CHOOSING TO BE DIFFERENT (OR NOT): PERSONAL INCOME TAXES AT THE SUBNATIONAL LEVEL IN CANADA AND SPAIN

Autores: *Violeta Ruiz Almendral*[1]
François Vaillancourt[2]

P. T. N.º 29/06

(1) Assistant Professor, Tax and Finance Law, Universidad Carlos III de Madrid (Spain)

(2) Professor, Economics Department, Université de Montréal (Canada).

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ABSTRACT

This paper analyzes the evolution of fiscal federalism in Spain and Canada, focusing on the exercise of normative powers on the Personal Income Tax (PIT). This is done by presenting and comparing the evolution of the use of taxing powers by two sets of subnational governments: the Canadian Provinces and the Spanish Autonomous Communities on the PIT. This tax is chosen because it is one of the most politically visible taxes.The main interest of this comparison lays in the fact that, despite the prevailing differences in the constitutional and institutional backgrounds of these countries, some of the outcomes are similar or at least comparable and there is reason to believe that it will continue to be that way. The paper is divided in three parts. First, the constitutional, legal and institutional framework of both countries are presented, by paying special attention to the elements relevant to taxation. Second we examine the outcomes in both countries, paying the most attention to the field of PIT. Third we compare and contrast these uses.

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Palabras clave: Fiscal federalism, taxation.

1. INTRODUCTION

The purpose of this paper is to present and compare the evolution over time of the use of taxing powers by two sets of subnational governments (SNGs): the Canadian Provinces and the Spanish Autonomous Communities (ACs) in the personal income tax (PIT) field, one of the most politically visible taxes.The main interest of this comparison lays in the fact that, despite the prevailing differences in the constitutional and institutional backgrounds of these countries, some of the outcomes are similar or at least comparable. The paper is divided in three parts. First, we present the constitutional, legal and institutional framework of both countries, putting the emphasis on the elements relevant to taxation. Second we examine the outcomes in both countries, paying the most attention to the field of personal income taxes (PIT). Third we compare and contrast these uses. We will refer to the central government as respectively the federal government (Canada) and the State (Spain).

2. CANADA AND SPAIN: THE TAXING POWERS OF SNGs

Departing from very different starting points, the Spanish and Canadian experience with the assignment of taxation powers presents many similarities, the most relevant being that in both cases there has been an increase in the tax autonomy of SNGs from either 1945 or 1978. We will now briefly present each case separately.

2.1. Canada

Constitutional Legal framework

Canada is one of the most decentralized federal countries in the world. Interestingly, when the Canadian federation became a reality (1867) the intent at least in English Canada was to create a strong central government, perhaps in reaction to the US model, then coming out of a civil war (SCOTT, 1977: 256 *et. seq.*; PERRY, 1997). The main competencies attributed to the provinces including social welfare, health and education, were not then important sources of public spending. In the 20th century, the system became more decentralized, partly as a result of some judicial interpretations, which set the stage for the federation as it is today (SCOTT, 1977: 260 *et. seq.*). The Canadian evolution from centralization towards a much more decentralized model, as we know it today, forced it to address the question of the distribution of taxation powers.

Canada is not referred to formally in its constitution as a federal state; it is a Dominion[1]. However, the presence of sections 91-95 in the 1867 Constitution that specify the powers of the central and provincial government make Canada a federal state. Item 3 of Section 91 specifies that the federal government can carry out '*The raising of Money by any Mode or System of Taxation*' while item 2 of Section 92 specifies that provinces can use '*Direct Taxation within the Province in order to the raising of a Revenue for Provincial Purposes*'. Thus, its Constitution bestows full access to all kinds of taxes (which in 1867 meant mainly indirect taxes and in particular customs duties and excises) to the central government, and shared access only to direct taxes to the Provinces. This is coherent with the original idea of creating a strong central government, the less relevant sources of taxation being given to the provinces. This situation did not last long. For instance, a flexible case-law interpretation of the term "direct taxation" allowed the Provinces to establish a Sales Tax as such (LA FOREST, 1981: 78 *et. seq.* MAGNET, 1998: 486-500). As a result, both provinces and the central government levy personal income taxes (PIT), corporate income taxes (CIT), sales taxes (GST,HST,RST-see table 2), payroll taxes, excise taxes and so on.

Institutional framework

Three factors are worth noting in this context:

1. Canada is the second largest country in the world with important distances between various provinces. As a result, policy choices made in a given province often have little consequences on the behavior of the residents of most other provinces since transaction costs associated with distance make it to expensive to profit from a behavioral change.
2. Canada is made up of two main language groups, anglophones and francophones. The latter group mainly (80%) resides in the province of Quebec ,with half of those residents unilingual speakers of French and even more of them exhibiting a preference for living in French. As a result, they are not mobile within Canada(North America) outside Quebec.
3. Canada is a close neighbor of the United States and linked to it (and Mexico) by the North America Free Trade Agreement (NAFTA). This treaty does not impact as such on tax choices .However, the greater integration of the Canadian economy with the US economy observed following the introduction of free trade[2] has meant that the need (real or perceived-this is debatable) to adjust Canadian taxes to account for changes in the US, which was always present, has increased in recent years.

[1] A biblical term seen as neutral by the drafters of the Constitution.

[2] From 1989 to 2000, exports as a share of GDP went from 26 to 46%, with exports to the US rising from 19 to 38% of GDP.

2.2. Spain

Constitutional/Legal framework

The Spanish Constitution of 1978 purposely omits any reference to the form of the State. That is, it does not describe it as centralized, federal or regional. After almost forty years of Franco's Dictatorship, which among other, entailed a very centralized government, the framers of the 1978 Constitution had before them one of the most difficult tasks that Spanish politicians could ever come across: to resolve the 'regional question' for good. This challenge was met by not defining the new system, but by establishing a procedural framework instead. Thus, what the Constitution does is to establish an 'optional autonomy system' (the so-called '*principio dispositivo*'). Groups of provinces which existed prior to 1978 as administrative units of the State with borders reflecting in part history, provided that they have common historical, cultural and economic characteristics, had the right to join in an AC. If they decide to do so, they then have to choose which matters they want to be in charge of and what level of authority they want to acquire[3]. In other words, this is autonomy '*à la carte*' or a 'cheese platter' system. Between 1978 and 1983, all of the Spanish provinces engaged in this process, so that the whole country is presently divided into 17 ACs[4] (LÓPEZ GUERRA, 1993 and 1996).

The constitutional provision relating to the taxation powers of AC is article 157 which states that:

1. *The resources of the Self-governing Communities shall consist of:*
   a) *Taxes wholly or partially made over to them by the State; surcharges on State taxes and other shares in State revenue.*
   b) *Their own taxes, rates and special levies.*
   c) *Transfers from an inter-territorial compensation fund and other allocations to be charged to the State Budget.*
   d) *Revenues accruing from their property and private law income.*
   e) *Interest from loan operations.*

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[3] But note that like in the Canadian case, constitutional articles indicate what powers the federal government (sec. 149) and the autonomous communities has in the first case or may choose to exercise in the second.

[4] Spain is divided into 17 Autonomous Communities: Andalucía, Castilla y Leon, Asturias, Cataluña, Castilla-La Mancha, Extremadura, Cantabria, Galicia, Valencia, Murcia, La Rioja, Asturias, Islas Baleares, Islas Canarias, Madrid, Pais Vasco (the Basque Country) and Navarra, as well as two Autonomous Cities, Ceuta and Melilla. Note that what is said in the discussion does not apply to the two Autonomous Cities, since they do not have legislative powers. The Canary Islands also have a special tax regime in some aspects (i.e. no Value Added Tax), although it doesn´t differ that much from the general system.

2. *The Self-governing Communities may under no circumstances introduce measures to raise taxes on property located outside their territory or likely to hinder the free movement of goods or services.*
3. *Exercise of the financial powers set out in subsection 1 above, rules for settling the conflicts which may arise, and possible forms of financial cooperation between the Self-governing Communities and the State may be laid down by an organic act [an Act passed by the State with a special, reinforced, majority].*

This article gives the impression that the ACs' taxation powers are very broad. However, the Special Law for the Financing of the Autonomous Communities, Law 8/1980 (*Ley Orgánica de Financiación de las Comunidades Autónomas* – hereafter, the LOFCA) implemented under article 157(3) of the Constitution broadly limited the powers of ACs. Therefore, and despite the fact that the Constitution clearly bestows taxation powers upon the ACs, the LOFCA imposes severe limits on the creation by them of new taxes. The most important limitation is the prohibition of double taxation (Sections 6.2 and 6.3), which prevents autonomous taxes from being similar to taxes already levied by the State and the municipalities. Since the existing tax room was traditionally occupied by the State and the municipalities, and this did not change when the ACs became a reality, little tax room was left for ACs (RUIZ ALMENDRAL; ZORNOZA PÉREZ, 2004 and 2005).

