Matrices of Regional Redistribution of Argentinean Public Revenue and Its Political Appropriation

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Abstract: The aim of this paper is to show the matrices that allow to explicitly read cross fiscal transfers that occur among the 24 provinces as well as among the 24 national districts, which derive of the application of the present system of collection and distribution of public funds administered by the central government. In the analysis, the collections made by the provinces were incorporated. Here, these matrices are being related to the partial appropriation of those funds by certain regional political elite in the current democratic period.

Key words: fiscal federalism; regions; political elites; Argentina

JEL codes: H71, H73, H77

1. Introduction

The initial objective of the paper is to explicitly read matrices that enable cross fiscal transfers that occur among the 24 provinces as well as among the 24 national district counterparts, which result in the current application of public fund distribution system operated by the central government and incorporate collection analysis conducted by the provinces. Along with that, we entered the question of ownership of part of these funds to support regional political elite in the current democratic period.

In this opportunity we will discuss particularly the financial relationships among the provinces that arise from the distribution of secondary and related sharing, confronting them with the principles of federalism. But the crucial thing is to determine that jurisdictional residents of certain provinces are contributing to the maintenance of provincial treasuries of others in a much higher proportion than the inhabitants of the former. This would be, in itself, an act of domestic geopolitics that determines the institutional delay observable in Argentina and that would transcend even the non-compliance with federal principles,

It is possible to access official data related to these provincial interrelationships consistently, but today it is not feasible to obtain official information that allows us to estimate regional fiscal balances relating to the central government and social security subsystem, as we did in previous works. However, we will estimate those referred to the National Administration together, albeit suboptimal.

To display the cross-transfer game in particular that of the residents of each of the provinces and the national districts, we developed two matrices. Now we prefer to do it with the updated data available, which are those of 2011.

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In line with what we have argued in a recent article, we read that the resulting net fiscal flows, now exposed in matrix mode, are not spontaneous but obey a strategy to appropriate a share of central government revenues, developed by a regional elite, established mainly in the north and south of the central strip. This strategy also takes into account the income and expenditure of the provinces themselves located in this region, with actions to preserve or increase the former and to decrease the latter.

In what follows, we first give a conceptual frame of the federal jurisdictions and principles, exclusive provincial taxes and charges or those shared by national and provincial jurisdictions ("concurrent" taxes); secondly, we address the construction and analysis of the above-mentioned matrices, methodology and information used, based on official data, in 2011, including provincial revenues in the first array. Below we provide an economic and political interpretation of the recent history of a strategy of appropriation of public revenues and ultimately the overall conclusions.

2. Jurisdictions, Federal Principles and Taxation

Jurisdiction means the authority to govern and enforce laws. Federalism: State system where a central power coexists with regional powers. These are often referred to as federated states, to distinguish them from national states; each level has its own jurisdiction to exercise its functions assigned by the Constitution.

The people, the land and the government are the state elements in their mutual relationship, as Hermann Heller (p. 256) conceptualized. So, it is up to the provinces that their governments exercise their authority over residents within its geographic boundaries; taxpayers in tax matters. The distribution of powers between the two types of jurisdiction is established in the Constitution. In USA what it is not explicitly granted to the central government is in the States of the Union, similar to the case of Argentina, with respect to the provinces, while the opposite occurs in Canada.

There is no constitutional treatment in terms of transfer of sovereignty from one federated state to another, at any constitution.

Constitutional provisions have their basis in the federal principles developed in a doctrine by several authors, from the creation of federal states to the recent past, under whose rationale should be interpreted. Héctor López Bofill (pp. 245-246) has stated such principles according to the text of the 1994 Argentinean Constitution, such as: federative unit, federal (national) sovereignty, federal (national) constitutional supremacy, provincial autonomy, competence reserves, equality among provinces, indestructibility of states, provincial territorial integrity, participation of the provinces. Less numerous is the list of other authors, but this would come to reflect that some principles are extended to contain others. So Rojo Salgado, Argimiro (pp. 56-62), citing G. Héraud, condenses these principles in only four: autonomy, participation, cooperation and subsidiarity.

Consistent with the purpose of this study, we selected the following principles (1) Autonomy: ability to manage resources and issue legal standards independently, so that each state takes care of its own affairs. (2) Competence reserves: they presuppose the existence of exclusive areas of competence, for which it must establish safeguards that prevent an entity from intruding on the powers of another (3) Equality of the provinces: it prevents exceptions or privileges that exclude some of the provinces in favor of others. These are complemented by (4) subsidiarity: it means replacement and supplementarity, refers to the ideas of help and support, from the top level toward the lower, without canceling it.

We may add, with regard to the competence reserve, the distinction between exclusive and concurrent

competences. López Bofill (p. 251), citing C. M. Bidegain, mentioned directives to troubleshoot demarcation of competences:

"(a) If the issue is national by area and dimension, competence will be national;

(b) The affairs to be distributed among the national government and the provinces are not a closed list, but open and growing;

(c) The national competence may arise due to the inability of the provinces to address problems that necessarily have to be solved."

Now it is appropriate to connect the previous doctrinal issues with the approach taken by the Public Finance in the issue of fiscal federalism. As such, the federal government model would represent a solution to the proposition of optimal allocation of functions that require the benefit principle, according to which: every service should be determined and paid within the confines of the jurisdiction in which the benefits occur. This requires the use of national taxes in the financing of national services and funding for local services is made through taxes whose burden is borne within the jurisdiction where such services are provided, as Musgrave and Musgrave (pp. 557-591) have taught.

Therefore, these authors propose the criteria for determining the functions of (1) allocation and (2) distribution, in a federal system. As to the first, for national goods, the theory of fiscal federalism requires a central provision, while goods whose benefits are limited to regional level, should be provided by lower-level jurisdictions. And the role of getting equitable distribution of income among individuals must be exercised by the central (national) government. Similarly, the national government should take care of the issue of equity among provinces if their residents differ in their per capita income and, therefore, in their fiscal capacity. This equity would be achieved through policies of subsidies. It should be borne in mind, for the purposes of this paper, what the fiscal doctrine proposes: *the help must go from the national to the sub-national jurisdictions, not among the latter*.

In Argentina the Constitution (Sections 4º and 75º) provides concurrent tax powers among the national government and the provinces in indirect taxes. These taxes may be levied by the provincial and national governments, only in emergency situations, for a limited time and concurrently.

The most important part of the Argentine tax system is the subsystem called "regime of coparticipation" or simply "coparticipation" now governed by Act No. 23,548 of 1988. This, like its predecessors, has been wrongly called "Agreement Act", since there is no prior agreement, but operates as a contract of adhesion, imposed by the national government.

The revenue sharing system in force in Argentina, or "coparticipation" is a mechanism by which the provinces delegated to the Nation the collection of concurrent taxes and the subsequent distribution of funds among the provincial treasuries. It forms a collection "coparticipable mass" together. Primary distribution is called the division of revenue among the national jurisdiction and the provinces as a whole. Redistribution among provinces is called secondary distribution[1]. This redistribution is done taking into account the social and economic situation of each province, according to preset ratios. Currently the original mechanism of the Agreement Act has spread to other shared taxes.

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[1] Percentual distribution: Buenos Aires: 21.3, Ciudad Autónoma de Buenos Aires: 1.9, Catamarca: 2.6, Córdoba: 4.7, Corrientes: 1.8, Chaco: 8.4, Chubut: 3.6, Entre Ríos: 4.7, Formosa 3.4, Jujuy: 2.8, La Pampa 1.9, La Rioja: 2.0, Mendoza: 4.1, Misiones 3.3, Neuquén: 1.8, Río Negro: 2.5, Salta: 3.8, San Juan: 3.2, San Luis: 2.2, Santa Cruz: 1.7, Santa Fe: 8.7, Santiago del Estero 3.9; Tucumán: 4.6, Tierra del Fuego: 1.3.

