villela, L., Barreix, A. y Taccone, J. (Ed.) (2003).

³⁵ Bird (2005) mention that Canadian “*local governments are simply never mentioned in the eternal federal-provincial fiscal wrangle for two reasons: first, they are completely under the thumb of the provinces, and, second, essentially for that reason, they have virtually no access at all to either sales or income taxes*”.

increases in the near future, financing expenditure with sale-type taxes, problems will also increase. Brazilian municipalities have an average index of 0,34 - lesser than Argentinean municipalities, but of double size in terms of GDP -.

FISCAL DECENTRALIZATION IN LOCAL GOVERNMENTS (2000)			
ORDER	COUNTRIES	LOCAL EXPENDITURES AS % DGP	LOCAL OWN RESOURCES / TOTAL LOCAL RESOURCES
Federal Countries			
1	Switzerland	25.9	s/d
2	Canada	9.9	s/d
3	Austria	9,4	0,17
4	USA	9.0	s/d
5	Germany	7,4	0,22
6	Belgium	6,6	0,44
7	Brazil	5.6	s/d
8	Colombia	2.5	s/d
9	Australia	2.6	s/d
10	Argentina	2.4	0,48
Unitary Countries			
1	Denmark	30,6	0,45
2	Sweden	23,9	0,54
3	Italy	23,5	0,28
4	Finland	17,3	s/d
5	Netherlands	15,2	0,07
6	Spain	14,3	0,32
7	Ireland	11,7	0,26
8	European Union	11,0	s/d
9	France	9,8	0,52
10	United Kingdom	9,5	0,13
11	Portugal	5,7	0,32
12	Luxemburg	5,7	0,32
13	Chile	2.8	s/d
14	Bolivia	2.2	s/d
15	Greece	2,2	0,30
<u>Sources:</u> Dexia (2002) for EU and World Bank (2000) for Argentina, Bolivia, Brazil and Chile.			

From the constitutional point of view, Brazil has a very singular difference with Argentina because of the autonomy of Municipalities ruled by 1988 constitutional reform. This reform has set a rather “double federation” in Brazil with two separate institutional relationships: Municipalities-Union and Municipalities-States. In Argentina, only Municipalities of the Provinces of Chubut and Neuquen have autonomy in federal terms, while the others has different regimes set by each province legislation, though the federal constitutional reform of 1994 mandates provinces to recognize local government autonomy. Fiscal relations

usually operate between each Province with its own Municipalities, though central government has always intended to operate directly with Municipalities, particularly through the destination of several item of the national budget.

Anyhow, if the present relative size of local governments is not so high no matter his future evolution, why did I have brought this topic into discussion? Because if in the near future local governments are going to finance their budgets increasingly with sale-type taxes, then the solution Federal VAT – Provincial RST is much more clearly a superior alternative than the Dual VAT coordination, as Charles McLure, Jr. (2005) has pointed out.

If sales destination frauds of Sub-national VAT are present in case of state or provincial level of governments, it is possible to imaging what will happen at the local level, though those taxes were not named VAT or RST. Cross border trade problem (with no frontiers controls of goods and services) would be superlative, so destination principle would be impracticable with VAT-type of sale taxation³⁶. In case of RST-type, many sales for intermediate consumption would be taxed and local businesses will suffer losses in the competitive world scenario. So, federal harmonization will need local governments be part of the coordination agreement taxing only invoices type A.

The solutions for Argentina and Brazil

Arguments presented, figures and information contained in previous tables, lead to support the solution already suggested for federal countries like Argentina and Brazil, assigning RST to Sub-national governments coexisting with a Federal VAT.

Anyhow, an Ideal Sales Taxation System in federal countries makes recommendable the adoption of a Uniform Tax Base, common to Federal and State or Provincial level of governments.

Uniformity of Tax Bases means a reduction of state taxation sovereignty. But it also constrains federal autonomy, because any decision on tax expenditure should be decided through a federal agreement.

That is the main political cost to assume, either for the State or for the Federal level of governments, while States or Provinces maintain their power to set the RST rate - the basic attribute of the Ideal Sales Taxation System – though under certain limits to be agreed. Agreement that I propose to name it: the “Federal Tax Room Agreement”.

