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## **Fiscal decentralization, tax competition, and federal tax administration: A note from the Argentine experience**

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### **Abstract**

*The paper analyses the usual arguments discussed in the fiscal federalism literature about fiscal decentralization through normative and positive (public choice) approaches. Afterwards, limits to enhance significantly fiscal decentralization in countries with important regional asymmetries like Argentina are analyzed. Finally, the author suggests the necessity of a fiscal institutional reform, which allows an efficient and responsible vertical coordination. A superlative role is assigned to the federal revenue administration in the suggested reform.*

### **Resumen**

*El trabajo analiza cuestiones habitualmente discutidas en la literatura sobre descentralización fiscal, distinguiendo entre el enfoque normativo y el enfoque positivo (elección pública). Luego se abordan los problemas que se presentan en los países con importantes asimetrías regionales, como Argentina, para avanzar en la descentralización fiscal. Por último, el autor sugiere la necesidad de una reforma de las instituciones fiscales, a fin de mejorar aspectos de eficiencia y coordinación vertical responsable. Una*

<sup>1</sup> Paper presented to the 60<sup>th</sup> Congress of the IIPF (International Institute of Public Finance), Milan, Italy, 2004.

*administración federal de ingresos fiscales tendría un rol preponderante en la reforma*

## **I. 1. THE ARGUMENT FOR FISCAL DECENTRALIZATION**

Tendencies registered in the last decades dealing with fiscal federalism in most countries have been a process of fiscal decentralization, especially "decentralization of functions" from the central or federal governments to sub-national levels of government. This trend contrasts in turn with the constitution and consolidation of supra-national economic blocks (European Union, Nafta, Mercosur), circumstance that has induced to a relative loss of the national government's autonomy but, paradoxically, it has accentuated the autonomies of sub-national governments.

This process, linked to the phenomenon of financial and economic globalization, implies a much more competitive scenario in which private and public activities should perform. Consequently, the importance of the design of the vertical structure of governments in each country has revalued the theory of fiscal federalism and fiscal decentralization, from its original presentation by Tiebout (1956). This in turn has induced to a reformulation of fiscal assignment by levels of government in many countries and a reformulation of the operation rules of the public sector, as it has been operating until the last two decades.

The tendency to decentralize functions is bound to the basic argument for decentralization: efficiency improvement by allowing individuals to express his social preferences through the vote in a principal-agency model where representatives authorities in governments are induced to optimal provision of public goods. Proximity of consumers to political authorities not only would reduce agency's problems in a representative democracy, but also it would introduce a dynamic political mechanism that reduces the cost of the social decisions and increases its quality. The almost perfect factors of production and goods regional mobility, characteristic of the present world scenario, and the significant reduction of transaction costs generated by technological change, make Tiebout's "vote with feet" not to be a mere theoretical speculation but rather a daily exercise of economic agents.

Decentralization also eliminates a typical problem of centralized models, avoiding the political biases of central governments that usually ignore the relative necessities and different regional characteristics. On the other hand, provision of equivalent type of services by different jurisdictions induces a

bigger technical progress and its diffusion, spreading out successful experiences.

An important argument for decentralization is to avoid the "common pool problem" associated to centralizing taxation while allowing more expenditure autonomy to subnational governments. This leads to an inefficient behavior of politicians as economic agents involved in a game that is typical of the centralized model. That is, the different individual attitude in the demand for a good or service, when its financing doesn't imply a symmetrical or concomitant obligation of giving up individual personal income for the marginal cost that the demand decision causes. The tendency to over-expend is the natural consequence of the group or social behavior.

In case of a federation what this dilemma insinuates is the importance of the "fiscal correspondence" principle in public decisions. All public expenditure decision should be bound to the concomitant decision of requesting the electorate (constituency) the payment of taxes to finance it. The presence of this principle not only generates a bigger fiscal discipline, but also a better general political performance of representative democracies.

The well known Brennan, G. and Buchanan, J. (1980) suggestion that decentralization is an effective restriction to central government's expansion, is now familiar in LDC's countries. That monolithic agent, the "Leviathan", that systematically pursues maximizing the size of the budget, ignoring the willingness of citizens is now a very understood suggestion in countries like Argentina, not only by experts but also and in particular by citizens.