The constitutionality of the original "coparticipation" has been discussed. Opponents to subsystem argued that the provinces transferred inalienable powers to the Nation. Conversely, it was argued that provinces have delegated only the authority to collect and administer taxes. The latter, for us, is not what happens. Some provinces are giving up some of their own measurable powers by the transfers of funds to the treasures of other provinces, as we show below.

It has been said that these discussions have been settled after the constitutional reform of 1994, due to the insertion of the coparticipation in the new text. For us it is not thus, because it has opened a legal conflict between constitutional norms: the "Agreement Act" scheme confronts to the existence of a federal system of government established in Section 1 of the Argentinean Constitution[2], as we explain above and justify below indicating monetary amounts at stake.

3. The Regional Fiscal Balances (RFBs) and Matrices

3.1 Concept

The Regional Fiscal Balances scheme (RFBs) is an instrument of economic information that shows an estimate of net fiscal flows among regions occurring through mechanisms operating a central government. These flows are calculated as the difference between inputs and outputs of fiscal funds for a specified period, in each of the parts of the territory. This allows us to distinguish two regions: a donor region and a recipient region of funds transferred from one to another, in the sense that its residents are those who give or receive, depending on the sign of the balances. Mathematical symbols:

$$\text{Inflow}_i = I_i; \text{Outflow}_i = O_i; i = 1 \text{ to } 24.$$
$$\text{RFB}_i = I_i - O_i; i = 1 \text{ to } 24. \text{ If: } \text{RFB}_i < 0, \text{dador}_i; \text{RFB}_i > 0, \text{recipient}_i.$$
$$\text{Transferred from the donor region: } \text{TDR} = \sum_n \text{RFB}_i, n = 1 \text{ to } N$$
$$\text{Received by the receiving region: } \text{RRR} = \sum_m \text{RFB}_i, m = 1 \text{ to } M; N + M = 24$$
$$\text{TDR} = \text{RRR} \pm \text{deficit/surplus of central government.}$$

As in our previous papers on regional fiscal balances (Ruarte Bazán, 2011, 2012), we tried to calculate and display the flows separated into three types: (1) Provincial (2) Central Government (3) Social Security. By adding them we can get one general. For reasons explained later, in this study we had to present (2) and (3) together, which we call the National Administration, as is usual in Argentina.

Therefore, we have developed two kinds of flows calculated for 24 partitions in each, corresponding to the 23 provinces and the Autonomous City of Buenos Aires (CABA) in the first case and 24 national districts identically called, in the second kind. That is, hereinafter we call District to each geographical partition used to try National Administration's fluxes.

The collection of all involved taxes is the responsibility of the Federal Administration of Public Revenue (AFIP, acronym in Spanish). In addition, AFIP collects pension contributions. Redistribution toward the provincial treasuries is done by other central government agencies, while social benefits are basically distributed by the National Social Security Administration (ANSES). Although the pension system should be autonomous, according to the Argentinean Constitution, it is actually manipulated by the central government, both the collection of its resources (through AFIP) and the payment of benefits. Its operation has distorted the Argentinean taxation. Today

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[2] Section 1—The Argentina Nation adopts for its government the federal, republican, representative form, according to what this Constitution establishes.

its resources come in a 55% of tax collection but, in turn, a part of its funds are used to meet the expenses of government and the needs of central treasury.

In the fiscal flow of each province, the input is what it receives from the central government according to Act No. 23548—secondary distribution—and similar acts. Individual output is what is collected by the AFIP in its geography, estimated by distributing the provincial portion of the primary distribution, as explained in the methodology. In the fiscal flow of the National Administration, each output of the district is estimated similarly with the central government primary distribution more contributions; each entry is the amount spent by the Nation in districts.

In place of RFBs, we can use Rates of Fiscal Geographical Return (RFGRs), which we define as the ratio of what is returned in the form of remittances from the central government regarding the proceeds from each province or district. Therefore, the role of donor or recipient of each partition depends on whether the value is greater or less than 1. Although the distinction between the two is arithmetic (quotient, instead of subtraction), RFGRs exempt us from inflation adjustments.

It should be noted that in terms of fiscal policy, a central government, within its jurisdiction, uses alternately both devolution or redistribution criteria to design or evaluate net flows.

According to the devolution criterion, funds should be allocated to each region according to the amount paid by taxpayers who reside there. Redistribution criterion is pursuing a regional redistribution of income and/or of the provincial fiscal capacity, by transferring funds to correct personal or regional economic asymmetries, equitably.

In the case of provincial funds raised by AFIP and intended for secondary distribution among provinces, the redistributive criterion should not apply because it is not the responsibility or provincial function to correct fiscal imbalances from another province or region asymmetries, but the national government, as conceptualized before. However, for the determination of coparticipable remittances to the provinces, the redistributive criterion is used, which is a departure from the federal principles and the Theory of Fiscal Federalism.

3.2 Matrices

One objective of this paper is to obtain further conclusions than usual, by reformulating the RFB scheme known. For this we thought to insert a matrix detailing what each receiver unit receives from each donor and, simultaneously, alter the sequence location of columns of the original scheme.

So the matrix of the provinces was developed in order to make explicit the financial relationship of each of the donor states with each receiver.

When developing the national case, we show the transfers of public funds among districts. In the provincial case also we incorporate provincial tax revenues and other transfers from the national government.

Denote matrices new schemes outlined.

4. Methodology

To calculate the net flows, you can use different output/ input criteria. These approaches are usually classified as: levying/payment; load/benefit; load/spending; income/spending (Barberán Ortí, 2005). We choose load for outflows. In estimating provincial and security flows there is no difference between benefit and spending criteria because transfers go directly to the owner or to the recipient in each case. We opt for criteria of expense or benefit to calculate the central government inflows which will influence the result, especially in the role of the City of Buenos Aires, where most national employees reside.

4.1 Provincial RFBs

We show outflows in real terms directly when possible or, if not, we estimate them. In the latter case, the amount obtained for each tribute/province, in turn depend on the criteria we choose to allocate geographic origin of primary levying, here in its provincial portion. Besides, these estimates depend on the availability of information.

As for small taxpayers, we learned of the geographical origin of each collected tax through accurate information published by the AFIP.

Instead, to distribute receipts from large taxpayers (these with tax residence assigned by law only in the City of Buenos Aires), it is necessary to use coefficients, as just discussed. We use the same criteria justified in Ruarte Bazán et al. (2011).

Regarding remittances of secondary distribution, we take the 2011 official information of Boletín Fiscal de Argentina (2012) where it shows those concerning Act No. 23,548 (1988) and its subsequent amendments and extensions.

The central government returns to the provinces that capture the same amount, ergo no sense to talk of redistributing surplus or deficit.

As for the type of record used, we chose cash basis exclusively.

4.2 National Administration RFBs

As for the geographical allocation of the AFIP revenue collection, we follow the same methodology explained in previous RFBs, here the part belonging to the central government but now we must include exclusive national taxes, as tariffs, besides the pension system.

The geographic location information relating to the execution of expenditure of the central government and benefit of social security, is not accessible from the 2011 fiscal year, what before was explicited by the General Accounting Office. Thus we have seen the need to use an approximation: the obtained proportions for each district on the total country budget. In addition there is the limitation that central expenditure with the social security benefits come together. For this reason, we can only design a joint national RFB.