Anyhow, coordination is even possible without tax base uniformity. I think that Richard Bird (2005) is right on this and he has been critic of “sale tax purists” recommendation – where experts like Charles McLure, Jr., or perhaps myself, are apparently included –

³⁶ Imagining Dual Destination Deferred Payment VAT operating at the local level of government is an interesting exercise for at the same time imagining more intuitively destination fraud problems in the provincial case. It is only a difference of territory size or distance between frontiers, but the cross border trade problem is essentially the same. Bird (2005) that strongly supports the Dual VAT solution for provincial governments, asserts that none of the solutions suggested by different approaches, like CVAT, VIVAT or Dual, are likely to prove viable for small local jurisdictions.

seeking for an ideal sales taxation system. But in this case, avoidance and evasion control would be more difficult or less effective, that is, it would be more difficult to eliminate all defects traditionally cited in case of RST or even problems of VAT too!³⁷ But, as Bird (2005) and Bird and Gendron (2001) suggest, dual or concurrence sales taxation in a federal country is possible or it could work some way. The point finally is to make it workable at the minimum social cost taking into account the particular country technical and political scenario.

Experts usually introduce messages for “taxation improvements” – not mere “revenue improvements” – and this attitude sometimes get politicians nervous³⁸. But the question is: if things can be made right getting the same money, why insisting in doing them wrong? Or, if it is possible technically and politically to make things more perfect, why insisting in making them “more or less”? I am not expecting you to answer these questions right away and I won’t try to answer them neither; but, as expert, let me insist on “taxation improvements”³⁹.

Because taxation improvements do not only would allow reducing social costs. They would allow tax revenue increase by reducing distortions, making business more competitive, so rising inversion levels, exports, economic growth and employment. This is the best (genuine) recipe to expand tax bases and improve tax revenue for the government.

Finally, sharing Richard Bird suggestion (2005), Federal governments should cooperate especially with those state and local governments adopting tax reforms towards more rational tax structures, trying to avoid distortions in sales taxation, avoiding taxing intermediate consumption and adopting the suggested rules of a “good” sales taxation recommended earlier, because tax improvements in any region would spread welfare

³⁷ Bird and Gendron (2001) admit that though tax base uniformity is convenient, it is not an essential requisite, citing the good experience of the federal VAT (GST) and Quebec VAT (QST) that have different treatments for a variety of items (real property, financial sector, input credits for large companies, books and newspapers). Our answer to that opinion is that tax base uniformity is a consequence of: 1) the characteristics of an Ideal Sale Taxation System, because essentially this is similar to avoid tax rate differentials, depending whether goods are taxed or not; 2) due to the needed coordination between VAT fiscal credits and RST exemptions to businesses inputs purchases; and, 3) for a more effective evasion control in final sales in both taxes (VAT and RST).

³⁸ As Bird, R. (2005) has point out “... *‘fiscal sovereignty’ does not exist just so that people can do good and sensible things. It exists so that they can do what they want to do, and in my view the only real rules that need to be in place are those required to ensure that states bear as fully as possible the fiscal and economic consequences of their own actions. ...*” (sic).

³⁹ Answering those questions means to evaluate the political risk to assume with any tax reform. But only politicians are in condition to do it. Concern to assume this political risk is genuine, and Bird and Gendron (2001) remind us the Canadian case once again, citing the interesting experience lived in 1991 when federal government changed the old federal nonofasic sales tax (the “Federal Manufacturers Sale Tax”) by the present Federal VAT (Goods and Services Tax). The political party that was in power at that moment had to face the popular opposition, because constituency that before the reform didn’t perceive the fiscal cost hidden in manufactures’ prices, after the reform that fiscal cost turned out more visible, and they lost elections. But the most usual political concern is the risk to loose revenues with the reform. A reasonable solution in this case is the “guarantee clause” for states or provinces of receiving a minimum amount of revenues after the reform similar to the amount obtained before the change.

benefits all over the rest of the federation⁴⁰. I am aware of the higher political difficulties facing Brazil respect to Argentina to undertake the reform. The relative amount of state or provincial resources that would change the present money circuit is important in Brazil. See the next Table 7 as a reference for this assertion.

Table 7
Relative importance of own state or provincial revenues
or resources before and after transferences
Argentina y Brazil (1998)

Concept	Argentina	Brazil
Own revenues before transfers	18,4 %	34,5 %
Resources after transfers	45,0 %	43,5 %

Note: see explanation in foot note 41 on these figures.

Source: Piffano, H. L. P. (1999c).

Figures in Table 7 show the lower own provincial revenues level before transfers of Argentinean provinces, relative to Brazil states. However, due to the magnitude of federal transfers, through the revenue sharing system (*Coparticipación Federal de Impuestos*) and other transfer mechanisms, Argentinean provinces – in relative terms – obtain a larger amount of resources after transfers than the Brazilian states.

Now, let's see Table 8 showing figures on tax burden in both countries.