As market competition in the private sector exercises its disciplinary force, political competition among governments in a decentralized model avoids central government's monopoly power. The inter-jurisdictional mobility of people pursuing "fiscal advantages", can offer partially and maybe completely, a substitute of explicit (constitutional) fiscal restrictions on the tax power of states, that has demonstrated not to be very effective in countries like Argentina.

The Brennan-Buchanan proposition has motivated an important number of empiric studies trying to demonstrate the Leviathan thesis. Though Oates (1985) recognizes not to have been able to demonstrate the thesis, other studies corroborate the hypothesis (Eberts and Gronberg, 1988; and Zax. 1989). Also Moesen, W. and Van Rompuy, P. (1990) offer an interpretation for the tendency to over-sizing the public sector in countries with centralized governments.

The most important criticism to the centralized fiscal model and the opposite advantage of fiscal decentralization deals with taxation and the "fiscal correspondence" principle. The result of centralization would be the over-sizing of public expenditure, though this fact couldn't be qualified as a consequence of Leviathan behavior. The basic point to explain that result is the negative effect caused by "the separation of expensing and financing decisions". On the contrary, fiscal decentralization induces a bigger fiscal responsibility due to accountability. As Wicksell (1958) and other authors have pointed out, the absence of a simultaneous expenditure and taxation decision, allows the political coalitions to create false perceptions of the tax-price of public goods. When there is a weak relationship between the decision of public expensing and taxation, politicians are tempted to generate the perception that the cost of the provision of local public goods or services can burden other people's wealth different to the ones of their "constituency". And the "median voter" preferences would be affected by fiscal illusion (Buchanan, 1952). The two decades old paper of Winer, S. (1983) demonstrates that reduction of the tax-price perceived locally are present, indistinctly, in the case of conditional grants and unconditional grants. The perception of a smaller marginal tax cost of the public expenditure generating budget size higher than the optima and the "flypaper effect", were empirically demonstrated by Winer for the case of the federal subsidies in Canada, using a "median voter's dynamic model" on provincial expenditure between 1952 and 1970. Before Winer's paper, Gramlich, E. (1977) survey had suggested that the expenditure level induced by the block grants is several times higher than the expenditure induced by increments in other revenues. This "non desired result" of the federal transfers, that challenges the conventional theory, can imply not only an expansion in local expenditure higher than an equivalent increase in local income ("flypaper effect"), but perhaps higher than the amount of the transfer ("bandwagonism effect")<sup>2</sup>.

The literature is abundant in arguments trying to explain the "flypaper effect"<sup>3</sup>. The general conclusion of the public choice literature is that either conditional and unconditional grants from central government to local

<sup>2</sup> See Oates, W. (1972), King, D. (1984), Henderson, J. M. (1968), Schwab, R. M. and Zampelli, E. M. (1987), Case, A. C., Hines, J. R. and Rosen, H. S. (1993).

<sup>3</sup> A large list of papers contains Niskanen (1971); Romer y Rosenthal, (1980), and Rosenthal, (1990); Barro, (1973), Abrams y Dougan, (1986), and Dougan, (1988); Nordhaus, (1975), and Rogoff and Sibert, (1988); Alesina-Tabellini, (1990), Tabellini-Alesina, (1990), Persson and Svensson, (1989); and, Alesina and Drazen, (1991).

governments, would induce a bigger and less responsible government than the one that would arise by means of citizens' choice in a democratic setting.

Actually, the "public choice" school goes beyond the mere dispute on technical issues, dealing with the achievement of "Pareto" solutions. It brings about a debate eminently political with important institutional consequences, where participants ideologically support two polar and opposite ideas. Those who support the centralization of national rents - that implies to reduce individual's freedom and the autonomy of intermediate social organizations (and consequently property rights) - versus those that remark individual freedom and autonomy of associations.

At the individual level, public decisions that usually governments follow implies an opportunity cost (tax burden) that not always will be compensated with the benefits derived from the expenditure side (negative fiscal residual). In such a case, Wicksellian postulate operates in practice if individuals have access to two derived dimensions of that opportunity cost: the dimension of the "voice" and the dimension of the "exit" (Wiseman, J., 1987). The dimension of the voice means the possibility for any individual to express his or her opposition to any social decision that he or she considers unsatisfactory and by that way the possibility of influencing in its modification. The dimension of the exit means the possibility to get rid of the system of rules imposed by the government, that is, the possibility of leaving the "club" (municipality, province, or nation).