We decided not to distribute surplus or deficit to balance inputs and outputs as other authors do, because we would obtain a fictitious equality between revenues and expenditures of the national administration, which is difficult to justify.

We prefer using the spending approach to calculate inflows, due to criticism in Argentina when it intends to distribute salaries of public employees resident in the City of Buenos Aires among all districts as required by the use of the criterion of benefit.

4.3 Composition of Public Revenue in Argentina: No Municipalities

In recent decades the composition of this income has undergone structural changes. In the 90s it was subtracted revenue at the central and provincial governments by concurrent tax diversion (about 15%) to the social security system. In the 90s and 2000s, other drawdowns with different purpose and destination (Provinces, social security, Central Government) were set for levying each concurrent important tax. The resultant residue is distributed according to effective percentages of primary distribution: 40% central government, 60% Provinces (including CABA). The transfers toward the provinces—some of which originated in new special taxes shared—are about 25% of its original primary distribution portion, both are automatic. In addition, the central government makes discretionary transfers. So the Argentinian tax system is very complex and is known as a "fiscal maze".

The following approximate percentages on average during 2000s and *italics for 2011* are shown.

By collecting agencies: DGRs (Provinces and CABA): 16%, *15%.* AFIP: 84%, *85%.*

Principal taxes, duties and contributions collected by AFIP:

- Concurrents: Value-added (29%, *21%*), income - profits (21%, *15%*), others (20%, *14%*).
- Exclusive: Duties on exports and tariffs and others (13%, *19%*).
- Social security: Employer and employee contributions (17%, *31%*).

Principal taxes and duties collected by DGRs:

- Gross receipts (70%, *76%*), seals (8%, *9%*), real estate (10%, *7%*), others (12%, *8%*)

By destination of proceeds: Provinces: 40%, Central Government: 35%. Social Security: 25%.

Or, Provinces: 40%, *36%.* National Administration: 60%, *64%.*

5. Results

Table 1   Provincial RFBs. 2010 ($ million Argentine)

	Province	Acronym	I_i	O_i	RFB_i	$RFGR_i$
Donor region	CABA	CAB	1.963	34.181	-32.218	0.057
	Buenos Aires	BAS	19.947	25.284	-5.337	0.789
	Santa Fe	SFE	8.968	11.176	-2.208	0.802
	Córdoba	CBA	8.821	9.798	-977	0.900
	Subtotal		39.699	80.439	-40.740	0.494
Recipient region	Chubut	CHU	1.678	1.329	349	1.263
	Neuquén	NEU	1.825	1.256	569	1.453
	San Luis	SLU	2.274	1.484	791	1.532
	Tierra del Fuego	TFU	1.266	349	918	3.628
	Santa Cruz	SCR	1.654	677	977	2.443
	La Pampa	LAP	1.875	816	1.059	2.298
	Mendoza	MZA	4.180	2.815	1.365	1.485
	Río Negro	RNG	2.536	1.069	1.467	2.372
	La Rioja	LRJ	2.050	475	1.575	4.316
	Misiones	MIS	3.432	1.186	2.246	2.894
	Catamarca	CAT	2.681	360	2.321	7.447
	San Juan	SJU	3.316	911	2.405	3.640
	Jujuy	JUJ	2.870	413	2.457	6.949
	Entre Ríos	ERI	4.865	2.178	2.687	2.234
	Salta	SAL	3.932	1.184	2.748	3.321
	Tucumán	TUC	4.759	1.774	2.985	2.683
	Corrientes	CRR	3.821	797	3.024	4.794
	Formosa	FOR	3.610	346	3.264	10.434
	Santiago del Estero	SES	4.133	610	3.523	6.775
	Chaco	CHA	4.980	967	4.012	5.150
	Subtotal		61.737	20.996	40.741	2.940
Total			101.435	101.435	0	

Usually the RFBs scheme is tabulated for each partition in the sequence of the arithmetic operation, first the data: minuend and subtrahend, then the result or subtraction: inflow$_i$ (I_i), outflow$_i$ (O_i), balance$_i$ (RFB_i) = I_i - O_i. By example, we show below Provincial RFB 2010 in Table 1, extracted from Ruarte Bazán 2011, incorporated

Rates of Fiscal Geographical Return$_i$ RFGR$_i$ = I$_i$/O$_i$, in the last column. By locating the provinces in ascending order of their RFB values, the two regions are bounded: top donor and bottom recipient, and thus can subtotal by region.

We include the meaning of the acronyms used to identify geographical units in the second column. Beside Table 1 these provinces are presented on a map and colored by type of region.
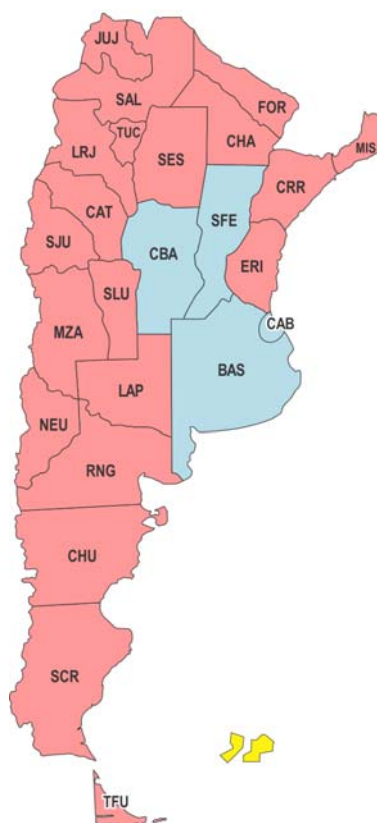
Map 1   Argentina's Regions: Provincial RFBs 2010—Donors: light blue. Receivers: pink.

5.1 Provincial Matrix

The purpose of this new scheme is to interpret the RFBs not merely as residues but as what is removed or added to the amount paid by local taxpayers depending on givers or receivers and as indicators of individual relationships between givers and receivers.

We obtain this different and useful perspective if, first, we change the location of the first 3 numerical columns of the previous scheme: in the first column we put values picked up by AFIP from each geographical unit (O$_i$), in the second column we locate amounts RFB$_i$ transferred (-) or received (+) and the third column we put the funds going to the treasuries I$_i$ = O$_i$ ± RFB$_i$. Furthermore, we modify the recipient region by inserting a matrix in the strict sense, which allows us to identify what each province receives from each of the donor provinces. This fact partly determines the title of this article and the name of the next Table 2.

We also extend the schema by adding new columns showing: the collections of the General Directorate of Provincial Revenue (DGRs); two columns for percentages indicators, then the subtotal of provincial revenues, other column of index percentage and finally a column which records other transfers from the central government (%).

The design of the table leads us to locate the Ciudad Autónoma de Buenos Aires (CAB), Buenos Aires (BAS),

Santa Fe (SFE) and Córdoba (CBA) at the top, forming the donor region occupying a central zone of the country. To its north, south and west is the receiving region that includes the other 20 provinces. Here and in other comments below it will be appreciated that CAB has a singular behavior, by its historical and institutional situation[3].

A brief economic characterization of the two regions can be found in the Annex. Now it suffices to say that it resides in the first 62% of the population and concentrated 73% of the GDP.

The proceeds for the payment of the provincial part of the primary distribution is displayed in column (1) which indicates that the donor region provides 79% ($106,022 mill.) of the total ($134,132 mill.) and thus its contributions quadruples the receiving region's funds ($28,111 mil.).

In the second column we see that the funds deducted and transferred from the donor region total $53,775 million, for whose formation the CAB residents contribute 76% ($40,792 million.).

