1. Inter-regional fiscal flows: introduction to the issues

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1 INTRODUCTION

In many countries, intergovernmental finance debates are typically embroiled in arguments as to how much each region receives or should receive from the central budget. Such behaviour might purely be a symptom of the opportunism that afflicts many countries, though it might just as equally reflect longstanding, and as yet unresolved, financial conflicts within the territory. At the practical level, this issue is made manifest through the measurement of inter-regional fiscal flows or ‘net fiscal flows’, that is, the difference between what the residents of a particular region receive in terms of public services and what they actually pay in taxes to the central government.

The first objective of this book, therefore, is to attempt to make sense of the usefulness of computing inter-regional ‘fiscal balances’, and in so doing to provide some guidelines as to how best to interpret the various methodologies adopted and the results to which they give rise. This is done by reporting the experiences of a number of countries. We seek to provide answers to such questions as: Why compute inter-regional fiscal flows? Is there a correct methodology for such computations? How should inter-regional fiscal flows be interpreted? What is the role of central government in the provision of information for this exercise? Can such data help enlighten the debate (and ease the territorial conflict) or do they simply serve to add more fuel to the fire of discontent (and exacerbate the conflict)?

However, this book seeks to go beyond a simple presentation of the results of these analyses and to ask, in the case of inter-regional fiscal flows in regional programmes (for example, intergovernmental transfers and public investment), why some regions end up receiving more than others (that is, what exactly determines fiscal flows?). And so the book also seeks to answer such questions as: What political reasons underpin the bias in

these programmes against (in favour of) rich (poor) regions? Does this bias differ across countries and, if so, what accounts for these differences? Does the basis for this bias lie in the constitution or does it reflect short-term electoral politics? To answer these questions the book undertakes a review of the literature on the political economy of grant allocation, examines in detail the politics of intergovernmental transfers in Spain, and undertakes a comparative analysis of the drivers of the inter-regional allocation of public investment across EU countries, again with a specific focus on the case of Spain.

And finally, the book turns its attention to the relationship between the intensity of these fiscal flows and country stability, since those who use these calculations to their advantage are frequently the supporters of secession in the country's richer regions. Thus, the book seeks to answer such questions as: Are fiscal flows merely the image of national citizenship rights and, as such, do they constitute the glue that binds the citizens together, endowing the country with stability? Or, rather, if the net-fiscal flows become too great, might they lead to the disaffection of the rich regions, fostering territorial conflict and jeopardising the future of the union? These questions are analysed both conceptually and by examining the experiences of individual countries so as to understand better how these arguments are used in the on-going debate on the future viability of a country.

This introductory chapter summarises the main findings of the book. Section 2 focuses specifically on questions related to the measurement of inter-regional fiscal flows, dealt with here in Part I of the book. Section 3 discusses the determinants of the inter-regional allocation of intergovernmental grants and public investment, included here in Part II of this book. Section 4 examines the relationship between inter-regional fiscal flows and country stability, dealt with here in Part III. Finally, section 5 concludes by assessing our knowledge of the political economy of inter-regional fiscal flows, and outlines various avenues of future research.

2 INTER-REGIONAL FISCAL FLOWS: MATTERS OF MEASUREMENT

The analyses undertaken in the chapters that make up Part I of this book illustrate that there is a long tradition, in more than one country, of estimating the 'inter-regional fiscal flows' that result from the fiscal activity of the central government. It clearly makes sense to estimate 'net fiscal flows' among regions so as to measure the degree of inter-regional redistribution or the impact of the federal public sector on regional production and

consumption. This said, however, the problems encountered in making this estimation should not be underestimated, while the interpretation of the results often leads to different conclusions depending on whose hands they are in. The two main contributions in this part of the book, provided by Guiseppe C. Ruggeri and François Vaillancourt, specifically address these two issues: measurement and interpretation.