An important feature of shared tax system is its asymmetry, which among other things, entails the existence of two different financing systems: the "*foral*" system, applicable to the Basque Country and Navarra, and the so-called "*common system*", applicable to the remaining fifteen ACs. The Constitution recognizes the autonomy of ACs and bestows upon them taxation powers. It also recognizes that the two so-called "historical regions" –the Basque Country and Navarra– are entitled to maintain their historical norms or regimes, which in fiscal terms translates into them having a substantially different system, known as *Concierto* (Basque Country) and *Convenio* (Navarra) systems. Both these terms translate into English as 'agreement'[5]. The main characteristic of this kind of system is that it entails a maximum level of taxation autonomy, which means that in these two ACs, their provinces (Álava, Vizcaya and Guipúzcoa, in the case of the Basque Country, and Navarra, which is uni-provincial) (RUIZ ALMENDRAL, 2003a) have powers to pass legislation, with only a few limitations[6], on the main taxes of the Spanish fiscal system, as well as to collect

[5] According to the First additional provision of the Constitution "*the Constitution protects and respects the historic rights of the territories with traditional charts (fueros). The general updating of historic rights shall be carried out, where appropriate, within the framework of the Constitution and of the Statutes of Autonomy*"; see RUIZ ALMENDRAL: 2003b, for more details on the Quota systems.

[6] Such limitations are established in the laws regulating the *Convenio* and *Concierto,* and basically refer to the need to maintain a certain level of harmonization with the State's tax system. They are, however, established in quite broad terms, which for example allow the Basque Country to establish corporation tax credits that differ broadly from those of the State or other AC in practice.

all taxes. Because the State is still responsible for the provision of some public functions or services within the territory of these two ACs, it is entitled to receive a certain sum of money from them, known as the '*Cupo*' (quota).

Under the common system, the ACs receive most of their revenues from the State, in the form of transfers. Generally, the establishment of new taxes is not a very attractive option for ACs. On the one hand, most of the ACs' taxes are costly to administer and do not generate much revenue. On the other, almost every time an AC establishes a new tax, the State challenges it before the Constitutional Court.[7] Such prohibitions equally affect the creation of new taxes by the provinces of the *foral* ACs. However, because they hold extensive powers on most of the relevant taxes (the *Concierto* or *Convenio* taxes), they do not need to create new ones. This situation inspired the 1997 and 2002 reforms of the common system, which will be dealt with later on.

The small proportion of own tax revenues in the financing of the common-system ACs[8] results in a substantial lack of fiscal responsibility. This situation derives both from the fact that they have limited taxation powers, and from their insufficient use of the powers that they already have. This scarce tax or fiscal responsibility contrasts with the larger responsibility that the ACs have in other areas. (ZORNOZA PÉREZ, 1987: 971-72; CASTELLS, 1988: 129 *et seq.*, and 2002: 14 *et seq.*; SOLÉ-VILANOVA, 1990: 350 *et seq.*; RUIZ ALMENDRAL, 2002 and 2004; RUIZ ALMENDRAL; ZORNOZA PÉREZ: 2005). And it is precisely this situation that has served as the motor for change in fiscal federalism in Spain and which, as we will see, has led to substantial reforms of the ACs' financing system. Table 1 summarizes the differences between common system ACs and foral ACs' taxation autonomy.

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[7] A fairly recent example is Catalonia, which established a tax on large commercial areas (*Impuesto sobre grandes establecimientos comerciales*) by the Law 16/2000, of December 29th. No sooner had the law been approved by Catalonia's Parliament than it was challenged by the State before the Constitutional Court, on the grounds that it is equivalent to some of the municipalities' taxes (the property tax and the economic activities tax). RUIZ ALMENDRAL; ZORNOZA PÉREZ: 2004.

[8] For the ACs within the *Cupo* system, the revenues deriving from taxes represent 94 per cent of expenditure, while transfers from the State represent less than 1 per cent in the case of the Basque Country, and less than 3 per cent in the case of Navarra. For the common-system ACs, transfers still represent more than 60 per cent of their revenues. Taxes only represent about 20 per cent; within this category, ceded taxes, which still operate, in practice, as a mere transfer of funds as most ACs have exercised their powers in a very limited way, represent about 90 per cent. The source for these data are: *Órgano de Coordinación Tributaria de Euskadi* (2002), p. 81, and *Liquidación de Presupuestos de las Comunidades y Ciudades Autónomas* (2003). These can be found at: http://www.estadief.minhac.es.

Table 1

COMPARISON OF LEGISLATIVE POWERS OF COMMON-SYSTEM AND FORAL ACs, SPAIN, 2005

Main Taxes in Spain	Legislative Powers that *foral* ACs may assume	Legislative powers that common-system ACs may assume
Personal income tax	Total regulation of the tax	Tax rates (must have same number of tax brackets as the State tax) Tax credits, under certain conditions
Corporation income tax	Total regulation of the tax	None
Tax on income of non-residents	Regulation of the tax only in the case of permanent establishment in the *foral* territory	None
Wealth tax	Total regulation of the tax	Tax rates Minimum threshold Tax credits
Death and gift taxes	Total regulation of the tax	Deductions (mainly, for family circumstances) Tax rates Deductions and tax credits Tax administration regulations
Taxes on transfers and official documents	Total regulation of the tax	Tax rates Tax credits Tax administration regulations
Gambling taxes	Total regulation of these taxes	Exemptions Taxable base Tax rates Tax credits Tax administration regulations
Value added tax	None	None
Excise duties	None	None

Source: RUIZ ALMENDRAL: 2003a; RUIZ ALMENDRAL; ZORNOZA PÉREZ: 2005.

Institutional framework

1. Belonging to the EU has had important consequences for the distribution of authority in every Member State with multiple levels of governments (PÉREZ TREMPS, 2000: 1079 *et seq.*). Spain is no exception, and European integration poses a very important limitation to the exercise of taxation powers by the ACs. Obviously, such consequences have a greater impact for the *foral* ACs, due to their wider taxation powers.

In this regard, there have been some conflicts when the EU has questioned both the generally lower tax burden of the tax system in the Basque Country and Navarra, in comparison to the common system, as well as the very existence of such different tax regimes within the same country. A good example of this is the European Commission Decision No. 93/337/CEE of May 10th, 1993, where it stated that some of the tax measures of the Basque corporation income tax may be inconsistent with the right of establishment (Section 43 EC Treaty) and may also fall under the category of 'state aids' (Section 87 EC Treaty). Of special interest are the conclusions of the Advocate General, Mr Antonio Saggio, presented on 1st July 1999 in the accumulated cases C-400/97, C-401/97 and C-402/97, also relating to the corporation income tax[9].

In the few cases where the Constitutional Court has had to deal with the *Cupo* system, it has clearly stated that it is consistent with the Constitution (*inter alia*, in Opinion 181/1988). However, a recent opinion of the same Court (96/2002) may have started a new line of thought, which would clearly limit the importance of the constitutional recognition of historic rights. This opinion is very complicated, mainly because it does not state clearly, but rather 'suggests', *obiter dicta*, that a divergent tax system may not comply with the principle of equality stated in article 14 of the Constitution.

In this case, brought by the AC of La Rioja, a neighbor of the *foral* ACs, which claimed the *foral* ACs were engaging in fiscal competition, the Constitutional Court ruled that the *foral* autonomy itself is not sufficient to render tax provisions admissible, and that the equality rights are as much part of the Constitution as are the special provisions that guarantee the historic rights. The relevance of this Opinion goes far beyond the actual decision taken[10] because, for the first time ever, the Court seems to call into question the existence of such different systems. This decision has been the source of much controversy, as indicated by the fact that it was rejected by half of the Court's judges and could therefore only be approved because the President was in favour. It is

[9] Where most fiscal benefits established by this region are declared contrary to the freedom of establishment enshrined in the EU Treaty.

[10] Which basically consisted of declaring void a State law that aimed to compensate European non-residents for certain differences in their tax treatment in the *foral* and common ACs.

likely that this Opinion would not have been adopted had the European Commission not questioned the *foral* systems previously.