Table 8
Global tax burden and sales taxation in term of GDP
Argentina y Brazil (1998)

Concept	Argentina	Brazil
Global tax burden	21,0 %	30,0 %
National	17,1 %	19,6 %
Subnational	3,9 %	10,4 %
VAT / GDP	7,0 %	7,5 %
VAT / Global tax burden	33,3 %	25,0 %
VAT / National tax burden	40,9 %	-
<i>Ingresos Brutos</i> (Prov) / GDP	2,2 %	-

Source: Piffano, H. L. P. (1999c, 2000) and Varsano, R. (1999).

Table 8 shows a lower Argentinean tax burden than Brazil and the important participation of the federal level of government, that coincide with the important participation of VAT

⁴⁰ Of course those national governments should also introduce changes in their tax structures. They should substitute taxes like the one levying financial transactions (*Impuesto al cheque*), exports (*retenciones*) or levying taxes on salaries to finance social security systems.

revenues, similar to the one of Brazil – but in this case belonging to states – in terms of GDP⁴¹.

Final arguments: “Warning! Dangerous dark clouds coming into sales taxation”

Sales taxation in general faces a troublesome scenario with tendencies to get more complicated in the near future. Remote purchases and cross border trade and particularly e-commerce have been increasing exponentially during the last two decades and international tendency seems to enlarge them even more in years to come.

Many states in USA have intended to levy Use Taxes for remote sales using the reversal method (direct payment) with unsatisfactory results. Due to different criteria applied by each State, the US Supreme Court has decided to limit this State tax policy requiring vendors to have a branch or dealer (the nexus principle) in the State of destination to levy that tax⁴². As it was already mentioned, in Argentina many Municipalities have introduced a similar tax with the “Tasa de Abasto” levying sales of some products (mainly food, wines and others beverage) on the argument of sanitary controls that usually are not taken ahead.

Electronic commerce, especially digital one, is another increasing problem for governments, because it is not easy to define by whom, to whom and how should the tax be levied.

All these increasing difficulties will make “sales taxation administration” a difficult one especially for local governments. My suggestion is to work on a new tax reform in the near future and my favorite for Sub-national governments is the “Flat Tax”. Local politicians should work quickly on this idea, though at present central governments are analyzing this alternative in case of the Federal Income Tax.

Variants of Hall-Rabushka (1985) “Flat Tax” has been surprisingly introduced very recently by many countries of the ex Soviet block: Leetonia (1995), Russia (2001), Ukraine (2003) and Serbia (2003), Slovakia (2004), Rumania (2005) and Georgia (2005). Also Jersey, Hong Kong and Guernsey, have this kind of tax since 1940, 1947 y 1960, respectively. In Europe, countries like Poland, Czech Republic, Germany, Slovenia, United Kingdom, Hungry, Greece and Italy – and in the rest of the world: Puerto Rico and China – are analyzing at present similar alternative.

The Province of Alberta in Canada has already incorporated the flat-tax rate in the income tax reform of 2001, so this is an important reference in case of Sub-national governments; taking into account that Alberta has no Sales Tax.

⁴¹ Global tax burdens in Brazil -since 2000- and in Argentina -after devaluation in 2001/2002 crisis- have registered an important increase in both countries and participations of sub-national governments own resources have decreased since then (for present estimations go back to Table 2 and 3).

⁴² See Quill case cited in McLure, C. Jr. (2005). For problems due to remote sales and e-commerce see also McLure, C., Jr. (1999); Bruce, D. and Fox, W. (2000, 2001); United States General Accounting Office (2000); and, Varian, Hal H., (2000).

I have been suggesting the “2% flat-tax rate” for Argentinean provinces since 1994, as a complement of the “7% Provincial RST rate”, and I called it the “Provincial Income Tax” (“Impuesto Provincial a las Ganancias”), both taxes to substitute the present “origin” Provincial Turn Over Tax (Impuesto a los Ingresos Brutos)⁴³.

Concluding remarks

Provincial RST can easily be coordinated with a Federal VAT, in an Ideal Sales Taxation System, solving all the principal defects traditionally cited dealing with the “isolated” Retail Sales Tax.

In cases of Sales Taxation Models where the principles of an Ideal Sales Taxation System are imperfectly considered, the solution is still possible through a Uniform Tax Base, in accordance with the Federal VAT.

Abandoning state sovereignty in tax base definitions is a minor cost for Sub-national governments. Tax base definition should not be considered an essential attribute of State or Provincial autonomy. Actually, even autonomy to set the tax rate should be limited in same way in a federal constitutional arrangement. Laffer curve and vertical externalities in concurrence of sources introduce a natural constraint to absolute autonomy.