Nevertheless, based on such reasoning it would not be possible to extract a general rule on what level of government should mainly concentrate the power to spend and to levy taxes. This decision will depend on social preferences, as well as the cost to assume for such services. For example, a citizen may prefer a service supplied locally, although it would imply a higher cost, if she or he assigns enough value to the biggest freedom of leaving the club that this solution offers her or him (escaping from government's coercion). Transaction costs for exit obviously grows with more centralization. Escape from the national level means the necessity of moving to other countries, with the high individual cost that this alternative implies.

Constitutional arrangements (legal or formal) can be an effective restriction to the government's coercive power. All state (regional or local) may act coercively as a "Leviathan", but the federal constitutional agreement limits this behavior. Anyhow, migration among local states inside a country, makes the transaction cost in the exercise of the exit option relatively low.

This possibility "to vote with feet" at low cost, restricts the freedom of any local government to adopt rules markedly different to those of other states. This restriction to Leviathan reduces the necessity of explicit rules (constitutional or legal) to limit government power that anyhow could not be effective in the case of a central government, in which case individuals would face the high opportunity cost of leaving the club. This is not a trivial conclusion for countries with low level of governance and weak systems of democracy.

Anyhow, the final conclusion is that decentralization of fiscal power would allow a higher effectiveness of the Wicksellian efficiency rule guaranteeing at the same time a bigger individual freedom scenario. But it cannot be concluded which should be the optimal level of decentralization (or centralization), because this depends on value system of a society. Actually, many types of federalism exist, from cases of great decentralization (Switzerland) to others of a strong centralization (ex Soviet Union).

It is true that preferences for certain goods and public services within a geographical area are very dependent on the culture of the area. Factors like language, religion, race, and history, do count and they provide a good argument for decentralization. The recent disintegration of socialist block countries constitutes a good test on the prevalence of local nationalism and ethnic factors, as strong determinants of a bigger decentralization.

The political mechanisms through which fiscal decisions are adopted deserve special treatment. As Weingast, B., Shepsle, K. and Johnsen, C. (1981) - (WSJ) - have pointed out, there are important divergences among the normative principles suggested by the theory, on one hand, and the preferences of the politicians, on the other. Governments or policy makers are not perfect agents of the desires of the principal (constituency). The normative traditional recommendation that considers governments as something given and bureaucrats as agents aiming to maximize a given general welfare function constitutes a naive government's theory at the light of these developments. Therefore, the principal-agent paradigm that suggests the existence of information asymmetries and policy makers (the agent) pursuing divergent objectives that collisions with general welfare (the interest of the principal), appears to be a more realistic vision to analyze federalism<sup>4</sup>.

<sup>4</sup> WSJ demonstrate how the political institutions transform the "economic" basement of the benefit-cost analysis in another of "political" benefits and costs analysis. The authors conclude that the political institutions fundamentally alter the perceptions and incidence of benefits and costs, biasing social elections moving decisions away from an efficient result. And the type of biases is different in each level of government (Thoni, E., 1986).

Galeotti, G. (1982) suggests that decentralization reduces politicians rents, improving vertical relationships (between voters and politicians) in detriment of horizontal relationships (among politicians), because through fiscal decentralization the elasticity for political demand faced by political parties is higher, confirming this proposition with empiric evidence.

Piffano, H., (1989), suggests that the Argentine strong "tax centralism" with a concomitant process of decentralizing services and incrementing provincial sharing in the revenue-sharing system (Coparticipación Federal de Impuestos), has lead to a strong central government intervention, that Porto, A. (1995) has denominated "coercive federalism". The system makes provincial governments responsible for providing "benefits" (public goods or services), without assuming sufficient tax responsibilities, weakening accountability and at the same time generating a "cartel behavior" of provincial governors seeking for more revenues from the common pool. But the implementation of tax decentralization demands a careful analysis of the types of taxes to decentralize, and the revenue consequences for sub-national governments.

Porto, A. (1990) suggests that certain economic results of the Argentine federalism are a consequence of the way that institutional process has modeled jurisdictional representation in the parliament (National Congress). Laws that rule the election of senators and representatives (deputies) have biased revenue distribution among provinces far away from a "devolution principle" arrangement.

In conclusion, from the Argentine experience and the experiences of other countries, fiscal decentralization clearly allows individuals to exercise the right to choose, so freedom is the relevant scenario. Choice and freedom are two faces of the same human right and fiscal decentralization makes the exercise of this right work effectively and efficiently. On the contrary, fiscal centralization reduces freedom, weakening the performance of representative democracies.