The latest judicial episode has been the controversial Decision of the Supreme Court (STS 9/12/2004, Sección segunda), that has declared void virtually all sections of the Basque Country's legislation[11] on the Corporation tax containing all sorts of tax benefits, including special deferral regimes and a substantially lower tax rate than the rest of Spain. This advantageous tax regime, La Rioja claimed, resulted in harmful tax competition. Interestingly enough, the Supreme Court has used virtually only European law as a tool in the legal reasoning, and hence the main reason for the Decision has been the assumption that the Basque's Corporation tax benefits constitute a state aid[12]. There are many flaws in this legal reasoning, such as a lack of a thorough explanation as to why exactly the said legislation infringes the European law (FALCÓN Y TELLA: 2005, 7 *et seq.*). However, the most striking aspect of the Supreme Court's reasons is that they do not mention any of the pertinent provisions contained in the Spanish Constitution, which would have allowed to reach the same conclusion, possibly in a more direct and logical way (i.e., among other, section 156, that requires the coherence between autonomy and solidarity[13]). The interest in these Decisions lays not so much in their conclusion, but in the fact that they would have probably not been adopted in absence of the above mentioned background. The European law is thus also indirectly having a decisive impact on the extent of the Community's powers. And this is probably just the beginning.

Belonging to the EU also means that no subnational taxation powers can be bestowed on European taxes, such as VAT or excise duties. Also, the high level of convergence in the Corporation Income Tax, due to some harmonization of accounting rules, explains why neither the Basque Country nor Navarra have introduced substantial changes in this tax. It also explains why the possibility of bestowing taxation powers on this tax onto the common-system ACs has never even been discussed.

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[11] One special feature of the Basque country's autonomy lays in the fact that the taxation powers are actually held by the three provinces (Álava, Guipúzcoa and Vizcaya), that have each its own legislation, following a number of harmonization guidelines established in the Statute of Autonomy and in the Ley de Concierto Vasco. Because such tax provisions do not formally have the status of a law, but are some kind of special regulations, the Supreme Court may declare them void. Had they had the formal range of a law, only the Constitutional Court may have been able to tackle them.

[12] Incidentally, the European Court of Justice had already declared state aid a specific part of the said regulation, in Decisions C-183 and 197/02, *Daewoo,* and C-186 AND 188/02-p. *Ramondin*.

[13] Article 156(1) states that: The Autonomous Communities 'shall enjoy financial autonomy for the development and exercising of their powers, in conformity with the principles of co-ordination with the State Treasury and solidarity amongst all Spaniards.

2. Size becomes an issue in Spain when we account for the various asymmetries of the system; Spain is then too small. These have notably influenced the whole decentralization process, and they continue to affect future talks of deeper decentralization. The cultural and sociological variations among Communities are great. One of the main reasons is the existence of own languages in as many as six out of seventeen Communities (Catalonia, Valencia, Balearic Islands, Basque Country, Navarra, Galizia). There are also historical reasons that explain the present asymmetries, from the Arab cohabitation in the southern part from the late eight century until the end of the fifteenth, to the traditional independent nature of Catalonia or the Basque areas, just to name some examples. These asymmetries have been substantially minored by the 1978 Constitution although they still remain present. There are two principal reasons why the State of Autonomies is asymmetrical. The first lies in the procedural framework established by the Constitution. It provides two special procedures for ACs to be formed. They differ in that one allows for more and faster autonomy, while the other entails a more limited and gradual gain of authority. These are usually referred to as the 'fast-lane' and 'slow-lane' processes. Fast-lane ACs could initially take on more authority, including health and education, which together represent about 80 per cent of the public spending on policy competences that can be taken on by ACs. Eventually, slow laners may increase their authority and gain access to the maximum level, provided that they follow the process established in Section 148.2. The second explanation for asymmetry lies in the recognition of the historic rights of the Basque Country and Navarra, enshrined in the first additional provision of the Spanish Constitution. This has resulted in them having a much greater level of competences. The first type of asymmetry can be categorized as *de facto* or *transitorial*; it refers only to the initial process, but does not prevent all ACs from eventually gaining access to the same level of authority. The second type is a *de jure* asymmetry

3. THE USE OF TAX POWERS BY SNGS: CANADA AND SPAIN

In this second section, we present first the general use of tax powers by SNGs in both countries then focus on the choices in the area of PIT. For the sake of clarity, we also present the cases separately in the first place.

3.1. Canada

Canadian provinces have chosen to exercise their taxation powers in all major fields. In 2004 all of them levy both personal and corporate income taxes at various rates and almost all levy sales taxes using a mix of VAT and retail sales taxes (except for Alberta, which has no sales tax). Finally, some provinces levy payroll taxes and most levy capital taxes on corporations. In all cases, they are completely free in setting the base, rates, and collection mechanisms. There are no tax harmonization laws as we will see exists in Spain, let alone national laws setting tax parameters. The only constraint is that if they wish to see either the CIT, HST or PIT collected by the federal government free of charge, they must use the same base. This in practice serves as a harmonization measure that keeps the PIT to a minimal possible identity. Table 2 presents the tax systems in place for 2002.One will note that Québec is distinct from the other provinces in its higher degree of tax autonomy.

The occupation of the tax fields has not always been this way. Before WWII, provinces and the federal government occupied the PIT and CIT fields. During WWII, the provinces had "rented out" the PIT, CIT and succession duties fields to the federal government. An agreement was necessary for the Dominion to solely occupy these fields. Hence in 1946, they occupied none of these fields. What we will now document is how they re-occupied the PIT field.

Table 2

MAIN FEATURES OF PROVINCIAL TAXES IN CANADA, 2005 (january 1ST)

Provinces	Provincial personal Income Tax			Provincial Corporate Income Tax(Manufacturing)		Sales Taxes		
	minimum rates	maximum rates	Collection /Base	Rate	Collection/ Base	Rate	Type	Collection /Base
Newfoundland	10.57	18.02	F	5	F	8	HST	F
Prince Edward Island	9.8	16.7	F	7.5	F	10	RST	P
Nova Scotia	8.79	19.83	F	16	F	8	HST	F
New Brunswick	9.68	17.84	F	13.0	F	8	HST	F
Québec	16	24	P	8.9	P	7.5	QST+	P
Ontario	6.05	11.16	F	12	P	8	RST	P
Manitoba	10.9	17.4	F	15.5	F	7	RST	P
Saskatchewan	11.0	15.0	F	10	F	7	RST	P
Alberta	10	10	F	11.5	P	0	—	—
British Columbia	6.10	14.7	F	13.5	F	7.5	RST	P

Source: *Finances of the Nation*, 2004, Canadian Tax Foundation, various Tables.
Notes: Sales taxes :HST : Harmonized Sales Tax.
QST+: Provincial Base similar to federal GST. Québec collects the federal GST on its territory and remits it to the federal government.
Prov.: Provincial sales taxes.
Capital taxes are general/Bank rates.

The occupation of the PIT tax field by the federal government after WWII was formalized in the *Dominion-Provincial Tax Rental Agreement Act* (SMITH, 1998). Briefly, provinces that signed the tax rental agreement that covered the 1947-1952 period received in exchange the most beneficial combination of per capita payment, Wartime Tax Agreements payments, and statutory subsidies. All provinces except Ontario and Québec signed this agreement (Newfoundland signed it in 1949, when it joined Canada)[14]. Provinces that decided to impose a PIT would see their resident receive a credit of 5% for such tax against the federal PIT (BIRD; VAILLANCOURT: 2002, 17). The preamble of the final version of the agreement gives its general purposes: "Whereas in view of the prospective termination of the Wartime Tax Agreement between the Parties hereto and the consequent prospect of a return to the pre-war dual system of direct taxation, it is desirable to enter into an agreement designed:

1. To establish a more *equitable* system of taxation throughout Canada by reducing duplication of direct taxation and of machinery for the collection of direct taxes.
2. To give a greater measure of *stability* to the revenues (of the Province) in order to enable it more adequately to carry out its responsibilities, and
3. To enable Canada, with the cooperation of provincial government, to carry out fiscal and other national policies intended to maintain *high levels of employment and production*." (SMITH: 1998, 47).