Ruggeri's look at the issues involved in measurement claims that the theory of the territorial incidence of public sector action constitutes the most appropriate methodological approach to the estimation of fiscal flows. However, there is no one universally accepted approach to doing this. According to Ruggeri, three approaches are typically adopted in empirical studies: the (1) cash-flow; (2) benefit; and (3) economic gain approaches. The cash-flow approach focuses on the location where revenues are collected and in which disbursements are made or materialise. But the obvious shortcoming to this approach is that allocating taxes according to the place in which they are collected often makes little sense and so, in order to overcome this, Núria Bosch proposes in her comments on Ruggeri's chapter, the assignment of tax revenues to the territory in which the economic capacity that is being taxed is located. Such a system of allocating taxes would certainly appear to be more homogeneous and symmetrical with the way in which expenditures are allocated under the cash-flow approach.

In the benefit approach, Ruggeri explains how the focus shifts to the residence of the individuals that receive the benefits of government services and who bear the tax burden of their financing. As such the approach is directly linked to fiscal incidence analysis. The third approach, that of economic gain, takes elements from the two preceding approaches. Thus, it assigns central revenues on the basis of where their burden is borne, albeit directly on the aggregate (collectively by its residents), and it allocates the central purchases of goods and services in terms of the economic gains received by a region, measured by the factor income generated in that region by central expenditure.

The comments provided by Núria Bosch and Antoni Zabalza agree, in the main, with these methodological proposals, though they make a number of additional suggestions. Bosch proposes, as we mentioned above, an alternative method for allocated revenues and, in addition, addresses the question of which methodology should be used in practice. She claims that the methodology chosen ought to reflect the goal pursued in the estimation of the 'fiscal balances'. Zabalza proposes a method for dealing with central surpluses and deficits in the measurement of regional balances, an aspect over which considerable controversy hangs. Thus, the flow approach is the most appropriate when the study seeks to measure

the economic impact of central public sector actions on a specific territory. However, if the study aims to measure the effects of central public sector activities on the welfare of people living in a territory, then the benefit approach is more apposite.

Having computed the fiscal flows, how then are they best interpreted? François Vaillancourt examines this question in a study of the Canadian case and proposes various geographical, historical, demographic and political determinants. Vaillancourt also identifies who he believes should undertake these calculations and stresses the importance of not entrusting a single body with the production of fiscal flow estimates, since this can stifle creativity both in producing estimates and, more importantly, in analysing them.

The book also presents the specific experiences of several countries, namely Italy, Belgium, Canada and Spain, when estimating fiscal flows. The discussion of the case of Italy, undertaken by Maria Flavia Ambrosanio, Massimo Bordignon and Floriana Cerniglia, raises the highly relevant question of how funds between Italy and the European Union should be treated. Paul Van Rompuy's analysis of the Belgian case discusses the relative weight given to different kinds of fiscal flows. Ruggeri's description of the case of Canada makes an interesting use of statistical indices to examine the contribution of net fiscal balances to changes in regional disparities. Finally, the examination of the case of Spain, provided by Marta Espasa and Núria Bosch, looks at the factors that determine the sign and magnitude of fiscal flows. To conclude, the comments by Guillem López-Casasnovas discuss the normative principles that could be used to assess the magnitude of 'net fiscal flows' of Spain's richer regions. The comments by Ramon Barberán focus on the use of the different methodologies proposed and the interpretation of the results obtained in the Spanish case.

3 BEYOND THE DATA: WHY DO SOME REGIONS RECEIVE MORE?

The chapters making up Part II of the book seek to identify the causes of 'inter-regional fiscal flows'. And here the main focus is on regionally-based spending programmes, since while it is clear that inter-personal redistributive programmes provided and funded directly by the central government will generate 'net fiscal flows' that are negatively correlated to income, the a priori relation of the former to regional income is not so obvious. Thus, the first three chapters (by Jonathan Rodden, Stuti Khemani, and Sandra León, respectively) focus on intergovernmental transfers, and

the remaining two (by Achim Kemmerling and Andreas Stephan, and by Albert Solé Ollé) analyse public investment executed by the central government.