Considering all alternatives in sales taxation, Provincial RST and Federal VAT is a superior solution than combining both VAT (Federal and Sub-national). Sub-national VAT's have different difficulties depending on the variant (origin or destination VAT). Distortions or fraud are possible, administrative and compliance costs are high, and all suggested solutions seem to be incomplete or impracticable in our countries.

The solution “Federal VAT-Provincial RST” avoids to tax intermediate consumption allows taxing all final consumption and introduces an incentive for tax administration agencies to reduce tax evasion.

Intermediate consumption won't be taxed because only Invoice B (draw to non register purchasers in the Federal VAT) should be taxed, while Invoice A (emitted for registered purchasers in the federal tax) would be exempt.

Reluctance to adopt Provincial RST is now clearly a political matter not a technical problem. Cooperation and informatics harmonization – practically operating in Argentina – make possible to overcome all relevant technical problems.

From the *public choice* point of view indirect taxation is not good for transparency (it weakens tax-price of public goods perception or Wicksellian correspondence principle), but Federal VAT-Sub-national VAT alternative in dual sales taxation is worse that Federal VAT – Provincial RST alternative.

⁴³ See Piffano, H. (1994), (1999a) and (2005) for suggestions about a “battery of new provincial taxes”.

A final recommendation for politicians, especially for local ones, is to be aware of the increasing difficulties in sales taxation due to remote sales and e-commerce, and also due to the present tendency to introduce radical reforms in tax structure in many countries pushed by the present violent, competitive, and aggressive scenario of globalization. I think that Flat Tax could be an alternative for sub-national governments - not only for the national level - and local politicians should open mind, hurry up and take note of international experiences on this tax innovation.

Appendix

Types of Sub-national VAT⁴⁴

“Pure” Origin VAT. Sales are taxed in the state or province where vendors reside. Fiscal credits recognized in each jurisdiction correspond exclusively to purchases inside the same jurisdiction. Whereas exports are taxed, imports from other jurisdictions do not generate fiscal credits⁴⁵.

“Modified” Origin VAT. Sales are taxed in the state where vendors reside. Fiscal credits recognized in each jurisdiction correspond to purchases inside the same jurisdiction and to invoices coming from others states. Imports from other jurisdictions are not taxed; but contrary to the previous case, they generate fiscal credit at destination, and exports are taxed. Since fiscal credits are admitted at destination, a clearinghouse of compensations from the state of origin to the state of destination is needed. So, “tax export” is avoided⁴⁶.

“Restricted” Origin VAT. Sales inside the region or federation are taxed in origin, that is, where vendors reside, with an agreement to equalize tax rates in all jurisdictions. Sales outside the region are zero-rated. The clearinghouse is avoided; states revenues will depend on - and each state will win or loose revenues according to - the interstate commercial flow, that won't be affected by the rate regime, since the tax rate is the same in all states, provinces, or jurisdictions.

“Hybrid” Origin-Destination VAT. Interstate transactions are taxed in origin with reduced rates (smaller than the intrastate ones) in order to transfer resources, or potential revenues (tax room), from the “producers” states to the “consumers” states. The system is operating in Brazil at a state (provincial) level (the ICMS or Tax on the Circulation of Merchandises and on Services of Communications and Interstate and Interurban Transport). It consists on the application of differential tax rates centrally regulated by the federal government. Initially 7% tax rate for sales from developed states (the regions of the south and southeast) to less developed states (the regions of the north, northeast and center-west); and initially 12% to the rest. States have the obligation to tax intrastate sales with a tax rate higher than the one ruling interstate sales (around 17%-25%).

Destination “Deferred Payment” VAT. Sales inside the jurisdiction are taxed at the local rate, but sales to other jurisdictions are zero-rated. Fiscal credits correspond in this case to the VAT incorporated in the invoices of intermediate inputs purchased inside the jurisdiction where vendors reside, as long as imports (not taxed in origin as they are taxed at destination with deferred payment), do not generate fiscal credit. A suggested alternative that would avoid the deferred

⁴⁴ Extracted from Piffano, H. (2003) where a formal approach of possible distortions and fraud in Sub-national VAT's alternatives can be found.

⁴⁵ The definition responds to similar approach used by IMF official documents (See Shome, P., 1995). The alternative VAT design in which fiscal credits with compensations among revenues services are admitted is identified as “Modified” Origin VAT. This “modified” version coincides with the definition used by EU sixth Directive (Commission of the European Communities, 1996). To some IMF experts the fact of crediting importers at destination for the tax levied in origin would transform this modality in a “destination” VAT (see IMF, 2000).