In 1950, Ontario adopted a law creating a tax equal to 5 percent of the Dominion tax (the amount of the Dominion credit) but the Dominion refused to collect it and the Ontario Income Tax Act was not proclaimed. It was only in 1954 during the second Tax rental agreement (1952-1957) that Québec created its own PIT (Québec had a PIT before WWII). Arguments used to justify this action were that "the constitution concedes to provinces priority in the field of taxation" and that "it would be unjust and prejudicial to the province to deprive itself of a source of revenue to which it had a prior right and that was necessary to meet the needs resulting from the vigorous strides it had taken" (SMITH: 1998, 57). The Québec tax on personal income (QTONPI) was a progressive tax with rates between 2.3 and 12%(progressivity similar to that of the federal PIT). Québec asked Ottawa to make it deductible, but the federal credit was only 5%. Ottawa did not accept easily this "rebellion". The QTONPI was over the credit offered by Ottawa for non-signatory provinces and was considered as double taxation. But, an amendment to the Income Tax Act was introduced to allow all provinces to do the same thing if they wanted "To accommodate Québec's PIT structure without causing taxpayers much excessive taxation, loosing too much revenue or wrecking the tax rental system" (SMITH: 1998, 61),

[14] Both decided to impose their own corporate income tax (CIT), initially at a rate of 8.5%, which was higher than the 7% credit for provincial CIT offered by federal government.

the federal government decided to change from the credit of 5% to an abatement of 10% for provincial PITs as of 1955. Under this system, the Provinces were offered three possibilities (SMITH: 1998, 74): *a*) to rent out their tax fields; *b*) to impose and collect these taxes themselves, and *c*) to impose them but to have them collected by the federal government. In this case, it would have to levy them at the standard rates and keep its definitions of income identical to those in the federal law. Québec chose the second alternative.

In 1962 the Tax Rental Agreement was replaced by a Tax Collection Agreement and the abatement by a reduction of federal taxes, the creation of tax room, thus allowing provinces to set their own tax rates" The federal government would collect them free of charge if they used the same base (definition of income, deductions, exemptions,..) as the federal government and set them as a tax on tax (TOT), thus using the same progressivity as the federal PIT. At that time provinces were offered the opportunity to replace part of federal transfers for social spending with a greater occupancy of the PIT tax field; only Québec agreed to do this in 1965.

In 1972, the federal government modified its PIT, widening the base, leading to an increase in the provincial PIT rates and in 1977, it reduced for a last time its PIT rates as part of a modification of transfers to provinces that saw major cost-sharing transfers transformed into block grants made up of both a cash payment and the revenue from provincial PIT increases. This transfer called Established Program Financing (EPF) and expanded and renamed CHST(Canada Health and Social Transfer) in 1995 and divided into the Canada Health Transfer(CHT) and the Canada Social Transfer(CST).

It is only following the 1972 and more often the 1977 changes that provinces outside Québec begin to show some tax initiatives in the PIT field. Figure 1 presents information on the timing of the introduction of the three most common tax measures:

- The most common and earliest introduced measures are tax surtaxes. These are calculated as a% of the provincial PIT; they vary both across provinces at a point in time and for a province over time. Table 3 illustrates the second point for Ontario.
- The second most common measure are investment tax credits for various types of investments ; these are usually for investments in shares of businesses(equity or stock savings plans) active in the relevant province but can be for specialized types of activities such as livestock (Saskatchewan).
- The third most common measure is credits for older individuals (65+). These aim at reducing the PIT paid by poor older individuals.

Other measures were also used. Let us note the temporary home heating tax credit introduced in Ontario for 1981, 1982 and 1983 in response to high oil prices; the income –linked child care expenses (children less than 7) tax credit introduced in 1997 in Ontario; the learning tax credit introduced in 1997 in Manitoba and aimed at reducing the cost of tuition; the income-linked mortgage tax credit in 1980 and 1981 in Saskatchewan; the family employment tax credit introduced in Alberta in 1997.

Table 3

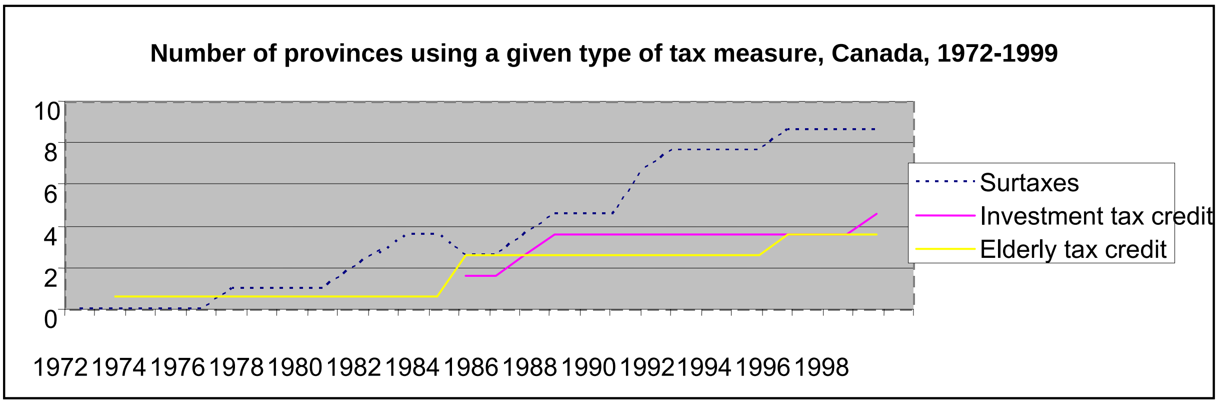
EVOLUTION OF ONTARIO'S SURTAX FROM 1983 TO 1999

Date	Income level at which the surtax becomes operational	Description of the surtax
1983	$2,179	2,5% temporary surtax on provincial tax payable in excess of $110,80.
1984	$2,150	5,0% temporary surtax on provincial tax payable in excess of $110,80.
1985		No surtax applicable
1986,1987	$44,210	3,0% surtax on provincial tax payable in excess of $5,000.
1988 1989,1990	$84,917	10,0% surtax on provincial tax payable in excess of $10,000.
1991	$84,528	12,0% surtax on provincial tax payable in excess of $10,000.
1992	$54,585	7,0% surtax on provincial tax payable between $5,500 and $10,000.
	$83,532	14,0% surtax on provincial tax payable in excess of $10,000.
1993	$54,179	14,0% surtax on provincial tax payable between $5,500 and $10,000.
	$82,908	20,0% surtax on provincial tax payable in excess of $10,000.
1994	$52,279 $67,855	20,0% surtax on provincial tax payable between $5,500 and $8,000.
		30,0% surtax on provincial tax payable in excess of $8,000.
1996	$50,935	20,0% surtax on provincial tax payable between $5,310 and $7,635.
	$66,101	33,0% surtax on provincial tax payable in excess of $7,635.
1997	$52,276	20,0% surtax on provincial tax payable between $4,555 and $6,180.
	$64,700	46,0% surtax on provincial tax payable in excess of $6,180.
1998	$52,400	20,0% surtax on provincial tax payable between $4,057 and $5,217.
	$62,400	33,0% surtax on provincial tax payable in excess of $5,217.
1999	$52,630	20,0% surtax on provincial tax payable between $3,750 and $4,681.
	$61,430	46,0% surtax on provincial tax payable in excess of $4,681.

The taxation activity of Canadian provinces in the PIT field shows the importance of incentives. An adequate link between transfers and tax points encourages SNGs to use their powers. But at least as important as that is the fact that such entities view their powers as theirs. As shown in figure 1, when provinces re-entered the PIT field, they did not immediately use their powers to establish taxes but to introduce all types of tax credits. With time, however, SNGs realize that the political burden or increasing fiscal pressure may be offset by the potential benefits (i.e. revenues, fiscal policy) of exercising their powers.

Figure 1

INTRODUCTION OF SPECIFIC TAX MEASURES IN PROVINCIAL PIT CANADIAN PROVINCES. 1972-1999



Furthermore, the Canadian case also shows the importance of PIT, which explains the many attempts to introduce a *de minimis* level of harmonization in this tax, at least with reference to the definition of the tax base. We will also see that this is a subject of preoccupation for the Spanish ACs and the State. A similar evolution can be expected in Spain, whose particularities will be dealt with no.

3.2. Spain

As mentioned above, ACs have had taxation powers since the 1978 Constitution was approved, but both the limited tax room available to them and their lack of governing experience have deterred them from employing such powers. This last aspect has a certain psychological nature, but quite enlightening: ACs being the new tier ("new kid") of government, they first needed to become accepted as governing unit by the citizens, before they could establish taxes or increase the fiscal pressure in any other way. In this context, it is not so hard to understand why the attempt of the AC of Madrid to establish a surcharge on the Personal Income Tax (PIT) was severely rejected by voters[15]. It was probably too early to have an AC tax citizens.