It is clear that all recipient provinces received input beyond what is collected locally by the AFIP ($53.774 million against $28.111 million), i.e., from outside they get twice the amount contributed by residents.

It also highlights the fact that the contribution of CAB residents exceed local input, in most of these jurisdictions (13 out of 20): TFU, RNG, LRJ, SJU, MIS, CAT, JUJ (467%), SAL, CRR, FOR (438%), TUC, SES (402%), CHA (300%). In others: SCR, LAP and ERI, CAB's contributions resemble the local contribution. Funds from other givers are generally lower than local revenue, except with respect to BAS, CAT (95%), JUJ (93%), FOR (88%) and LRJ (55%).

However, for some recipient provinces the input from top provinces together is less than the local contributions, see column (4) (2)/(1): Chubut (CHU): 30%, Neuquén (NEU): 44%, Mendoza (MZA) 54% and San Luis (SLU) 69%. While some are at the opposite extreme: Catamarca (CAT): 630%, Jujuy (JUJ): 617%, Formosa (FOR): 578%, Santiago del Estero (SES): 531%.

The reading of column (3) highlights the fact that although on the donors lie the highest tax effort as seen, it reaches them less ($52,247 thousand) to that obtained by the recipient ($81,885 thousand): only 39% of the total raised ($134,132 million).

The percentages in column (4), confirm this fact in detail: the first region's residents together give 51%, while the receivers increase their perception 191%. Among these the particular situation of CAB (94%) is re-emphasized. Among the receivers there are disparities, from Chubut (CHU) with 30% to CAT and JUJ exceeding 600%.

If provincial levyings (5) placed in scene versus the local contribution to the AFIP, we read column (6) that the location of NEU, CHU and MZA remains below 100%; while the opposite happens for FOR (1,133%), La Rioja (LRJ) followed by (953%) and reiterated SES (694%), with CAT and JUJ (646%).

If relatively we measure the provincial revenue compared to total provincial revenue (7), we could visualize the degree of fiscal autonomy of each subnational jurisdiction and/or the fiscal effort that can be done to their residents. We do this in (8) and naturally we found the special case of CAB (89%), highlighting the place of BAS (57%). In the middle are placed: NEU (45%), CBA (37%) and SFE (36%) and CHU (36%). By contrast, there are

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[3] The Ciudad Autónoma de Buenos Aires was established in the 1994 Constitution and took its first government in 1996. Its jurisdiction is exercised within the limits of a city and has provincial and municipal roles. It collects revenues of provincial and municipal nature and has expenses of a province (not completely) and of a municipality. It was not included in the secondary distribution of the Act 23548 (1988) until the 2000s and only with an initial 1.4%. Still it is argued if it can be considered a province, but derives its resources in a high percentage of its residents and mostly provides services proper to a province. Thus, it is justified for its singular fiscal behavior.

provincial treasures that are financed by only one digit of their local revenues, in the case of FOR (7%) and LRJ (8%), others with figures close to 10% as SES (11%), CAT (12%), JUJ (12%), and CHA (14%).

This situation does not change essentially, in percentage terms, if you take into account the current transfers, usually drawn directly from the central government to the provinces, as you can see the last column of Table 2.

Table 2 Provincial Matrix. 2011 ($ million Argentine)

	Geographic location	(1) Primary distribution provincial and similar, collected by AFIP from local residents	(2) Decrease directed to supply non-local provincial treasuries (RFBs)	(3) Allocated value provincial treasuries according to secondary distribution	(4) (2)/(1) %	(5) Collected Tax by provincial DGRs (excludes royalties and other non-tax revenue)	(6) (2)/(5) %	(7) Subtotal of provincial revenues	(8) (5)/(7) %	(9) (5)/(7)+ Current Transfers (%)
Donor region	CAB	43.392	40.792	2.600	94	21.624	189	24.224	89	88
	BAS	34.153	8.137	26.016	24	35.193	23	61.209	57	50
	SFE	15.350	3.445	11.905	22	6.606	52	18.511	36	33
	CBA	13.126	1.400	11.725	11	7.029	20	18.754	37	35
	Subtotal	106.022	53.775	52.247	51	70.452	76	122.699	57	52

	Geographic location	(1) Primary distribution provincial and similar, collected by AFIP from local residents	Contributions to provincial treasuries of non local residents from:				(2) Subtotal from non-local residents (RFBs)	(3) Allocated value provincial treasuries according to secondary distribution	(4) (2)/(1) %	(5) Collected Tax by provincial DGRs (excludes royalties and other non-tax revenue)	(6) (2)/(5) %	(7) Subtotal of provincial revenues	(8) (5)/(7) %	(9) (5)/(7)+ Current Transfers (%)
			CAB	BAS	SFE	CBA								
RECIPIENT REGION	CHU	1.697	390	78	33	13	514	2.210	30	1.262	41	3.472	36	35
	NEU	1.675	561	112	47	19	740	2.415	44	2.004	37	4.418	45	42
	SCR	956	918	183	78	32	1.211	2.166	127	938	129	3.104	30	22
	SLU	1.784	933	186	79	32	1.229	3.013	69	867	142	3.881	22	22
	TFU	431	935	186	79	32	1.232	1.663	286	572	215	2.236	26	25
	LAP	1.103	1.038	207	88	36	1.369	2.472	124	729	188	3.202	23	22
	MZA	3.612	1.469	293	124	50	1.936	5.548	54	2.912	66	8.460	34	32
	RNG	1.324	1.546	308	131	53	2.038	3.362	154	1.104	185	4.466	25	24
	LRJ	578	1.619	323	137	56	2.134	2.712	369	224	953	2.936	8	6
	SJU	1.721	2.035	406	172	70	2.682	4.403	156	880	305	5.284	17	16
	MIS	1.554	2.277	454	192	78	3.002	4.556	193	1.308	230	5.864	22	19
	CAT	487	2.326	464	196	80	3.067	3.554	630	475	646	4.028	12	11
	JUJ	531	2.485	496	210	85	3.276	3.807	617	507	646	4.314	12	10
	ERI	2.990	2.630	525	222	90	3.467	6.457	116	1.955	177	8.413	23	21
	SAL	1.494	2.829	564	239	97	3.730	5.224	250	1.397	267	6.621	21	19
	CRR	1.068	3.041	607	257	104	4.009	5.078	375	797	503	5.875	14	13
	FOR	707	3.102	619	262	106	4.089	4.796	578	361	1133	5.156	7	7
	TUC	2.193	3.135	625	265	108	4.132	6.325	188	2.300	180	8.626	27	24
	SES	870	3.503	699	296	120	4.618	5.488	531	665	694	6.153	11	10
	CHA	1.337	4.019	802	339	138	5.299	6.635	396	1.120	473	7.756	14	13
	Sub total	28.111	40792	8.137	3.445	1.400	53.774	81.885	191	22.378	240	104.264	21	20
Total		134.132						134.132				226.963		

Compilation, according to official figures. AFIP, Dirección Nacional de Coordinación Fiscal con las Provincias (DNCFP) and other sources.

5.2 National Administration Matrix.

Similarly to the above matrix, we construct Table 3 which central government and pension system flows.