## **II. THE LIMITS TO FISCAL DECENTRALIZATION AND THE ROLE OF FEDERAL TAX ADMINISTRATION**

### **II.1. Negative externalities in absence of federal fiscal coordination**

Fiscal decentralization shouldn't mean fiscal anarchy. All federation requires of 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 lead 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 inefficiency and horizontal inequalities, in case of 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 ( $e_t$ ).

According with the well-known Laffer's curve, if the tax rate-elasticity of revenues is positive, ( $e_t > 0$ ), a tax rate increase will increase revenues. But, the contrary will happen when that elasticity is negative ( $e_t < 0$ ). In that case, a tax rate increase will reduce revenues.

If two governments converge simultaneously to burden the same tax base, tax rate determination of each government could probably imply reciprocal pecuniary externalities. These reciprocal pecuniary externalities beg for the consent of a certain consolidated tax burden.

Without consent, vertical tax competition will probably induce to an inverse behavior than the one of horizontal competition, with negative results. National government and subnational governments trying to exploit the shared base, aiming to maximize its revenues, will probably produce reductions to other level of government's revenues. The result will be a consolidated loss of revenues and a significant economic cost for the private sector economy. So, vertical competition would not have any economic sense, driving to a reciprocal deterioration of tax revenue and an important loss in general welfare.

Consequently, the exercise of tax autonomy, especially in concurrence of sources, will demand a necessary fiscal and financial coordination between federal and sub-national governments. That is, to arrive to basics consent regarding the exercise of the respective tax autonomy. This implies the definition of "tax rooms" for both levels of government. Consent is needed not only on tax bases and other attributes of tax structure, but also on tax rates.

For that reason and in particular contexts of weak governance, a federal tax system should follow the principle of separation of sources. Separation of sources not only reduces notably the necessity of coordination,

but also allows a better performance of the fiscal correspondence principle. Each government is perfectly identified in its demand for tax payments to its voters. In case of shared tax bases, especially in case of taxes levying transactions, harmonization agreement is needed though this cannot avoid weakening accountability. In practice it is needed a common legislation rule by the national government, with sub-national autonomy to fix their own tax rate within certain limits<sup>5</sup>. It would not be possible or convenient to admit tax rates differentials according to activities or types of goods or services, unless they are established on the bases of a general federal agreement (between the federal and all sub-national governments).

Dealing with the consolidated tax burden, agreements for a “fiscal responsibility act” should define the accumulated effect of exaction on the private sector economy. The agreement should contemplate limits on consolidated tax burden and limits on public debt.

Literature has also pointed out repairs to fiscal decentralization due to redistributive and stabilization objectives (Prud’homme, R., 1995, and Tanzi, V., 1995). Besides, coordination problems increase in dimension and complexity due to tax administration issues, as it is explained later. On the other hand, Bird and Wallisch (1993), have presented some lessons from experiences of economies in transition, where decentralization of public expenditures and the concomitant centralization of tax revenues (cases of Hungary and Russia), have not solved the problem of fiscal imbalance of the central government, and has generated a process of sharp indebtedness of sub-national governments, as well as attitudes to develop other extra-budgetary sources.

## **II.2. Fiscal decentralization and tax competition**

Tax autonomy to fix tax rates has been suggested as the main attribute of fiscal decentralization. At the same time, tax rate autonomy is essential for competition among states or countries. This competitive scenario would allow Tiebout theorem to work for good. In principle, tax competition should not be considered negative when distortions are avoided, particularly by means of tax systems with uniform tax rates. Different tax rates on goods and services can be sustained on economic efficiency rationale (Ramsey’s rules). But in practical design of tax systems in many countries it seems unlikely

<sup>5</sup> See OECD (1999) and McLure, C. & Martinez-Vazquez, J. (2003) for international experiences.

that governmental bureaucracy could be in technical conditions to estimate and implement them. Actually, tax rate differentials in most VAT laws have been justified mainly on equity and not on efficiency grounds. Based on tax administration arguments, many experts coincide in suggesting to avoid discriminatory treatments among goods and services, maintaining the neutrality in tax rates, unless specific and evident empirical evidence prove the necessity of such differential treatment<sup>6</sup>.