The Communities have nevertheless exercised their taxation powers by establishing their own taxes. Because of the double taxation prohibition, or the non-equivalence rule, they have had to "invent" new sources of taxation in order to avoid taxes similar to those levied by the State and Municipalities. There are many examples of such kind of taxes. One relevant feature of the taxing activity of the Communities is the prevailing "copy cat" behaviour. When a Community introduces a new tax, the others pay very close attention to its structure and the way the new tax is received by the State. If it is considered an attractive means to obtain more revenues, i.e. it is easy to administer, does not cause too strong popular opposition, etc., and the State's reaction is not too harsh, i.e. the introduction of the tax is not challenged by the State before the Constitutional Court or even if it is, the legal arguments for the lawsuit are not considered very strong, the other Communities may introduce a similar, in most cases identical, tax. Normally, Communities will wait for at least a year to see what the State's reaction will be. One example of this behaviour is the following sequence of tax changes: in 1991, Baleares introduced a tax on certain facilities that may affect the environment[16]. Six years later, Extremadura adopted an identical tax[17]. Another example is the above mentioned Cataluña's tax, which was introduced in 2000, taxing certain shopping areas, such as big supermarkets[18]. The year after, Navarra adopted a similar tax and Asturias followed in 2003[19]. Despite there being a large number of autonomous taxes, –mostly environmental–, they do not account for more than one per cent of ACs' revenues.

A drastic change in this area took place under the 1996 State-AC financial agreements, that lead to substantial reforms in some Laws (specially the LOFCA). Before, all the financial agreements had dealt mainly with transfer

[15] In 1984 (Law 15/1984, december 19th, del Fondo de Solidaridad Municipal), Madrid established a 3 per cent surcharge on the PIT, on a tax on tax basis. In the midst of a severe political turmoil, it was challenged before the Constitutional Court which, in Opinion 150/1990 declared it perfectly valid. However, the government of Madrid AC had already decided to suspend the application of the tax (in 1985), which never entered into force. The defeat of the then Socialist government in the AC elections of 1995 was partly attributed to that attempt.

[16] *Impuesto sobre determinadas instalaciones que inciden en el Medio Ambiente*.

[17] These two taxes were established, respectively, by Law No. 19/1991 of 20 December 1991 (Baleares), and by Law No. 7/1997 of 29 May 1997 (Extremadura). The Balearic tax was declared void by the Constitutional Court (Decision 289/2000). Although the ruling cannot be extended to the tax established by Extremadura, this probably explains why no other Community has created another similar tax.

[18] *Impuesto sobre Grandes Establecimientos Comerciales*.

[19] The laws regulating these three taxes are: Law n.° 16/2000 of 19 december 2000 (Cataluña); Law No. 23/2001, (Navarra) and Law n.° 15/2002 of 27 december 2002 (Asturias).

issues, never touching the tax room or tax assignment problem. The relevance of the 1996 reform is twofold. On the one hand, tax powers are redistributed with tax room given to ACs. The until then theoretical possibility to establish surcharges is modified with Communities acquiring the right to regulate certain aspects of some taxes that previousy had been of the exclusive responsibility of the Central Government (the so-called ceded taxes –CT–). On the other hand, the idea that ACs could gain greater fiscal autonomy or responsibility by establishing surcharges (*recargos*) on State's taxes was abandoned. This possibility was considered by the framers of the reform, and by some of the Communities, to be inadequate as it could lead to a substantial de-harmonization of the tax system (RUIZ ALMENDRAL, 2004; RUIZ ALMENDRAL; ZORNOZA PÉREZ: 2005). Instead, changes to CTs enable the use of a harmonized basis –identical tax base, tax definitions, etc.- while they leave certain room for differentiation –deductions, tax rates,–. Thus, until 1996, CTs had been a way of making transfers to ACs, with some of the taxes owned and entirely regulated by the State received and, in some cases, administered by the Communities. As of then, they become shared taxes In July 2001, the ACs and the State agreed to broaden the scope of these ''ceded taxes''. As a result, the ACs' legislative powers for some of these taxes are now greater than in 1996 and new taxes have been ceded to them. The new powers over the ceded taxes vary widely, depending on the tax. In some cases, the ceded tax operates substantially as a transfer (as in the Value Added Tax) but, in others, the broad scope of the powers granted makes the tax very similar to an autonomous tax (as in the case of gambling taxes). The position as at 1 january 2002 is shown in table 4.

Table 4

CEDED TAXES AS AT 1 JANUARY 2005

Ceded Taxes	AC share (%)	Administration	Legislative Powers that ACs may assume
Personal income tax	33	State	Tax rates (must have same number of tax brackets as the State tax) Tax credits, under certain conditions
Wealth tax	100	ACs	Tax rates Minimum threshold Tax credits
Death and gift taxes	100	ACs	Deductions (mainly, for family circumstances) Tax rates Deductions and tax credits Tax administration regulations

(Sigue)

(Continuación)

Ceded Taxes	AC share (%)	Administration	Legislative Powers that ACs may assume
Taxes on transfers and official documents	100	ACs	Tax rates Tax credits Tax administration regulations
Gambling taxes	100	ACs	Exemptions Taxable base Tax rates Tax credits Tax administration regulations
Value added tax	35	State	None
Excise duties	40	State	None
Tax on wine	40	State	None
Tax on electricity	100	State	None
Tax on vehicles	100	ACs	Tax rates (under certain conditions and limits)
Special tax on gas	100	ACs	Tax rates (under certain conditions and limits) Tax administration regulations

Source: The authors and RUIZ ALMENDRAL: 2003a; RUIZ ALMENDRAL; ZORNOZA PÉREZ, 2005.

One of the most outstanding aspects of the 1996 reform, or at least the one that caused more political discussion, was the fact that tax legislation competencies were transferred also on the PIT, until then considered the keystone or typical example of a central tax. The transfer of such powers on the PIT was one of the main arguments used to claim that this trasnfer was unconstitutional. Thus, in 1997 some constitutionality claims were filed before the Constitutional Court, which still has not decided on the topic, but who probably won't, as most Communities have withdrawn their claims after accepting the 2001 financing system[20].

Following the 1996-2001 reform, the yield from CTs will still accrue to the Communities on the basis of taxes paid by their residents. But now, the yield is the result of the Community's own taxing autonomy, exercised by either accepting the State tax structure or should a Community exercise its new

[20] Andalucía, Asturias, Extremadura and Castilla-La Mancha filled claims. However, at the present moment the case is no longer active, for all of them have withdrawn their claim. Theoretically, the Constitutional Court is able to continue with the claim, but in this case it has decided not to, and thus leave this problem to the political arena.

legislative powers, by choosing its own tax structure. The powers of ACs are not uniform across ceded taxes. Dependent on the tax, the yield will totally or partially accrue to the ACs, which may or may not have legislative powers and be in charge of the administration of the tax. Furthermore, the ACs are given the option to choose whether they want to exercise their regulatory powers. If they fail to do so or decide not to exercise such powers, the State determines every aspect of that tax in that AC. If an AC decides to pass legislation modifying the above mentioned authorized aspects over any ceded tax, it may do so by enacting legislation which will then substitute for State law in those areas where the AC can legislate. For instance, in the case of the wealth tax (where ACs may establish whatever tax rates they choose), State legislation on tax rates will be applied to residents in those ACs that decide not to establish their own tax rates. The way that this option has been structured[21] –and the fact that the State still guarantees to ACs lump-sum grants allocated on the basis of historical shares in State transfers– serves to create a strong disincentive for ACs to use their new taxation powers. Evidence of this disincentive is the fact that, since 1997, the ACs have mainly used their powers to create new fiscal benefits (RUIZ ALMENDRAL, 2004: 405 *et seq.*).

In general, and applicable to all ceded taxes, Communities must: (1) respect the solidarity principle, which basically means an interdiction of harmful tax competition; (2) not establish tax measures that will entail discrimination based on where the income comes from, where the immovable property is located, where expenditure is realized or where a certain contract is signed/enforced, etc.[22], and (3) they must maintain a similar global fiscal pressure as in the rest of Spain. None of these constraints are crystal clear, but they have been established so as to leave the State some room to control or define the scope of ACs powers. Until now, none of them have been invoked, although there are some cases where the exercise of their powers by ACs may raise some doubts as to whether they are respecting them (RUIZ ALMENDRAL, 2003). There are specific conditions for the PIT, as we will later see.

This reassignment of taxation powers constitutes the most important tax reform since the State of Autonomies became a reality. Under the new regime, common-system ACs have substantially increased their taxation powers. Although the gap between the powers of the *foral* and common ACs remains

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[21] The formula guarantees a minimum to all Communities, regardless of whether or not they exercise their taxation powers; see details in RUIZ ALMENDRAL; ZORNOZA PÉREZ: 2005.