Table 3 National Administration Matrix 2011 ($ million Argentine)

Donor region	Geographic location	(1) Primary distribution and exclusive taxes of Central Government, previsional contributions, collected by AFIP from local residents.	(2) Decrease directed to cover expenditures in other districts. (RFBs)			(3) Difference which is applied in expenses of Central Government and payment of previsional benefits, local.
			$	(2)/(1) %	%	
	SFE	42.361	20.155	48	38,0	22.206
	BAS	110.633	18.962	17	35,7	91.671
	CBA	35.409	13.278	37	25,0	22.130
	CHU	7.240	572	8	1,1	6.668
	NEU	5.900	108	2	0,2	5.792
	Total	201.543	53.074	26	100,0	148.468

RECIPIENT REGION	Geographic location	(1) Primary distribution and exclusive taxes of Central Government, previsional contributions, collected by AFIP from local residents.	(RFBs) Contributions to expenses from non-local residents from:					Subtotal		Deficit	(3) Sum which is applied in expenses of Central Government and payment of previsional benefits, local.
			SFE	BAS	CBA	CHU	NEU	$	%		
	SLU	4.983	75	70	49	2	0	196	4	48	5.227
	MZA	12.819	156	147	103	4	1	411	3	99	13.329
	TFU	2.543	373	350	245	10	2	980	39	237	3.759
	SJU	5.850	507	477	334	14	3	1335	23	322	7.507
	CAT	3.581	573	540	377	16	3	1510	42	365	5.456
	ERI	8.210	599	564	395	17	3	1578	19	381	10.170
	SCR	4.129	607	571	399	17	3	1597	39	385	6.112
	LAP	3.014	833	783	549	23	4	2192	73	529	5.735
	RNG	5.164	872	821	574	25	5	2297	44	554	8.015
	MIS	4.830	892	839	587	25	5	2348	49	565	7.744
	SAL	5.975	1058	996	697	30	6	2787	47	673	9.435
	LRJ	2.206	1090	1025	718	31	6	2870	130	692	5.768
	JUJ	2.823	1197	1126	789	34	6	3152	112	761	6.737
	TUC	7.939	1241	1167	817	35	6	3266	41	789	11.994
	FOR	1.660	1292	1216	851	37	7	3404	205	821	5.885
	CHA	3.771	1490	1401	981	43	8	3923	104	947	8.641
	CRR	3.168	1517	1428	999	43	8	3995	126	964	8.126
	SES	2.918	1625	1530	1071	46	9	4281	147	1033	8.232
	CAB	120.208	4159	3913	2740	118	22	10952	9	2643	133.803
	Sub Totals	205.792	20.155	18.962	13.278	572	108	53074	26	12808	271.674
			Deficit								
Total		407.335	4.733	4.256	3.254	356	256			12808	420.142
Compilation, according to official figures. AFIP, Oficina Nacional de Presupuesto (ONP) and other specific sources											

This array allows us to see what portion of the funds provided by residents of the national giver districts are transferred towards receivers: $53,074 to $201,543 (million): 26%. This deviation is very relevant to SFE (48%) and CBA (37%) and significant for BAS (17%). The relative weight of the total of the contribution is primarily supported by SFE (38.0%), BAS (35.7%) and CBA (25.0), totaling 98.7% of the transfer.

Recipients receive a bonus of 26% (53.074/205.792) on what they contribute and 32% including undistributed deficit (65.882/205.7929). Formosa (FOR) excels which a triple of what it contributes (205%), and

SES (147%), LRJ (130%), CRR (126%), JUJ (112%) and CHA (104%), more than double these percentages without taking deficit into account, which would rise by a third these percentages.

CAB special situation excels because, on the one hand, it is located among those that have one of the lowest percentages of additional perception (9%) and on the other, it has a high relative share of around 20% (10.952/53.074).

5.3 Federal Solidarity Fund (FFS) and the Royalties

Table 4   Provincial Distribution of Duty Collections of Exports of Soybean and Derivates of Oil and Mining Royalties 2011 ($ million Argentine)

| Provinces | Duties by geographical origin of soy exports | Regional Fiscal Balance of Federal Solidarity Fund | | | Provinces | (1) Collection of royalties | Collection of provincial taxes | | (4) Residues (1) – (2) | (5) (1)/(2) % |
		30% for this Fund	Remittances to provinces	Balances			(2) Provinces that charge royalties	(3) Other provinces		
Santa Fe	13543	4063	626	3437	SFE	0		6606	0	
Córdoba	5367	1610	622	988	CBA	0		7029	0	
Sub total	18910	5673	1248	4425						
Tierra del Fuego	0	0	86	-86	TFU	301	572		-271	53
La Pampa	90	27	132	-105	LPA	204	729		-525	28
Chubut	0	0	111	-111	CHU	2059	1262		797	163
Santa Cruz	0	0	111	-111	SCZ	983	938		45	105
Neuquén	0	0	122	-122	NEU	2341	2004		337	117
San Luis	60	18	160	-142	SLU	0		867	0	
La Rioja	0	0	145	-145	LRJ	0	224		-224	
Santiago del Estero	467	140	289	-150	SES	2	665		-663	
Ciudad de Buenos Aires	0	0	173	-173	CAB	0		21624	0	
Río Negro	0	0	177	-177	RNG	590	1104		-514	53
Entre Ríos	533	160	342	-182	ERI	311	1955		-1644	16
Salta	263	79	268	-190	SAL	276	1397		-1121	20
Catamarca	0	0	193	-193	CAT	204	475		-271	32
Jujuy	0	0	199	-199	JUJ	3	507		-504	1
Misiones	0	0	231	-231	MIS	47	1308		-1261	4
San Juan	0	0	237	-237	SJU	198	880		-682	22
Formosa	0	0	255	-255	FOR	21	361		-340	4
Corrientes	0	0	260	-260	CRR	75	797		-722	9
Chaco	243	73	349	-276	CHA	0		1120	0	
Mendoza	0	0	292	-292	MZA	969	2912		-1943	33
Tucumán	110	33	333	-301	TUC	0		2300	0	
Buenos Aires	3493	1048	1538	-490	BAS	0		35193	0	
Sub total	5260	1578	6003	-4428	*Sub total*	8584	18090	74739	9894	47
Total	24170	7251	7251	-3	*Total*	8584	92829			9

Compilation, according to official figures. Instituto Nacional de Estadísticas y Censos (INdeC), DNCFP, Subsecretaria de Relaciones con las Provincias. Ministerio de Economía de la Nación and other sources.

These two tax issues could not be incorporated in the previous matrices but they are interesting for the purpose of this paper. Both have to do with the exploitation of natural resources.

In 2009 the so-called Federal Solidarity Fund was created which comprised 30% of the amounts received by way of export duty on soybean and derivates and aims to strengthen funding for infrastructure in the provinces

which is distributed under the same percentages of secondary distribution of Act No. 23,548. Before its existence the redistribution of these export duties was under the jurisdiction of the central government and thus the inherent fiscal flows in its entirety would fit into the national matrix and so continues in 70% but it is possible now to make a special regional fiscal balance for the 30% including the provinces, as in Table 4. Moreover, royalties are important to provincial taxation as seen in the columns attached to the same Table.

It can be interpreted that this Table complements and completes the Provincial Matrix.

Royalties represent, as a whole, about half of the revenue from taxes in the provinces that charge them and for some more: CHU, SCZ, NEU, RNG, TFU and they are important for MZA, CAT and SJU. This should increase the fiscal autonomy of those provinces to a greater degree than the one shown in the Provincial Matrix.

As it is read, both are redistribution mechanisms that show, together, the same recipient provinces of previous matrices. In one case the sums collected are shared among all provinces, not in the other.