Competition among governments trying to attract investments and consumption to its jurisdictions has been accused of welfare detrimental due to fiscal externalities among regions, that would lead to tax rates very low and cause sub-provision of public goods in equilibrium (“race to the bottom”). As Janeba, E. and Schjelderup, G. (2002) pointed out, this vision is in sharp contrast with the literature of public choice already mentioned. Competition in general and especially competition among governments is beneficial because it reduces government’s waste and discipline politicians (reducing the rents of politicians).

The more elaborated literature on harmful tax competition has been supported on the basic assumption of economic distortion due to taxation on capital<sup>7</sup>. 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 (preferences) differential 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 trying to avoid capital flying away. An interesting recent paper of Brueckner (2004)<sup>8</sup> has analyzed this problem using a simulation model. His conclusion is that depending on the parameters, tax competition could be beneficial or harmful.

Anyhow, most literature arguing against Tiebout’s thesis has the common assumption of the existence of a “central” planner capable to satisfy Samuelson condition in the provision of the “local” public goods. All normative literature are usually based on the existence of omniscient and benevolent politicians and bureaucrats working in the central governments,

<sup>6</sup> Tax neutrality policy would also reduce lobbies effectiveness seeking rents from tax expenditure decisions.

<sup>7</sup> This assumption is linked to the usual type of local taxes (on property) financing local governments. For a survey of theories on tax competition, see Wilson, J. D. (2000).

<sup>8</sup> Brueckner mentions the basic literature on the topic, with reference to Oates (1972), Berglas (1976), Wooders (1978), and others.

ignoring transaction cost and principal-agent paradigm in social decision mechanism. It also ignores that any social decision based on the “national” median voter preference will always yield a higher standard deviation than choices based on different local median voters (Oates decentralization theorem).

Besides, the argument of externalities and excess burden from the taxation angle neglects the fact that distortions can be produced by fiscal policies through the expenditure side of the budget. When asymmetries in the provision of public goods are present and this asymmetric provision modifies the economic equations of private investments, tax harmonization among states would not be a sufficient condition, but also a no-necessary condition to avoid distortions through the fiscal behavior of governments<sup>9</sup>. The thin line of separation of both sides of the public budget: expenditure (including exhaustive, transfer and tax expenditures) and revenues, makes all theory on tax harmonization incomplete and in many cases misleading.

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)<sup>10</sup>. 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 aliens<sup>11</sup>. 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 EU<sup>12</sup>.

<sup>9</sup> Piffano, H. and Porto, A. (1994).

<sup>10</sup> EU’s commissioner for the single market is also negotiating with Liechtenstein, Andorra, San Marino, and Monaco to reach a deal on sharing information and introducing withholding taxes.

<sup>11</sup> The temporary suspended IRS REG-133254-02 proposed by the Clinton Administration is now waiting for a final government decision on this EU intention.

<sup>12</sup> 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.

However, we 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 will lead to inefficient and inequitable results.

### II.3. Regional asymmetries and equalization

An important issue of fiscal decentralization and interstate coordination, is the problem of regional asymmetries in the distribution of tax bases. Differences in natural resources and economic development among regions will limit the possibilities of fiscal decentralization and will demand that coordination among jurisdictions should not only be vertical but also horizontal.

A distinctive feature of fiscal federalism in Argentina, for example, is the important asymmetries among sub-national governments. Though its extensive territory with 24 jurisdictions, 56% of the GDP concentrates in only two jurisdictions: the capital city (Ciudad Autónoma de Buenos Aires) and the Province of Buenos Aires. Together with three provinces located in the central part of the country: Córdoba, Santa Fe -both bordering with the Province of Buenos Aires- and Mendoza -bordering with Córdoba-, concentrate 78% of GDP.

Asymmetries regarding population and population density naturally are also important, as can be observed in the table below.

Jurisdiction	GDP (%)	Population (2001)	Density (Pop/Km <sup>2</sup> )
· City of Buenos Aires and Province of Buenos Aires	56		
· Córdoba, Santa Fe y Mendoza	22		
· Others	22		
· City of Buenos Aires		2.776.138 ( 7,7%)	13.679,6
· Province of Buenos Aires		13.827.203 (38,2%)	45,0
· 24 Municipalities of “Gran Buenos Aires”		8.684.437 (24,0%)	2.394,4
· Rest of Province of Buenos Aires		5.142.766 (14,2%)	16,9
· Province of Córdoba		3.066.801 (8,5%)	18,6
· Province of Santa Fe		3.000.701 (8,3%)	22,6
· Province of Mendoza		1.579.651 (4,4%)	10,6
· Province of Tucumán		1.338.523 (3,7%)	59,4
· Province of Entre Ríos		1.158.147 (3,2%)	14,7
· Province of Salta		1.079.051 (3,0%)	6,9
· Rest of provinces		< 1.000.000	

Source: Piffano, H. (2003a) and Ministerio de Economía y Producción, Argentina.