[22] Note that it is discrimination that is forbidden, not an objective differentiation. The difference will usually lay in those cases when an AC is trying to fiscally “penalize” tax payers for choosing another Community to celebrate a contract, close a deal, etc. Of course the “thin red line” separation discrimination from differentiation will not always be clear, and like in many other cases in the Spanish State, the interpretation given by the Constitutional Court will be decisive to understand this provision; RUIZ ALMENDRAL, 2004: 361 *et seq.*

quite large, it has certainly been reduced by the reform. If the trend continues, the possibility that the two systems end up converging should not be completely ruled out. Such convergence derives mainly from the common-system ACs' newly acquired taxation powers. Until 1997, only *foral* ACs could pass legislation and control the main taxes of the system (such as the personal income or the corporation income taxes). Since then, common-system ACs have gradually gained access to most important tax bases, excluding Corporation income taxes. Although the gap is still wide, for common-system ACs can only regulate *certain aspects* of some of these taxes while *foral* ACs may regulate most elements of the said taxes *except for certain aspects*. However, when we compare the powers that the common-system and *foral* ACs hold on the main taxes of the taxation system, it is clear that a profound asymmetry still prevails.

4. SHARING TAX FIELD IN THE PIT IN CANADA AND SPAIN. DIFFERENT RULES, SIMILAR OUTCOMES?

In this section we now explicitly compare the situation in the two countries. As we have already mentioned, the legal foundations of these two tax regimes are quite different. The differences in Canada in PIT are the result of the freedom to choose available to all provinces but mainly exercised by Québec. Thus, only Québec has an autonomous collected PIT and CIT. The differences in Spain are the result of the revival of the historical economic regimes[23] (*fueros*) under the above mentioned interpretation of the Constitutional first additional provision, on the one hand, and of the fairly recent attribution of taxation powers on the PIT, on the other hand.

When we compare the dynamics of the sharing of the PIT field in Spain and Canada several elements are interesting:

1) In both countries there has been some concern varying over time on maintaining (or not) a centralized or at least an harmonized PIT. This of course derives from the fact that in both cases this tax has a great political relevance that originates both from its quantitative importance and from its visibility for citizens. Note that, for exactly the same reasons, the question of whether or not the PIT in the European Union should be to some extent subject to harmonization has also been discussed (RUIZ ALMENDRAL, 2002). The questions that arise when deciding whether or not this tax should be harmonized and to what extent, are always whether or not the definition of the tax base should be the same and what level of fiscal pressure, tax progressivity

[23] Under Franco's Dictatorship, all fueros were in principle extinct, although Alava did maintain certain prerrogatives.

and structure it should have. Departing from this common element, the experiences of both countries are different but they may overtime lead to a similar outcome, as in the end of the day, both SNGs hold taxation powers on this tax, but must use them in a more or less harmonized fashion.

In both Canada and Spain, the subnational PIT operates on a tax on income basis. Strictly speaking, there is no subnational tax in Spain, but rather a subnational regulation of a State's tax. This is carried out on a tax on income basis, and taking the State's regulation on the PIT both as a basis and as a framework. The regulation of the central PIT actually leaves some room for the ACs regulation. In 1997, this room represented 15 per cent of the taxable income, that is, ACs where responsible for 15 per cent of the fiscal pressure of taxpayers in their territory in that given tax. As of 2001, that room increased to 33 per cent. That means that all tax credits affect 33 per cent of the taxable income, and the same goes for the tax rates (although no AC has set them yet).

2) Who decides what elements should be similar or different and where are those rules to be found? The legal framework is quite different between the two countries. While Canadian provinces may establish their own PIT if they wish, Spanish ACs are restricted by the prohibition of equivalence[24], and they partially depend on the State to be able to exercise their taxation powers on the PIT field. Of course they may always establish a surcharge on the Central State's PIT, but this possibility is politically unfeasible unless some tax room is provided beforehand.

In Canada this framework is a series of inter-governmental agreements (*Tax Collection Agreements*) that are linked to the fact that the State collects both the central and the Provinces' PITs. This collection is free provided the Provinces' legislation abides by certain rules, such as respecting the definition of the tax base established by the State[25].

In Spain the PIT is still collected by the State[26]. The laws that put in practice the attribution of some taxation powers do establish a number of conditions or limitations under which the ACs may exercise their powers on this tax. Thus, apart from the general conditions mentioned above, applicable to all ceded taxes, in the case of the PIT:

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[24] Such prohibition is established in sections 6.2 and 6.3 of the *Ley Orgánica de Financiación de las Comunidades Autónomas*, which following the attribution of section 157.3 of the Spanish Constitution, fully establishes the general guidelines of the Autonomous Communities' financing system. According to these sections, an AC may not create a tax that is in any way similar or equivalent to an already existing tax, created by the State or a municipality.

[25] Canada. Department of Finance. *Federal Administration of Provincial Taxes.* New Directions. Ottawa, january 2000.

[26] By means of a collecting agency, the *Agencia Estatal de Administración Tributaria*, AEAT (www.aeat.es).

a) The tax rates established by the ACs must follow the same progressivity pattern as the State's, and they must also have the same number of brackets. Note that this rule could be easily circumvented by establishing a surcharge, which is not forbidden. However, the odds of an AC doing so are small, as it would be politically costly, and

b) They may only establish tax credits in certain areas or for certain items: family and personal situation of tax payers, non entrepreneurial investments and donations or gifts.

3) Once a certain level of harmonization for the PIT is agreed to, the question that arises is how to put it in practice, which of course entails the question of how to "penalize" non-harmonization. In Canada, the Dominion will levy a collecting fee on Provinces whose PIT differs from the guidelines. In Spain, the laws that put into practice the attribution of certain taxation powers on the PIT do not specifically mention any sanctions. However, should an AC infringe the framework established by the State, it could always decide to take back those powers[27]. This possibility may however be too painful to use, so the most likely solution to a conflict of this nature would probably be either a political agreement, or eventually, a claim before the Constitutional Court.

As shown in the tables below, the activity of ACs and the Provinces differs substantially.

[27] Legally, the powers that ACs now have on ceded taxes have been *delegated* to them by the State, by means of section 150.1 of the Spanish Constitution; "*The State may confer upon one or various Communities the power to pass legislation for themselves within the framework of the principles, bases and guidelines laid down by a State act. Each enabling act shall make provision for the method of supervision by the Cortes Generales over the Communities legislation*"; RUIZ ALMENDRAL, 2004, 317 *et seq.*

Table 5

PROVINCES' PIT RELATED MEASURES, CANADA. NINE PROVINCES WITH FEDERALLY COLLECTED PIT,2005 (JANUARY 1ST)

Province	PIT tax measure
Newfoundland	- Equity tax credit program, under which individual who make qualifying investments in eligible small businesses can receive a non-refundable tax credit of up to 35 percent, to an annual maximum of $50,000 - Tax credit for political contributions to a maximum credit of $500 - Tax credit for interest paid on student loans - Harmonized sales tax (HST) credit similar to the federal GST credit - High income surtax of 9 percent of provincial income tax payable in excess of $7,032
Prince Edward island	- High income surtax of 10 percent of provincial income tax payable in excess of $5,200 - Tax credit for provincial political contributions to a maximum credit of $500
Nova Scotia	- High income surtax of 10 percent of provincial tax over $10,000 - Equity tax credit program provides a credit equal to 30 percent of investments in elegible small businesses, to a maximum annual investment of $50,000 - Credit of 15 percent for investments in labour-sponsored venture capital funds, to a maximu investment of $3,500 - Tax credit for provincial political contributions, to a maximum of $500
New Brunswick	- Provincial political contribution tax credit, to a maximum of $500 - 15 percent of non-refundable tax credit for investments in labour-sponsored venture capital funds, to a maximum of $5,000 - 30 percent credit for investors in qualifying small businesses: effective in August 2003 and the maximum annual credit is $15,000
Ontario	- Surtax rates: **20,0%** surtax on provincial tax payable between $3,747 and $4,727 **36,0%** surtax on provincial tax payable in excess of $4,727 - Refundable tax credits are available to offset a portion of a taxpayer's property tax (or rental payments) and sales tax - Senior receives a separate refundable credit for property and sales tax. The credit for seniors have a combined maximum of $1,000 and, in 2003, are reduced by 4 percent of combined net income over $22,000

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Province	PIT tax measure
Ontario	- Refundable credit is provided under Ontario's home ownership savings plan - Tax credit for political contributions, to a maximum of $1,000 - Non-refundable tax credit for investment in a labour-sponsored venture capital corporation, maximum $750 (15 percent of the maximum investment of $5,000)
Saskatchewan	- 15 percent tax credit for investments in national labour-sponsored venture capital corporations. For 2003, the maximum provincial credit obtainable on such investments is $525 (maximum investment $3,500) - Enhance credit for investments in provincial labour-sponsored venture capital corporations. The tax credits is equal to 20 percent of invested amounts to a maximum of $1,000 (maximum investment $5,000) - Total credits for investments in both types of plans in a year cannot exceed $1,000 - Non-refundable 10 percent credit for individuals on purchases of flowthrough shares of eligible mineral exploration companies in the province - Refundable sales tax credit for taxpayers with incomes up to $35,000. The maximum credit for an adult is $77 and, for a child, $55 - Political contribution tax credit, maximum credit $500
Alberta	- Tax credit for political contributions to a maximum credit of $750 - Family employment tax credit for families with more than $6,500 in income from employment or self-employment. (The credit is equal to 8 percent of parents' earned income over $6,500, to a maximum of $500 per dependant and $1,000 per family, and it is reduced by 4 percent of family net income over $25,000)
British Columbia	- Tax credit for political contributions, maximum $500 - Sales tax credit - Employee share ownership tax credit - Employee venture capital tax credit - Tax credit for investments in venture capital companies - Mining exploration tax credit - Mining flowthrough share credit

Source: Authors Finances of the Nation, Canadian Tax Foundation.