⁴⁶ The concept whether a tax is exported or not, should be understood as the place where percussión of the tax is located. When it is levied in the state of origin (so taxes are incorporated in the invoices sent to other jurisdictions and the revenue service at destination is not compensated by such liability) or when the revenue service at destination levies the tax (so invoices are sent zero-rated from the state of origin), respectively. Then, this is not the concept of “incidence” of the tax, that is, the place where the tax burden is definitively located, which obviously depends on market conditions.

payment for imports is that vendor burdens exports with the tax rate of the destination jurisdiction, pays the tax to the local (origin) revenue administration and this, in turn, delivers the corresponding revenues to the state of destination by a clearinghouse mechanism.

“Prepaid” VAT. Poddar (1990, 1999) has suggested that registered vendors in any state or province should apply the local tax rate to all sales, unless buyers residing in another state or province provide them with a certificate corroborating that the tax has already been paid in their jurisdiction. By this way firms that want to buy goods from another province should make two payments before the exporter makes the shipment of goods: one to the exporter (the “price before tax”) and another to the State of destination (the VAT liability). Getting the VAT payment certificate from the State of destination, exporter will be able to burden her or his sale to other state with a zero tax rate and justify that situation at her or his provincial revenue service.

“Viable Integrated” VAT (VIVAT). In this alternative, suggested by Keen and Smith (1999), a common and uniform tax rate is fixed in all states or jurisdictions on transactions among registered merchants - that usually reflects intermediate transactions - letting each state to fix the tax rate on sales made to non-registered buyers - that is assumed generally directed to final consumption -. So, the tax doesn't demand to differentiate sales according to destination of goods (intrastate or interstate), but to buyer's situation (registered or non-registered), in whatever state or jurisdiction he or she resides. Revenues from sales to non-registered traders o buyers make necessary a revenue sharing mechanism.

“Dual” VAT. Bird and Gendron have suggested this alternative that is similar to the Deferred Destination-Payment VAT one, operating at present in the province of Quebec (QST) and in the European Union, but with the particularity in Canada of coexisting with the Federal VAT (GST). Both taxes (federal and provincial) burden the same tax base – though this is not quite necessary - ; each government sets its own tax rate and administration of both taxes is assigned to one of the two revenue services. In Canada, the province of Quebec is administering both taxes⁴⁷.

“Partilhado” VAT (“Barquinho” or “Little Boat” Model). In this alternative, suggested by Varsano (1995, 1999), sub-national government taxes sales inside its jurisdiction with the local tax rate and sales to other jurisdictions are taxed with “zero sub-national rate”. However, sales to other jurisdictions are taxed with a supplementary Federal tax rate similar to the sub-national tax rate; so, in case of a dual VAT system, this supplementary tax rate is added by the federal government to its own federal tax rate. By this procedure fiscal liabilities are equalized in origin, no matter where goods are sent. The revenue from this added federal rate belongs to the federal government and it will be admitted as (federal) fiscal credit in intermediate purchases in the destination state. If sales are directed to final consumption, this part of the federal added revenue should be distributed among provinces by a sharing mechanism.

“Compensating” VAT. It is a variant of the Partilhado VAT proposed by McLure (2000). The main difference is that interstate sales are taxed with an added federal tax rate (the CVAT rate) that is determined as a weighted provincial average tax rate. Buyers registered at destination will have

⁴⁷ As it was explain earlier (see supra foot note 5 and Table 5) our taxonomy of Sub-national VAT's only considers as “Dual” VAT this alternative that essentially allows state autonomy in the definition of the tax rate. This is the case of the cited Federal Goods and Services Tax (GST) and the Quebec Sales Tax (QST). The other sales taxation arrangement among federal government and three provinces is the Harmonized Sales Tax (HST) (see Bird and Gendron, 1998) not classified as “Dual VAT” in the taxonomy, because it is a “joint-national-provincial VAT” or a “piggy-backing” sub-national tax with a uniform tax rate in all states, with a revenue sharing mechanism (on each jurisdiction estimated consume basis).

fiscal credit for the CVAT paid in origin for their imports, that will be taxed (with deferred payment) in the following stage the moment the importer sales the goods in his or her own state. If sales go to registered buyers of the same state, they will be taxed with the local rate (and they will generate fiscal credit of the corresponding Sub-national revenue service). If sales go to registered buyers of other states, the CVAT works again and it will generate the corresponding fiscal credit in destination. Finally, if sales go to non-registered buyers or final consumers, the CVAT levied on imports from other states will work as a final VAT. These sales generate a revenue surplus to federal government that should be distributed among states or provinces (because the federal added tax only works as a "*barquinho*", without any intention of generating additional tax revenues to the federal government). So, it requires a sharing mechanism based on a given formula.

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