These strong asymmetries certainly are also present among local governments (municipalities). In the map of 2.157 Argentine municipalities, can be distinguished four categories: some few municipalities conforming big agglomerates (the City of Buenos Aires and the municipalities of the surrounding “Conurbano”, belonging to Province of Buenos Aires, or the “Great Rosario” in the Province of Santa Fe, for example); these conglomerates contain several municipalities and sometimes different provinces; a second category is municipalities with high population density (like several municipalities of the “Conurbano Bonaerense”); a third category is municipalities of cities and towns of small population density (including several provincial capital cities); finally, rural municipalities that conform most of the municipalities, including many municipalities of the Province of Buenos Aires outside the Conurbano.

The observed asymmetries will demand to pursue natural objectives of territorial redistribution of resources. These objectives exist in many federal countries and in some cases are incorporated in its constitutions (like in Canada and Argentina). The challenge is to design a system of federal transfers that avoids or minimizes possible perverse effects predicted by the positive theory. At the same time, to figure out an appropriate institutional design in order to avoid the presence of strategic behaviors of sub-national governments trying to improve its resources coming from the common pool administered by the federal government<sup>13</sup>.

#### **II.4. The role of federal tax administration**

A weak fiscal correspondence coefficient is a natural consequence of the asymmetries and the existence of an important common pool to be shared by provinces. The table below (omitting and containing decimal errors) shows the relative high percentage of national transfers as the main source of financing of sub-national governments in Argentina. Equalization transfers are possible through actual revenue sharing mechanism (Coparticipación Federal de Impuestos) and others federal grants (ATN).

<sup>13</sup> On this topic see Piffano, H. (2003b) and Porto, A. (2003).

JURISDICTION	TOTAL REVENUES	TOTAL PROVINCIAL OWN REVENUES	PROVINCIAL TAX REVENUE	PROVINCIAL NON-TAX REVENUES	TOTAL REVENUES FROM THE NATIONAL LEVEL	REVENUES FROM FEDERAL REVENUE SHARING	FEDERAL GRANTS
CITY OF BUENOS AIRES	100%	68%	64%	3%	32%	19%	14%
PROVINCE OF BUENOS AIRES	100%	48%	39%	9%	52%	29%	24%
PROVINCE OF CATAMARCA	100%	9%	3%	6%	91%	30%	60%
PROVINCE OF CORDOBA	100%	29%	25%	4%	71%	32%	39%
PROVINCE OF CORRIENTES	100%	16%	9%	8%	84%	44%	39%
PROVINCE OF CHACO	100%	12%	8%	3%	88%	33%	55%
PROVINCE OF CHUBUT	100%	44%	9%	36%	56%	24%	32%
PROVINCE OF ENTRE RIOS	100%	23%	15%	7%	77%	26%	51%
PROVINCE OF FORMOSA	100%	7%	4%	3%	93%	36%	57%
PROVINCE OF JUJUY	100%	16%	9%	8%	84%	33%	51%
PROVINCE OF LA PAMPA	100%	25%	16%	9%	75%	33%	42%
PROVINCE OF LA RIOJA	100%	8%	4%	4%	92%	36%	56%
PROVINCE OF MENDOZA	100%	39%	14%	25%	61%	26%	36%
PROVINCE OF MISIONES	100%	13%	8%	5%	87%	39%	48%
PROVINCE OF NEUQUEN	100%	59%	5%	54%	41%	25%	15%
PROVINCE OF RIO NEGRO	100%	41%	10%	32%	59%	35%	24%
PROVINCE OF SALTA	100%	27%	11%	17%	73%	31%	41%
PROVINCE OF SAN JUAN	100%	9%	4%	5%	91%	25%	66%
PROVINCE OF SAN LUIS	100%	9%	7%	1%	91%	39%	53%
PROVINCE OF SANTA CRUZ	100%	59%	4%	55%	41%	28%	13%
PROVINCE OF SANTA FE	100%	32%	26%	7%	68%	26%	42%
PROVINCE OF SGO. DEL ESTERO	100%	6%	5%	1%	94%	34%	59%
PROVINCE OF TUCUMÁN	100%	18%	15%	2%	82%	38%	44%
PROVINCE OF TIERRA DEL FUEGO	100%	62%	9%	53%	38%	38%	1%
TOTAL	100%	35%	24%	12%	65%	30%	35%