Table 6

ACs' PIT RELATED MEASURES, SPAIN.,15 COMMON ACs, 2005

ACs	Tax credits in the PIT
Andalucía (*)	Disabled tax payer: 50€ "baby bonus": children younger than three: 50€ (only when taxpayer is entitled to the same benefit from the State) international adoption of children: 600€ Acquisition of first house by tax payers younger than 35: 2 per cent of quantities invested Rental of private home: 10 per cent of quantities, max. 150€ per year Self employment, or beginning of entrepeneurial activity by tax payers younger than 35: 150€ (if women, of any age: 300€)
Aragón	"baby bonus": 500-600€
Asturias	Tax payer exercises tutorship and lives with person older than 65: 300€ Investments to buy or ameliorate private home in case of disabled tax payers: 3 per cent of investment Investments to buy or ameliorate private home: 100€ (only when taxpayer is entitled to the same benefit from the State) Rental of private home: 5 per cent of quantities, max. 250€ per year (10 per cent, and max. 500€ when home is located in a rural area) Self employment, or beginning of entrepeneurial activity by tax payers younger than 30 or women of any age: 150€ Donation of private land in the rural areas to the Government of Asturias: 20 per cent of the value
Islas Baleares	Tax payer older than 65: 36€ Disabled tax payer or ascendants or descendants: 60€ Acquisition of house by tax payers younger than 36: 6.5 per cent of quantities invested Rental of private home by tax payers younger than 36: 10 per cent of quantities, max. 200€ per year Investments to ameliorate private property in certain environmentally protected areas (Natural parks, etc): between 12 and 25€ per Hectarea depending on the area where property is located. Kindergarten for tax payers descendants aged between 3 and 6: 15 per cent of expenses, max. 200€

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ACs	Tax credits in the PIT
Islas Baleares	Expenses derived from school materials for children under 16: between 18 and 100€ per child depending on income thresholds Descendant attending University outside the island of residence
Islas Canarias	Expenses associated to descendants under 25 who depend economically from the tax payer and pursue University or superior studies in an Island or place other of that of his normal residence: 300 if inside, and 600€ if outside the Canary Islands Donations to public entities that have environmental purposes or the conservation of historical properties or landmarks: 10 and 20 per cent of quantities given Investements in ameliorating goods of public and cultural interest: 10 per cent of investment
Cantabria	15 per cent of subsidies received by mothers with children under 6, max.: 270€
Castilla-La Mancha (*)	15 per cent of quantities donated to the Cooperation Fund of Castilla-La Mancha
Castilla y Leon	Disabled tax payer older than 65: 600€ Tax payer with more than three children (if disabled children, increase of the quantity): 225€, 100€ as of the fourth child, and 450€ if one or more are disabled "baby bonus": birth or adoption of child: 100€, 250€ and 500€ for the first, second and third and subsequent children, respectively Expenses derived from child care when parents hire a person for that purpose: 30 per cent of expenses, maximum 300€ Investment in property categorized as historic or artistic Donations to certain Funds whose purpose is to ameliorate the historical and artistic goods of Castilla y León: 5 per cent of donations Donations to certain Funds whose purpose is to ameliorate and protect the natural environment of Castilla y León: 15 per cent of donations
Cataluña	"baby bonus": birth or adoption of child: 150€ for every parent Donations to Funds whose objective is the protection and enhancement of the use of the Catalonian language: 15 per cent of donations

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ACs	Tax credits in the PIT
Cataluña	Rental of private home: 10 per cent of quantities, max. 300€ per year (10 per cent, and max. 600€ when family has three or more children) Acquisition of house by tax payer: 3,45 per cent, more if there is a mortgage Acquisition of house by tax payers younger than 32, unemployed, disabled or with at least one child: 6,45 per cent, more if there is a mortgage Interest paid on students loans: 100 per cent Gift to descendants in order for them to acquire their first hause: 1 per cent
Extremadura (*)	Acquisition of house by tax payer younger than 35: 3 per cent of invested quantities Tax payer whose income is mostly derived from work and earns less than 15.000€ per year: 120€ Donations to public entities whose purpose is the conservation of historical properties or landmarks: between 5 and 10 per cent depending on the entity (max. 300€)
Galicia	“baby bonus”: birth or adoption of child: 240€/300€ (depending on income) Tax payer with more than three children (if disabled children, increase of the quantity): 200, 280, and 380€ depending on final number of children and disabilities Payment to another person for taking care of a tax payer’s child under three: 180€ Rental of private home: 10 per cent of quantities, max. 300€ per year
Madrid	“baby bonus”: birth or adoption of child: 600, 750 and 900€ depending on whether it is the first, second or third and subsequent child International adoption of children: 600€ per child Tax payer exercises tutorship and lives with person older than 65 or disabled: 600€ Rental of private home by tax payers younger than 35: 20 per cent of quantities, max. 700€ per year Donations to certain cultural entities: 10 per cent Ascendants older than 65 living with tax payer

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ACs	Tax credits in the PIT
Murcia	Acquisition of private home by tax payer: 4,95 per cent, more if there is a mortgage Acquisition of private home by tax payers younger than 30: 3 per cent, 5 per cent when low income Donations to certain cultural entities to promote Murcia's historical goods: 30 per cent of donation Expenses of kindergarten for children under 3: 15 per cent, max. 150€
La Rioja	"baby bonus": birth or adoption of child, applicable as of the second child: 150€, and 180€ for the third and subsequent children (60€ more if multiple births) Acquisition of house by tax payers younger than 36: 3 per cent Acquisition of a second house in certain small villages of La Rioja that are specially underpopulated: 7 per cent Investment by tax payer: buying personal computers in order to install new technologies at home: 100€
C. Valenciana	"baby bonus": birth or adoption of child, applicable as of the second child: 150€ (200€ or more if disabled). In case of multiple births or multiple adoptions: 200€ Tax payer with three or more children: 180, 300 or 450€ depending on number of children and possible disability. Tax payer older than 65 and disabled: 160€ Acquisition of first house by tax payers younger than 35 or disabled: 3 per cent Rental of private home by tax payers: 10 per cent of quantities, max. 180€ per year Donations to certain cultural entities, or entities whose object is the protection of the environment: 10 or 20 per cent, depending of the entity Spouse not working: 120,20€

Source: The authors.

(*) Andalucía, Castilla-La Mancha and Extremadura did not accept the 1996 reform of ceded taxes, as they considered the outcome of the financing system was to their disadvantage. They did accept the 2001 system (after much negotiations and political tensions) and hence started having legislative powers on the PIT as of January 2002. Most of the rest of the Communities began exercising their brand new powers in 1999 (only some Communities, like Valencia and Catalonia, started as early as 1997).

CONCLUSION

The most obvious conclusion is that the nature of the choices made in both countries is different. In Canada the most common use of PIT autonomy by Provinces is to levy surtaxes. Hence, tax autonomy is mainly used to raise revenues. On the contrary, no Spanish AC has yet dared to change the tax rates established by default by the State, and most ACs have only established tax credits on family and personal circumstances. This may have been influenced by the fact that in Spain the PIT has largely been considered a “sacred cow” in personal taxation. Opinion 182/1997 of the Constitutional Court clearly reflects this view by stating that taking into account its central position in the tax system, any change in this tax will mean a change in the distribution of the ability to pay among citizens. Such ability to pay being a constitutional principle (article. 31.1 states the right and duty of citizens to pay taxes according to their ability to pay), transferring powers on the PIT to ACs could not occur without discussion. Furthermore, part of this view was deeply influenced by some streams of thought in fiscal federalism literature, that regard PIT as one of the ideally central taxes, due to its contribution to the stabilization function (MUSGRAVE, 1983: 4 *et seq.*). Such ideas may have also influenced the Canadian model, and it has often been discussed whether it would not be better to have a more uniform PIT (BOADWAY, 1996).