6. The Regionalized Appropriation of Public Revenues

Table 5   Rates of Fiscal Geographical Return Criterion of Load/Spending
Donor region: shaded light blue; Intermediate: green; Recipient: pink

2006-2010								2005-2009		2011	
Provincial		Central Government		Social Security		General		General		*General*[1]	
CAB	0.06	SFE	0.39	TFU	0.17	SFE	0.59	SFE	0.63	*SFE*	*0.59*
BAS	0.78	CBA	0.55	NEU	0.25	CBA	0.7	CHU	0.65	*CBA*	*0.70*
SFE	0.89	CHU	0.66	CHU	0.28	CHU	0.71	CBA	0.72	*BAS*	*0.81*
CBA	1	BAS	0.68	SCR	0.33	NEU	0.77	NEU	0.76	*CAB*	*0.83*
CHU	1.16	NEU	0.69	SLU	0.43	BAS	0.81	BAS	0.78	*CHU*	*0.99*
NEU	1.39	SLU	0.74	SFE	0.49	CAB	0.9	CAB	0.83	*NEU*	*1.08*
MZA	1.58	CAT	0.84	CBA	0.56	SLU	0.97	SLU	0.99	*MZA*	*1.15*
SLU	1.77	MZA	0.94	MZA	0.58	MZA	1.02	MZA	1.03	*SLU*	*1.22*
LAP	2.37	ERI	1.06	RNG	0.63	LAP	1.4	LAP	1.34	*ERI*	*1.48*
SCR	2.37	TFU	1.15	LAP	0.64	RNG	1.43	RNG	1.37	*SJU*	*1.57*
RNG	2.51	LAP	1.18	MIS	0.66	SCR	1.45	SCR	1.39	*SCR*	*1.63*
ERI	2.6	RNG	1.24	ERI	0.74	ERI	1.46	ERI	1.51	*RNG*	*1.75*
MIS	2.98	SJU	1.51	SJU	0.8	TFU	1.62	MIS	1.66	*TUC*	*1.81*
TUC	3.04	CAB	1.53	SAL	0.89	MIS	1.72	TFU	1.81	*TFU*	*1.82*
TFU	3.82	SAL	1.53	BAS	0.96	TUC	1.86	TUC	1.87	*MIS*	*1.93*
SAL	4.02	MIS	1.54	TUC	0.98	SAL	2.1	SAL	2.14	*SAL*	*1.96*
SJU	4.39	TUC	1.66	CAB	1.04	SJU	2.16	SJU	2.25	*LAP*	*1.99*
LRJ	4.87	SCR	1.68	JUJ	1.04	LRJ	2.75	CHA	2.79	*CAT*	*2.21*
CHA	5.31	CRR	2.24	LRJ	1.07	CAT	2.86	LRJ	2.81	*CHA*	*2.99*
CRR	5.47	CHA	2.45	CRR	1.08	CRR	2.9	CRR	2.84	*LRJ*	*3.05*
CAT	7.35	LRJ	2.53	CAT	1.27	CHA	2.99	CAT	3.08	*CRR*	*3.12*
JUJ	7.46	JUJ	2.61	CHA	1.28	JUJ	3.5	JUJ	3.59	*JUJ*	*3.14*
SES	8.37	SES	3.55	SES	1.44	SES	4.35	SES	4.23	*SES*	*3.62*
FOR	12.37	FOR	5.68	FOR	1.58	FOR	6.52	FOR	6.17	*FOR*	*4.51*

Note: [1] Calculated using values of Provincial and National Administration Matrices. Based on data from AFIP, Contabilidad General de la Nación (CGN), DNCFP and other.

In previous publications (Ruarte Bazán R. et al., 2011, 2012) we have discussed the mechanisms of appropriation of Argentinean public revenues and for this we use the tool we proposed and defined above as Rates of Fiscal Geographical Return (RFGRs), among other social and political indicators.

Its use facilitates historical analysis because it allows us to frame periods longer than a year, to avoid the correction for inflation that would imply the use of Regional Fiscal Balances (RFBs), as said before. The next Table 5 shows the 2006-2010 period separated in three types of RFGR and the General RFGR as sums of the 3 partial RFGRs, and the 2005-2009 period for General RFGR used in the following econometric demonstrations which highlights that the donor region now includes San Luis, a place without major natural resources. Also a final column for 2011 General RFGR, calculated from the previous matrices is added.

6.1 The RFGRs as a Measure of Regional Appropriation of Fiscal Flows Operated by the Central Government

We can visualize the RFGR as a measure of regional appropriation of these fiscal flows. This table, and also the matrices, show that the Central Government makes a distribution of own resources in their districts, with similar priorities to the secondary redistribution between provinces. In Ruarte Bazán (2012, p. 2) we present the ordinal correlation (Spearman) between provincial and national RFGR as $\rho = 0.86$ for 2005-2009 and $\rho = 0.82$ for 2010 and cardinal correlation R^2 is 0.73 and 0.71, respectively, and higher for previous years. That is, there exists a pattern of behavior that would respond to the same strategy and would not distinguish whether it is national or provincial jurisdiction. Then, the regional belonging would be decisive in the redistribution of public revenues collected centrally.

From this point of view, it would become somewhat abstract discussion of whether that redistribution favors the nation or the provinces in general, imploring the federal principles. In fact, the combination of provincial and national districts forms two resident´s regions, being the transfer of funds from one to another very pronounced.

In any tax system, whether federal or unitary, it is inevitable the occurrence of an asymmetry in the geographical distribution of government revenue and therefore it is appropriate that there is a geographical redistribution to correct inherent regional economic imbalances. But in Argentina, this redistribution is very disproportionate, unjustified and permanent, which alters the federal principles without getting redistributive effects on income, as we have shown in Ruarte Bazán et al. (2011).

6.2 The TRG Is a Better Indicator of the Political and Socio-cultural Behavior

In this last article we proposed to construct a regional index of alignment of politicians by origin district, considering the behavior of legislators in the National Congress, provincial governors and President of the Nation.

This index, with variability between 0 and 1, allowed us to demarcate two political regions, according to whether each of 24 geographical partitions is above or below a critical value (0.66), for the period 2005-2009.

Then we correlate this politic regional index with other known regional, political and economic indicators: *political overrepresentation, the "pampean"*[4] *character, metropolitan attribute and also with RFGR.*

From the comparison it resulted that the latter ones arose as the best indicator of regional, political alignment. Here too, the belonging to a region explains the alignment better than party membership. Indeed, for the period it was found that 3-4 governors of the recipient region were aligned but affiliated to different parties than the Peronist party in the central government while a Peronist governor of the donor region was not aligned with the elite.

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[4] Pampa is an Aboriginal word used in Argentina to denote an area of fertile plains conducive to agricultural development, traditionally cattle and grain and now soybeans also. Here there are the largest number of rural and urban population and greater industrial production.

In order to deepen the analysis, we were interested in investigating the regionalized behavior of politicians not only in their political alignment but also to society from which they come and as functional performance.

The intention was to understand in part how the common sociocultural factors associated with the analyzed regions play and the tax reasons. This is why we built another index that combined the transparency of political activities, the level of patronage or political commercialism and management quality. The idea was to see how these variables are related to the same index used as political and fiscal behavior reflected in the RFGR. We found that the RFGR is a good descriptor of political behavior expressed in the combined ratio and the same intensity as the political alignment. From what it is inferred or deduced that, regionally, the political, cultural and fiscal behaviors are conjugated in the same social behavior.

6.3 Regionalization in Provincial Budgets

A similar strategy of regional appropriation can be seen when we extend our approach to the composition of resources and expenditures of provincial budgets.

The donor provinces are forced to increase proportion of own collections, according the Provincial Matrix, and thus they must raise the tax burden on their residents and their socio-economic indicators are expected to get worse.

On the other hand, in the recipient region, the mining and oil provinces consolidated their income by royalties recognized in the Constitution of 1994, while North and Midwest provinces were allowed to transfer their deficit pension funds, toward the national level.