Source: *Ministerio de Economía y Producción, Argentina.*

The table shows that - with the exception of the City of Buenos Aires and the principal “oil” provinces (Tierra del Fuego, Santa Cruz, and Neuquen) – more than 65% of total revenues come from the federal level of government. The Province of Buenos Aires, followed by Córdoba and Santa Fe, is the province with relative important own tax revenues. Others “oil” provinces, like Mendoza or Chubut, have relative important own revenues, though less than half of its total revenues are explained mainly by oil revenues.

Therefore, these data shows that many provinces are very dependent on “money coming from Buenos Aires” (meaning “from the National government” which residence is the City of Buenos Aires).

Now, how to avoid probable perverse effects of a reduced fiscal correspondence coefficient in case of governments with scarce own financing capacity?

Many experts in Argentina have suggested the introduction of assignment formulas that incorporate indicators of “fiscal effort”<sup>14</sup> due to the possibility of strategic behaviors of sub-national governments trying to elude its political responsibility through federal financing. In author’s proposals, dealing with the tax sharing system in Argentina, it was suggested mechanisms of incentives based on the establishment of standard or postulated values for tax revenue capacity and fiscal needs of sub-national governments<sup>15</sup>.

However, it is notorious the absence of proposals that contemplate the role that should assume federal tax administration. As Bird, R. (1983), Casanegra of Jantscher (1990) and Bird, R. and Casanegra of Jantscher (1992) have pointed out, “tax administration *is* tax policy”, especially in less developed countries. So tax administration should not be forgotten or isolated from the central issue of federal tax design. And, dealing with tax administration, literature has found many problems in a tax decentralization scenario. They are: perverse incentives and difficulties dealing with smuggling control, frauds in individual and societies residences, maneuvers in price transfers among firms belonging to the same holding, tax tourism, and some elusion and evasion maneuvers, among others<sup>16</sup>.

<sup>14</sup> Zapata, J. A. (2003).

<sup>15</sup> Piffano, H. (1998).

<sup>16</sup> See McLure, C. & Martinez-Vazquez, J. (2003).



In order to avoid those difficulties, a central control on revenue raising activity through the federal tax administration service is needed. This suggestion is not incompatible with the possibility of reinforcing sub-national tax power. Federal tax administration control should not only be referred to national taxes but also to provincial taxes. Actually, in Argentina the AFIP - the federal tax administration service - is an autarchic public entity that administers national revenue taxes shared between the Nation and provinces. It is the administration of the common pool that recognizes a shared property of national and provincial levels of governments on several common tax revenues (Coparticipación Federal de Impuestos).

The AFIP - supervised by Auditoria General de la Nación (General Audit Office of the Nation) an entity that belongs to the National Congress - has signed an agreement with the Comisión Federal de Impuestos (Federal Commission of Taxes) through which provinces are informed on the evolution of revenues and jurisdictional assignment of revenues.

Dealing with provincial tax administrations, very recently AFIP and some provinces – including the four main provinces relative to GDP and population - have signed agreements of technological harmonization and data exchange that should improve effectiveness and efficiency in tax administration services performance. Those agreements of technological harmonization also pursue to generalize the “*cuitificación*” -the assignment of a CUIT or code number to tax payers (persons and societies)- relative to taxes on income, real estate properties, automobiles and others provincial taxes.

However, cadastre and real estate ownership, automobiles, and society registers are still decentralized. That means the lack of a federal crossed-control, and the possibility of strategic behaviors of sub-national governments with few incentives to improve effectiveness and efficiency on its own tax revenue collection.

The suggestion is to centralize cadastre and automobile register, as well as the constitution of a federal entity in order to control personal and societies residence and real estate ownership, through a database shared with the corresponding provincial public entity.

In Argentina, provinces could not argue to be harmed in its autonomies, after having delegated the legislation and administration of the main tax revenues to the National government through the tax sharing system. Centralization of tax revenue administration and control would not only compensate the possible perverse effect of the lack of incentives or

commitment of provincial revenue services – usually associated to the existence of the “common pool effect” - but rather it will improve effectiveness and efficiency of consolidated tax revenue of federation.