However, once the SNGs have and exercise taxation powers on the PIT, the fear of a tax jungle may disappear or become less important. In Spain, it is to be noted that most discussion on whether or not ACs should have taxing powers on the PIT took place in 1996, when legislative powers were first transferred onto ACs on this tax. When in 2001 such powers were extended to the current 33 *per cent* no one seemed surprised, and there was almost no discussion, probably due to the fact that by then it was more or less clear that no AC was interested in undertaking drastic changes on the tax. But how long will this last? Considering the speed at which Spain has been decentralized, and how fast ACs “learn” to activate their authority, perhaps not for long. Moreover, ACs have already increased fiscal pressure in other taxes, such as gambling taxes or stamp duty, and they have also introduced all kinds of minor indirect taxes, user fees or environmental taxes. Furthermore, the Spanish government has already announced that the Communities must start using their taxation powers on ceded taxes in order to obtain greater revenues to finance the ever increasing Health expenditure, which alone in the period 1999-2002 has grown about 24,7% in all common-system ACs[28]. The time for the Spanish ACs’ PIT should not be too far.

[28] See *El País*, march 24th 2005 (p. 13).

REFERENCES

BIRD, R. and VAILLANCOURT, F. (2002): *Changing with the Times:Success,Failure and Inertia in Canadian Federal Arrangements,1945-2001* Federalism in a Global Environment conference, CREDPR ,Stanford University.

BOADWAY, R. (1996): "The Folly of Decentralizing the Canadian Federation". *Dalhousie Review*, núm. 75.

BOADWAY, R. and HOBSON, P. (1993), *Intergovernmental Fiscal Relations in Canada.* Toronto: Canadian Tax Foundation.

CASTELLS OLIVERES, ANTONI (1988), Hacienda autonómica. Una perspectiva de federalismo fiscal. Barcelona: Ariel.

FALCÓN Y TELLA, RAMÓN (2005): "En torno a la STS 9 diciembre 2004 relativa a las normas forales de 1996 (I): los efectos de la declaración de nulidad y el papel del Tribunal Supremo en el control de las ayudas de Estado". *Quincena Fiscal*, núm. 2.

LA FOREST, G.V. (1981): The Allocation of Taxing Power Under the Canadian Constitution. Toronto: CTF.

LÓPEZ GUERRA, L. (1993), 'The development of the Spanish 'State of Autonomies' 1978-1992. At: JUTTA KRAMER (Hrsg.): *Föderalismus zwischen Integration und Sezession.* Baden-Baden: Nomos Verlagsgesellchaft.

– (1996), 'Regions and Nationalities in Spain: the autonomous communities'. At: GISELA FÄRBER; MURRAY FORSYTH (hrsg.): *The Regions -Factors of Integration or Disintegration in Europe?.* Baden-Baden: Nomos Verlagsgesellschaft.

MAGNET, J.E. (1998): *Constitutional Law of Canadá.* Vol. I (*Federalism*). Edmonton: Juriliber Limited.

PÉREZ TREMPS, PABLO (2000), 'La participación de las Comunidades Autónomas en los asuntos comunitarios europeos'. In: (Enrique Álvarez Conde, ed.): *Administraciones Públicas y Constitución.* Madrid: Instituto Nacional de Administración Pública (INAP).

PERRY, D.B. (1997): Financing the Canadian Federation, 1867 to 1995: Setting the Stage for Change. Toronto: CTF.

PERRY, D.B. and TREFF, K. (2001): *Finances of the Nation 2000.* Toronto: CTF.

RUIZ ALMENDRAL, VIOLETA (2002): "El Impuesto sobre la Renta de las Personas Físicas en el proceso de armonización fiscal en la Unión Europea". *Revista Española de Derecho Europeo* (Civitas), núm. 3.

– (2002a): "Fiscal Federalism in Spain: The Assignment of Taxation Powers to the Autonomous Communities". *European Taxation* (IBFD, Holanda). Vol. 42, núm. 11. november.

Ruiz Almendral, Violeta (2003): “Autonomous Communities taking advantage of the mechanism to ensure the neutrality of VAT”. *International Vat Monitor* (IBFD, Holanda). Vol. 14, núm. 5. sept/oct.

– (2003a): “The Asymmetric Distribution of Taxation Powers in the Spanish State of Autonomies: the Common System and the *Foral* Tax Regimes”. *Regional and Federal Studies* (Reino Unido). *Frank Cass Journal*. Vol. 13, núm. 4, Winter.

– (2004): *Impuestos Cedidos y Corresponsabilidad Fiscal*. Valencia: Tirant lo blanch.

RUIZ ALMENDRAL, VIOLETA y ZORNOZA PÉREZ, JUAN (2004): “El Impuesto sobre Grandes Establecimientos Comerciales. Análisis constitucional”. *Revista Nueva Fiscalidad*, núm 10, november.

– (2005): “Reflexiones sobre la financiación de las Comunidades Autónomas”. *Ordenamiento territorial en Brasil y España*. Seminario organizado por el Instituto de Derecho Público Comparado y Cátedra de Estudios Portugueses Luis de Camoẽs. Valencia: Tirant lo blanch.

SCOTT, F.R. (1977): “Centralization and Decentralization in Canadian Federalism”, en: SCOTT, F. R.: *Essays on the Constitution*. Toronto: University of Toronto Press.

SMITH, E.H. (1998): *Federal-Provincial Tax Sharing and Centralized Tax Collection in Canadá*. Special Studies in Taxation and Public Finance, núm. 1. Toronto: CTF.

SOLÉ-VILANOVA, JOAQUIN (1990), ‘Regional and Local Finance in Spain: Is Fiscal Responsibility the Missing Element?’. In R. J. BENNETT (Ed.): *Decentralization, Local Governments and Markets*. Oxford: Clarendon Press.

ZORNOZA PÉREZ, JUAN (1988), “Tributos propios y recargos de las Comunidades Autónomas”. Madrid: *Memoria de la Asociación Española de Derecho Financiero*. 1986/87, vol. II.

SÍNTESIS

PRINCIPALES IMPLICACIONES DE POLÍTICA ECONÓMICA

El 1 de enero de 2002 entró en vigor un conjunto de normas que modifica sustancialmente el hasta entonces vigente sistema de financiación autonómica, en lo que probablemente constituya la reforma más importante en dicho sistema desde la formación del Estado de las autonomías.

Este trabajo tiene como objetivo analizar la citada reforma desde la perspectiva del principio de corresponsabilidad fiscal, y en particular, sus resultados a la luz del ejercicio de potestades normativas de las Comunidades Autónomas en el IRPF. Para ello, se realiza un estudio comparado entre el modelo canadiense de distribución de competencias en el impuesto sobre la renta (Personal Income Tax) y el español.

El resultado es que, frente al comportamiento que es habitual en las Provincias canadienses, las Comunidades Autónomas han tendido a ejercer sus competencias a la baja, estableciendo todo tipo de beneficios fiscal que, si bien son económicamente poco significativos, pues su cuantía es reducida, muestra el escaso interés de nuestros gobiernos subcentrales por apropiarse de las nuevas fuentes impositivas. Es posible que ello sea explicable habida cuenta de lo reciente de estas competencias. Por eso, el análisis conjunto con el caso canadiense tiene interés para comprobar las tendencias a medio plazo de los entes subcentrales en el ejercicio de sus potestades normativas.

El estudio tiene particular relevancia en un contexto como el actual, donde es muy probable que se modifique sustancialmente el vigente sistema de financiación autonómica, a consecuencia de las reformas de los Estatutos de Autonomía que demandan un mayor grado de descentralización fiscal.

Sin embargo, la experiencia demuestra que las reformas normativas son en sí mismas insuficientes. A la luz de los datos expuestos, resulta evidente que el sistema actual de financiación de las Comunidades Autónomas no contiene los incentivos suficientes y necesarios para fomentar el empleo *corresponsable* de las nuevas potestades normativas en materia de impuestos cedidos.

Por ello, seguramente resulta ineludible plantear una modificación de las reglas financieras del modelo que tomen en cuenta también la capacidad fiscal de una manera más precisa que la que se viene empleando hasta ahora, pues ésta constituye la única manera de que los impuestos cedidos sirvan efectivamente al objetivo para el que fueron reformados. Desde esta perspectiva, el modelo canadiense debería ser examinado con mayor detenimiento por nuestra doctrina.

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