6.4 Concept of Elite and Public Choice Theory

The concept of elite emerged in the field of political science in late nineteenth and early twentieth centuries and was first proposed by the Italian Gaetano Mosca to refer to an organized minority that deals with the political leadership in a society with some degree of development. It is possible to talk about elites, depending on their origin and the social dimension. The members of the elites are articulated by interest and are homogenized by membership to certain groups (Imaz José L., 1973). The region of origin may be among these factors of agglutination. Among many examples, let's take Brazil, where it is common to refer to "paulista" (Sao Paulo) and "carioca" (Rio de Janeiro) elites as dominant, according to the times.

Although there is a history on the regionalization of the elites in Argentina, we were interested in the formation of that occurred since the advent of democracy in 1983, especially in the current era.

In the construction of political index mentioned above, we were able to visualize that some Argentine political leaders tend to have permanent regionalized alliances beyond their party identification and the network of fiscal interests that it represents is manifested systemically in Congress and in the behavior of presidents and governors.

So only in the receiving region bounded by the RFGR and Conurbation of Buenos Aires City[5], especially south and west, it could be said that a political elite has emerged, in the sense that those who integrate it have an internalized behavior based on the agreement or covenant to capture a disproportionate share of government

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[5] The Buenos Aires Conurbation, however, belongs geographically to Buenos Aires (BAS), province or district. In Ruarte Bazán et al. (2010, pp. 18-19), we decided to simulate the Buenos Aires district split into two territories: the Courbanation and another called New Buenos Aires, because it was not possible to calculate directly the fiscal flows since the information concerning transfers and national expenditure in towns and cities, although existent, is inaccessible, all in function that there is strong evidence (preference in geographical execution of national public works, municipal budgets, political alignment of municipal mayors, etc) that fiscal and politician's behavior in both territories is different. Thus, this simulation allowed us to reinforce the conclusion that the net fiscal flow between regions, measured by RFGR, is the best indicator of political behavior by origin.

revenue. However, despite the huge funds recepted, we find that they have not improved the levels of poverty and the per capita GDP of the population of the region where the elite is located[6].

Here we find that the theory of public choice explains the observed behavior by politicians in question. This is because this theory holds that politicians seek to maximize the public budget according to their own interests, giving them priority over social welfare.

As it is known, this theory links the economy with politics, with application of rational choice model to political phenomena. It is a general theory about how private interests act in the public activity. It denies the assumption of benevolent or honest bureaucrat, rejecting that those who act selfishly in private are disinterested when they assume the public office.

6.5 Significant Political Events in the Establishment and Consolidation of the Preeminent Regional Elite

Most of these political and legal facts have impact on the budgets and result directly or indirectly in a benefit to the district or region governed by politicians of the acting elite.

(1) 1986. *Interim Agreement* between the northern governors and the national government which derived in the Act 23548 that meant the loss and transfer of 6 1/2 points percentage in secondary coparticipation by the Province of Buenos Aires toward the other provinces. This was a quart of its revenues by this origin.

(2) 1988. *Justicialist Party primaries*. Two pairs were formed for president and vice president. One formed by a politician from the North (Carlos Menem) and another politician from the Conurbanation of Buenos Aires (Eduardo Duhalde). The other pair, originating in Buenos Aires (Antonio Cafiero) and Córdoba (José de la Sota). The triumph of the first candidates, though by a narrow margin, 54% to 46%, is representative of the emerging elite that we have proposed. The second pair won in Cordoba and City of Buenos Aires with good results in Santa Fe and Buenos Aires, while Menem-Duhalde imposed by high-margin in the North and Patagonia, except a few districts. By the political events of the ensuing decades, it could be interpreted that said electoral victory consolidated the elite.

(3) 1992. *Creation of Historic Repair Fund of Greater Buenos Aires*. Section 40 Act 24073, introduced with the promise of President C. Menem to keep it for the entire period of E. Duhalde in the governance of Buenos Aires province.

(4) April 1992. *Transfer of deficient Retirement Systems of provincial employees to the ANSES*. 1992 Fiscal Agreement. Second Clause. Numeral 6. It benefited particularly the provinces of the West and the North.

(5) 1994. *Granting constitutional status to the Coparticipation regime* (Act 23548) *with clauses that prevent modification*. Section 75, subsection 2 and transitional clause.

(6) 1994. *To enshrine the original domain of natural resources to the provinces*. Constitution, Section 124, in fine, which mainly benefits the Andean provinces.

(7) From 2001 to 2003. *Political crisis in favor of the emerging regional elite*. Because it meant the displacement of two resident presidents of the Central Region: Fernando de la Rua (City of Buenos Aires) who was elected by vote and a designated President by Congress, Adolfo Rodriguez Saa (San Luis), replaced by a President from the region of the new elite Eduardo Duhalde (south western Conurbation) also designated, who

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[6] In Ruarte Bazán et al. (2010), using an econometric model that takes as dependent variable the *Percentage Households below the poverty line* and as independent variable the *Rates of Fiscal Geographical Return* in each district, using *Gross National Product per capita* as a control variable, based on the initial 141 observations between 2002 to 2007, it was found that those regions which are net recipients of funds tend to have higher levels of poverty.

promotes as his successor and later elected Nestor Kirchner (Santa Cruz), of the same acting elite region.

(8) July 2006. *Enactment of the Act of hydrocarbons, No. 26.197*. Called "short Act", which transfers to the oil provinces the permits and oil concessions granted in each district.

(9) 2009. *Creation of the Federal Solidarity Fund,* Decree 206, which allocates 30% of export duties on soybeans and soy products, to be distributed according to the percentages established by Act 23,548. This fund has an unbalanced distribution against soybean producing regions, as seen in Table 4.

(10) 2012. *Expropriation of YPF*. Through Act No. 26,741, which secures an equity stake and share and the directory between the national government and only those provinces in whose territories oil is extracted, in circumstances that the activities of the company are spread throughout all the country in production and marketing of fuels.

7. Conclusions

7.1 From the Provincial Matrix

● In general, we can say that there is a disproportionate transfer of fiscal funds toward the treasures of recipient provinces located in the North, South and West of Argentina, from residents of the other donor provinces located in a Central strip.

● This transfer exceeds the levying of Federal Administration of Public Revenues-AFIP-of local residents (191%) of recipient provinces altogether and the levying that performs the Provincial Directorates of Income-DGRS-(240%) of same provinces. This latter collection is only a 20% of total provincial revenues of all origin.

● In contrast, we can discern provinces geographically located at the center and the East (CAB, SFE, BAS and CBA), where the transfer to other provinces represents the 51% of the funds collected by AFIP. Their DGRs collect 52% Provincial revenues by all concepts.

● It is a fact that the receiver provincial treasuries get most of their resources beyond its borders which mainly come from the CAB's residents. The contribution of these residents exceeds the AFIP collection by secondary coparticipation in 13 provinces and if it includes DGRs it exceeds them in seven provinces: LRJ, CAT, JUJ, CRR, FOR, SES and CHA. These would be absolutely unsustainable provinces without input from the CAB residents.

● The City of Buenos Aires as a legal person has a unique historic, geographic and institutional situation. It is the more autonomous jurisdiction in the sense that it gets its resources to 88% of own levying. At the opposite extreme are the provincial treasures of La Rioja and Formosa which have 6% and 7% resources of that origin, respectively.

● The Province of Buenos Aires holds the second index of autonomy if it is measured by its own levying: 50% of total revenues.

● When we incorporate information about Provincial distribution of duty collections of exports of soybean and derivates and of oil and mining royalties, the tendency that favors generally the same provinces is confirmed.