Finally, centralization of tax administration would remove important obstacles faced by many provincial tax administration services, which though having a strong political commitment to improve administrative efficiency, have limited human and technical resources for an effective and efficient work result. Those barriers are beyond the possible perverse incentives induced by the tax sharing system dealing with institutional or political commitment to collect tax revenues.

The analysis leads to a basic final suggestion: the future federal tax agreement in Argentina should not omit two essential chapters to avoid possible defects of decentralization (in its present or higher level of decentralization): macro-fiscal rules (responsibility act) and tax administration centralization.

Centralization of tax administration doesn't prevent provinces from its own autonomy to fix tax rates of provincial taxes, except the consent that must be trade off with the federal government in cases of concurrence of tax bases. Provinces could also decide to decentralize some taxes to municipalities, like the real estate or property tax. Centralization of cadastre, on the other hand, would guarantee horizontal equity in fiscal treatment of taxpayers of national taxes, like the one levying personal wealth (*Impuesto a los Bienes Personales*). Revenue from this tax is shared between national and sub-national governments. In case of taxes on register goods it is not irrelevant the fiscal uniform determination of tax bases; though each province would burden the corresponding tax base with a different tax rate. Provincial tax administration services could become administrative partners of the federal tax administration, making possible to reduce bureaucracies in all federal tax administration.

### **III. CONCLUDING REMARKS**

In federations like Argentina, vertical fiscal design admits variants that imply different degrees of sub-national autonomy.

According to the prevalent opinion in literature of fiscal federalism, sub-national autonomy to fix tax rates in taxes that must finance its expenditure is the essential attribute for the exercise of that autonomy.

Relative to tax assignment, literature recognizes two approaches: the normative theory and the positive theory (public choice). Although both approaches coincide in several aspects, particularly in the decentralization of services, important differences emerge as regards to tax decentralization.

Analyzing recommendations and arguments of both approaches, certain limits arise to any intent for a fiscal decentralization that would assure full fiscal correspondence. The reason is essentially the presence of territorial asymmetries in tax bases and the consequent necessity of some revenue equalization system. Additionally, technical reasons on taxation and tax administration limit the decentralization of taxes that usually constitute the most efficient sources and, at the same time, the most important in revenue raising capacity.

In summary, tax decentralization has been accused as detrimental from macroeconomic and microeconomic point of view. On the macro side, decentralization could damage central control of internal economic activity and redistributive objectives. On the microeconomic aspect, decentralization could lead to detrimental consequences relative to the optimal provision of public goods (race to the bottom). However, competition among states is the basic attribute of a federal system, because it is inherent to tax autonomy. Otherwise, decentralization and horizontal states competition make possible Tiebout's theorem work for good. Literature is not conclusive on the final result comparing benefits and costs of decentralization due to horizontal tax competition. But "vertical competition" is harmful in any federation. A federal consent on relative tax rooms between national and provincial level of governments is needed.

Anyhow tax bases asymmetries among provinces or states make also necessary an equalization system. This means some common pool of revenues to be distributed among provinces. This in turn usually weakens fiscal correspondence principle.

Tax centralization and revenue distribution among governments through the tax-sharing system also imply the possibility of strategic behaviors of governments that can lead to inefficient and inequitable results, from a jurisdictional and personal point of view.

The solution to make both contributions – the normative and the public choice contribution - compatible and to avoid defects of any common pool system – like the tax sharing system of Argentina - must be found out in federal tax administration design.

Through the basic federal agreement dealing with federal tax administration and macroeconomic or macro-fiscal rules is possible an institutional federal design that limits reciprocal negative externalities between both levels of governments that finally leads to a widespread economic harmful to the whole federation.

This document has reviewed problems and recommendations of literature on fiscal federalism, leading to the conclusion on the necessity of some degree of tax harmonization and centralization of the federal tax administration. This would consist in a shared-databases system, including cadastre and real state ownership register, automobiles register, and residences of citizens, identification and residence of societies, and other crucial aspects for tax administration and control. These recommendations could be implemented through different formal agreements among national and provincial governments, and would allow closing up holes opened to elusion, evasion, and fiscal frauds, as well as neutralizing possible negative effects on the political incentives derived from the common pool problem.

Interstate federal control of tax administration would improve tax systems performance, national, and sub-national, and would avoid damages usually assigned to both federal models: centralized and decentralized.

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