The political explanations of inter-regional fiscal redistribution offered by these studies fall into two categories. The first (see the chapters by Rodden and Solé Ollé) treats ‘inter-regional fiscal flows’ as a product of redistribution from rich to poor regions. Here, ‘fiscal flows’ are considered to be driven by the deal struck in the country’s constitution, where the political power of rich vis-à-vis poor regions is determined. Solé Ollé refers to this kind of redistribution as *programmatic*, indicating that the central government is forced to adhere to certain objective principles and, therefore, to use income-based allocation formulae. The second category of explanations treats ‘inter-regional fiscal flows’ as the product of the tactical manoeuvres of centrally based politicians. ‘Tactical redistribution’ (in Solé Ollé’s terminology) refers, therefore, to the allocation decisions of the central government that are not constrained by any normative criteria, but rather that are governed exclusively by short-term electoral considerations. The chapters in this section differ in terms of the weight they apportion to these two explanations. While Rodden places the emphasis exclusively on *programmatic* redistribution – without denying, however, the importance of tactical considerations – Khemani and León disregard rich-to-poor redistribution and focus solely on short-term politics, while Kemmerling and Stephan and Solé Ollé give weight to both types of redistribution.

Rodden provides evidence to show that the redistributive power of inter-governmental grants varies widely across a small set of countries. While in some – namely Spain, Canada, Germany and Australia – there is considerable redistribution, elsewhere, for example, the USA, India, Brazil and Argentina – this is not the case. Rodden offers several institutional explanations for this stylised fact. Thus, he claims that inter-regional redistribution is higher in parliamentary democracies than it is under presidential systems, since in the former power tends to be concentrated in the hands of government, thereby easing the use of programmatic national appeals and permitting the emergence of a national low income coalition. He also reports that redistribution can prove more problematic in countries in which rich regions are over-represented in the legislature. Finally, he stresses that these institutional traits depend on the initial constitutional bargain. Thus, in countries such as the USA, Brazil and Argentina, there is less inter-regional redistribution precisely because rich regions retain the power of veto acquired at an early stage in constitutional contract negotiations. Elsewhere, in countries such as Canada, Spain, Italy, Belgium and the UK, the rich regions have neither inherited these powers nor were they ever granted them in the first place. In these latter countries, national

majorities of poor individuals (residing in poor regions) have been able to impose higher levels of redistribution. Hence, it is quite normal to find that rich taxpayers living in rich regions are in favour of more tax decentralisation and/or reduced levels of redistribution both in the allocation of intergovernmental grants or public investment. A permanent struggle takes place between territorial aspects of public finance and inter-governmental grants in these countries, where sectors of the population might even seek secession. This explains why the main examples for the calculation of 'inter-regional fiscal flows' or 'fiscal balances' documented throughout this book come precisely from these countries (see Part I for the cases of Canada, Italy, Belgium and Spain, but also Part III for the case of Scotland). Certainly, the relationship between 'inter-regional fiscal flows' and territorial conflict is a complex one (meriting a complete section in this book). This complexity is highlighted in Carles Boix's comment on Rodden's chapter, in which more refined (yet untested) predictions are derived regarding the amount of inter-regional redistribution, based on a consideration of the effect of external shocks and the possibility of renegotiating the federal bargain.

The chapters by Khemani and León both focus on the politics of inter-governmental grants, but concentrate on short-term *tactical* aspects. The existing literature tends to suggest that governments will allocate discretionary transfers to one of three jurisdictions: *swing districts* – where a high proportion of voters remain indifferent to both incumbent and opposition, to party strongholds – where a high proportion votes for the incumbent, or to jurisdictions controlled by the same party – to avoid political credit going to the opposition. Khemani and León seek to extend this literature by showing that the institutional arrangements in each country have an impact on the actual type of tactical incentives that politicians choose to adopt in practice. More specifically, both chapters examine the interaction between political tactics and the degree of decentralisation, broadly understood either as spending decentralisation or as the creation of a new sub-national jurisdiction. Khemani focuses on this latter aspect, arguing that politicians might be interested in creating new local jurisdictions, which will be grant-financed, in order to better exploit short-term political tactics (that is, to better target *swing* voters). She offers convincing evidence of this from India. León, on the other hand, does not treat decentralisation as endogenous but rather shows how the extension of the decentralisation process in Spain has affected the political tactics adopted by the central government in the allocation of transfers to the regional authorities. She argues that as decentralisation has advanced, the ability of sub-national politicians to obtain credit for the services funded by these grants has grown, and thus it has become more convenient for the central government