● All this allows us to infer that the Argentine fiscal system does not respect the federal principles of autonomy, the competence reserves, equality of the provinces and subsidiarity. Nor does the theory of fiscal federalism apply, as to the criteria for allocation and distribution for both national and provincial level.

● Argentina is not a confederal state which requires a greater degree of autonomy and the possibility of state segregation.

- Neither is it a unitary state, because the provinces retain their own tax levying power, have the original domain of natural resources and the provision of certain services such as primary education; there is a judicial system of separate functions between nation and provinces.

- Ergo, it is sui generis.

- Disparate behavior between the recipient provinces is observed, but in some of them the degree of financial dependence is extremely high. It could be said that these are failed provincial governments: by themselves they would not be able to provide the most basic government services.

7.2 From National Administration Matrix

- The fact that residents of the Center East: SFE, BAS and CBA (no CAB) are the donors is repeated, in this case from districts. Some of these strongly contribute to the maintenance of receptors located mainly in the North, West and South: Its contribution is around 26%, standing out SFE with 48%, followed by CBA with 37% and 17% BAS. Other giver districts in the South: CHU and NEU contribute with lower percentages.

- While recipients receive a bonus of 26% of what they contribute or 32% if the undistributed deficit is added. The CAB district excels since it receives a low percentage (9%) of what it contributes while it is a high percentage of the total transferred (21%) and, on the contrary, here the AFIP collects ($ A 120208 mill.), the highest percentage: 30% of the national share of the primary distribution and of the social security system ($ A 407335 mill.). It is followed by the BAS (27%) district.

- There are six districts located in the North where the AFIP levying is less than the external supply: LRJ, JUJ, FOR, CHA, SES and CRR.

7.3 From the Appropriation of Public Revenue

- The territorial behavior of public finances, as measured by Rates of Tax Geographical Return (RFGR), operates as a radiography of good resolution of what regionalized political behavior is in Argentina. These rates are also indicative of regional patterns of cultural behavior.

- The appropriation of a portion of the revenue from the central and provincial governments, by the main political leaders of the region formed by the North, South, West and the Greater Buenos Aires, is decisive for the formation of the Argentine dominant political elite which resides in that region.

- The installation process of this leadership recognizes historical reasons in the deformation of the fiscal federalism.

- The Theory of Public Choice helps to explain this politician behavior.

- From the 1980s to the present, this leadership develops a strategy that consolidates its development with important political and legal facts.

- For a correct diagnosis of the current situation of public finances and politics in Argentina, it is necessary to understand that the exercise of public power does not pass the federal Nation - provinces axis, but a relationship of hegemony of the elite that has occupied the national government and the governments of the provinces in the recipient region, against the leaders of the donor region.

- The variable regional belonging of politicians, used less frequently than their party affiliation and ideology to explain political phenomena, may be of greater importance than the latter in accordance with what we discuss here. This would have to be reevaluated by both political discipline and Argentina's political leadership, in order to design the investigations and political goals, respectively.

- Because the elite is a system that gathers interests, it will not be altered by any leak, transmutation or disappearance of some of its members. The hierarchy does not matter much, even of the President of the Nation,

who would act in its exercise, as a primus inter pares.

● If there is room for the recirculation of elites, as posed by Wilfredo Pareto, it means that there may be renovations within the same elite or a replacement of current elite may occur. In Argentina, it seems that politicians in the Center Region have not matured on the connection of their interests but recent events suggest that it is not ruled out that they will begin to have a change of perspective according to both their interests and the country in general.

● A new political elite that includes participation of leaders of the Center-East Region would generate an expectation of improving the quality of politics in Argentina, due to the fact that the current elite has the worst indicators of corruption, of political patronage and management quality, which we verified when we built a regional index that combined these variables.

In turn, it is surprising that in the region of residence of the current hegemonic political elite only a little over a third of the people resides, one-quarter of Gross Domestic Product is generated only, and having a low level of per capita GDP and a high rate of poverty, as can be read in the following Annex. That is to say, it is surprising that the hegemonic political elite emerges from the least economically and socially powerful region.

For all these reasons, Argentina faces a distortion in the distribution of fiscal resources that transcends the federal issue and harms its economic and human development. The alteration of existing interior geopolitical conditions is required in order to solve this problem.

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Appendix

Table 6   Relevant Regional info Argentine Socioeconomic Type

Geographical units	Number of inhabitants	Territorial area[2] Km[2]	Density Inhabitants / km[2]	Share of GDP[3] %	GDP U$S Billions	GDP per capita U $ S/inhabitant	Proportion of poor people[5] %
ARGENTINA	[1]41,261.490	2,886.034	14.3	100	[4]447.644	10.849	12.5
Buenos Aires	16,070.810	307.571	52.3	33.10	148.175	9.220	11.2
Córdoba	3,403.266	165.321	20.6	7.66	34.287	10.075	8.7
Santa Fe	3,285.665	133.007	24.7	7.79	34.853	10.607	9.5
Main districts donors	22,759.741	605.899	98	48.55	217.315	9.548	10.6
Buenos Aires City	2,972.596	200	14.863	24.83	111.162	37.396	7.0
Donor Provinces	25,732.337	606.099	42.4	73.38	328.477	12.765	10.2
Catamarca	378.321	102.602	3.7	0.64	2.848	7.529	14.6
Corrientes	1,020.910	88.199	11.6	1.27	5.697	5.581	19.7
Chaco	1,085.362	99.633	10.9	1.22	5.447	5.018	23.1
Chubut	523.631	224.686	2.3	1.41	6.327	12.083	10.7
Entre Ríos	1,271.252	78.781	16.1	2.14	9.594	7.547	11.6
Formosa	545.286	72.066	7.6	0.57	2.573	4.718	25.2
Jujuy	692.514	53.219	13.0	0.83	3.727	5.382	18.1
La Pampa	328.050	143.440	2.3	0.86	3.867	11.786	5.7
La Rioja	343.160	89.680	3.8	0.50	2.235	6.512	15.5
Mendoza	1,788.534	148.827	12.0	4.17	18.677	10.443	10.3
Misiones	1,133.017	29.801	38.0	1.36	6.078	5.364	19.1
Neuquén	566.992	94.078	6.0	2.10	9.399	16.577	12.4
Río Negro	656.863	203.013	3.2	1.46	6.524	9.932	11.7
Salta	1,249.085	155.488	8.0	1.52	6.808	5.451	23.7
San Juan	700.483	89.651	7.8	1.04	4.647	6.634	14.0
San Luis	444.642	76.748	5.8	0.96	4.307	9.687	10.7
Santa Cruz	281.779	243.943	1.2	1.18	5.290	18.772	9.7
Santiago del Estero	898.938	136.351	6.6	0.82	3.666	4.078	22.7
Tucumán	1,489.500	22.524	66.1	1.96	8.767	5.886	16.4
Tierra del Fuego	130.834	127.205	1.0	0.60	2.690	20.558	14.5
Recipient Partitions (no B. A. City)	15,529.153	2,279.935	6.8	26.7	119.168	7.673	16.3

Note: [1] Figure estimated by INDEC 2011 and own calculation each territorial unit.

[2] Instituto Geográfico Nacional (Argentine). Figures in the table exclude Antarctica, with its total area of 3,745,997 km[2] and density 11.0 inhabitants/km[2].

[3] Own projection according to Economic Commission for Latin America (1997-2005), and the Ministry of Interior's Office (2002-2007), latest official figures published.

[4] Estimated by the International Monetary Fund for 2011.

[5] INDEC data, Census 2010.