to allocate more resources to their co-partisans than to *swing* regions. The general conclusion to be drawn from these chapters is that short-term political tactics might be complex and contingent on the specific set of institutions. Santiago Lago's comment on these two chapters is in line with this conclusion and he highlights a number of other institutional traits (for example, the degree of nationalisation of party systems) that might further complicate the analysis.

The chapter by Kemmerling and Stephan and that by Solé Ollé shift the focus towards an analysis of public investment. The first of these studies, while recognising that the politics of inter-regional redistribution might be affected by a country's institutional structure, undertakes a comparative analysis of the determinants of transportation infrastructure investment in four European countries – Italy, Germany, France and Spain, which differ in terms of their electoral system and the nature of their federation. The exercise is of great value but has to overcome enormous difficulties, given the problem of gathering comparable data for the four countries and the institutional differences that exist between them. The authors show that considerations of efficiency and (on occasions) equity influence the territorial allocation of investment and that, when controlling for this, tactical politics are also important. Partisan strongholds in some countries and close electoral races in others seem to influence investment, while alignment between parties at the levels of regional and central government seems to matter in at least one of the federalist countries (namely, Germany). More comparative studies of this type are clearly needed if we hope to understand what underlies the differences in these countries.

Solé Ollé's study, a close examination of the determinants of central government spending in Spain between 1964 and 2004, represents another attempt in this same direction. The chapter estimates an investment equation for different subperiods (the dictatorship and eight democratic terms-of-office) in order to gauge the relative importance of *programmatically* and *tactically* motivated redistributions, concluding that both have influenced the regional allocation of public investment in Spain. Tactical motives have been of some importance in each of the eight democratic terms-of-office, with the central government investing more in jurisdictions where: (1) there are more *swing* voters (proxied by the *margin* of victory in the previous election), (2) it is cheaper to buy a seat (measured by the ratio *votes/seats*), (3) there are regional parties which are *pivotal* in the central legislature, and (4) there is partisan alignment between the central and the regional executives. Programmatic motives have also been important, reflected in the following findings: (1) the allocation of investment is not only efficiency oriented, (2) the orientation towards efficiency was high during the dictatorship and decreased with the arrival of democracy,

equity being also more important with left-wing governments and EU funds, and (3) the allocation also shifted away from equity as a result of a lower correlation over time between income and a district's political power (a measure which includes the four tactical variables identified above). The results suggest, therefore, that the intensity of programmatic inter-regional redistribution depends a great deal on constitutional provisions that mandate a redistributive use of public investment and established an electoral system that discriminated against populated rich electoral districts. However, party ideology and the political circumstances surrounding each election are also important in understanding which districts obtain more investment. Germà Bel's comment on this chapter acknowledges these basic empirical findings, but suggests that the strong equity orientation found in some of the periods might be due to the meta-political objective of fostering political centralisation by promoting investments in infrastructure networks geographically centred on Madrid (for example, roads and railways).

4 INTER-REGIONAL FISCAL FLOWS AND COUNTRY STABILITY

Part III of the book comprises several studies that analyse the effects of the intensity of 'inter-regional fiscal flows' on the degree of territorial conflict and, ultimately, on the possible formation or break-up of the country. The section opens with an interesting conceptual discussion by Enrico Spolaore, in which he asks if inter-regional redistribution is helpful or not in preventing territorial conflict and (supposedly) undesirable secessions. His opening premise is straightforward: if a unified country is a Pareto improvement, then redistribution, by compensating those parts of the country that lose out, should remove all incentives to secede. However, as Spolaore recognises, the practice is somewhat more complicated. If regions differ according to their preferences, then redistribution towards regions with markedly different preferences from those of the national average will mitigate pressures of secession. But if regions differ according to their income levels, redistribution whereby the rich compensate the poor for staying in the country might also have centrifugal forces. Spolaore concludes that inter-regional redistribution cannot be successful in impeding secessions in all instances. He also analyses the effects of policy decentralisation, which will tend to reduce the heterogeneity problem. In some cases, however, the effects of greater autonomy might be just the contrary, increasing the ability of minority regions to secede. Moreover, the empirical evidence surveyed in the chapter suggests that redistribution

and decentralisation only help mitigate conflicts in the absence of ethnic fragmentation and in democracies. Massimo Bordignon's comment on Spolaore's chapter adds an additional dose of scepticism to the ability of these policy prescriptions to solve territorial conflicts in the real world.

Finally, this part includes three region/country studies which aim at illustrating the role played by public finance and 'inter-regional fiscal flows' in the discussion regarding the desirability of secession. The cases dealt with are those of Catalunya (Spain), Québec (Canada) and Scotland (UK). In all three instances there exist cultural differences that mean that a unified country necessarily imposes certain costs on the inhabitants of these regions. In the first case, that of Catalunya, the region is richer than the country's average region and – given the strong redistributive orientation of Spanish public finances – bears a highly negative 'net fiscal flow'. Elisenda Paluzie's chapter on Catalunya illustrates how regional redistribution contributes to feelings of dissatisfaction among sectors of the population with the unified Spanish state, and discusses how these feelings interact with other costs and benefits of the relationship between the region and Spain. François Vaillancourt's chapter on Québec illustrates the case of a region that is culturally very distinct from the rest of Canada but which, having an income level lower than average, benefits from a positive 'net fiscal flow'. Vaillancourt notes that this positive flow has grown over time, together with the support for sovereignty, which might suggest that these factors are needed to reduce secessionist pressures. The case of Scotland, described by David Bell, also illustrates the importance of economic considerations in any discussion of the convenience of secession. As Bell shows, Scotland benefits from a positive 'net fiscal deficit' in the UK, suggesting once again that this might operate as a side payment reducing secessionist pressure. The chapter also illustrates the role that projected North Sea oil revenues play in computing the economic benefits of an independent Scotland.

5 CONCLUSION

The book documents the cases of several countries in which there is a constant struggle over the regional allocation of taxes and spending. It shows that regional income is the main factor in this conflict, with rich regions unhappy with their negative 'net fiscal flows'. The book offers various explanations for the different degrees of 'inter-territorial redistribution' observed and also for the different levels of territorial conflict to which it has given rise. Rodden claims that the redistributive power of grants is not so great in countries where rich regions retain some of the power from

earlier constitutional bargains. Boix suggests that redistribution is affected by the real options open to regions at times of constitutional renegotiation. Dissatisfaction with an earlier constitutional agreement made under very different conditions might, therefore, result in conflict. Spolare analyses the exact role of inter-regional redistribution in mitigating this conflict and preventing undesirable secessions. Can the precise calculation of 'inter-regional fiscal flows' and the dissemination of this information help attenuate this conflict? Several authors believe that 'fiscal balances' can indeed help in this way, but that a certain amount of caution needs to be exercised. First, it seems essential to reach a basic agreement on the methodology to be adopted in computing these fiscal flows, otherwise – given the variety of approaches and outcomes – the parties to a conflict are apt to interpret them differently. It remains unclear as to whether one official institution should be entrusted with this task, though Vaillancourt is of the mind that it is better to engage several institutions in order to encourage greater competence and to obtain the best outcome. In countries in which a basic consensus exists as regards methodology and interpretation this should be feasible. All in all, one clear conclusion emerges from this book: despite the disagreements, a basic consensus does exist, at least among academics, as regards the best methodology to adopt. It is our hope that this collection can help in bringing this idea to a wider audience.