
Introduction and background

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The link between theoretical and empirical public economics

The special nature of the fiscal economy is determined by its function, which is to provide the state, as the highest form of compulsory collective economy, with the requisite income (goods or money) and to implement its use. The specific character of both the consumption and the income sides of the fiscal economy arises necessarily from this fact. This is of primary importance for a grasp of the science of Public Finance (Wagner, 1883, p. 2).

In 1883, Adolf Wagner identified the public economy in terms of its function and need of private resources to fulfill this function. More than a century later (122 years), the study of public finance revolves around the identification of which function is to be performed by the public economy and which should be left in private hands, and those sources of income necessary for it to be implemented.

Wagner's framework at first glance appears to be theoretical. In reality it offered the first 'empirical' content to a theory of public finance. One and all have heard of Wagner's 'Law of increasing state activities', an empirical observation that over the years has drawn students of public finance to engage in a wide range of empirical analyses ranging from a single equation ordinary least squares (OLS) regression to very sophisticated econometrics. Wagner states quite categorically that his 'law' is an 'empirically observed uniformity' by which, as the national economy grows, the public sector will grow at a faster rate than the private sector' (quotation from Peacock, ch. 3, this volume).

Peacock and Wiseman (1961) pioneered the search for what makes government grow. The evolution of empirical public economics went hand in hand with the evolution of econometrics and its use in all branches of economics in general and macroeconomics in particular. At the micro level, concern for the effects of public sector instruments, tax and debt finance on incentives and hence the growth of the economy motivated public finance researchers to seek empirical evidence to reinforce what they have deduced from the theoretical models about the 'sign and magnitude' of the first and second order effects of policy. Failing that, new theories are developed, with additional testing carried out in a relentless effort to understand the motives and incentives, not only of the private sector, but the public sector as well.

One of the early efforts at quantifying the effects of taxation on incentives is the study by George Break, 'Income taxes and incentives to work: an empirical study' (1953). Further research in this area by Robert Barlow, Harvey Brazer and James Morgan (1966) and Daniel Holland (1969) reinforced what has been hypothesized about the adverse effects of taxation on the supply of labor and improved our understanding of public attitudes towards taxation, especially those that distort the choice between income and leisure, saving and consumption. Distortive or non-neutral taxation is the norm rather than the exception. Harberger (1962) put forth a framework to empirically analyze these distortions and inspired a plethora of empirical research on the non-neutral taxation on income from capital.

To fully appreciate the principles of compensatory finance, empirical evidence needed to be uncovered about the effects of budget activities on the economy – the value of the multiplier, the lag structure and income and demand elasticities. In an attempt to disentangle discretionary fiscal actions from those that are autonomous or induced, Musgrave and Miller (1948) provided us with estimates of the built-in flexibility feature of the income tax. This was perhaps the foundation for the development of rules for fiscal policy (Phillips, 1954).

In every sphere of public sector influence, some evidence was uncovered. The contributions of early writers to our understanding of the public economy are too numerous to list. It suffices to say that today empirical research is built on the solid foundation laid for us by those scholars who have shaped the direction of the research on the public economy. Currently, empirical research is no longer confined to one country or time series analysis. Both time series and cross-country data are used. Static and dynamic panel analysis are pursued, with econometric techniques ranging from Ordinary Least Squares, Generalized Least Squares, Random Effects/Fixed Effects to bounds tests, all being pursued with vigor and determination. Contributors to this volume, some of whom are among those who have laid the foundation for what has become known as empirical public economics, together with newcomers to the field, by their contributions offer students of the public economy the opportunity to participate in the search for new theories as well as the use of innovative methods to test the underlying hypothesis. The field offers a spectrum of issues ranging from the role of government in the global economy to the political milieu that affects its choice. Given the complexities of empirical research as well as its limitations, there is a constant need to continue the search for a bigger and better tool box to further our understanding of the economics and politics of the public sector.

A menu of issues

The editors of *The Elgar Companion to Public Choice* (2001), William F. Shughart II and Laura Razzolini, provide their readers with a menu of the ongoing research questions still facing public choice scholars. Scholars in the public finance tradition join their counterparts in public choice in seeking answers to some of these questions. Of particular interest are the following issues:

- How effective is democracy?
- How encompassing is a dictator's interest?
- Are direct democracies (for example Switzerland) less protectionist than representative democracies?
- Why does government grow? Or decline?
- Is secession a viable exit option?

As the outline unfolds, contributors to this Companion make valiant efforts not only to provide a theoretical framework for addressing these issues, but also for injecting to the analysis a modicum of empiricism. As Nicholas Stern posits, 'good public economics depends on good empirical information and analysis'. This is the goal of this Companion.

The contributions to this volume are organized under four main headings. In Part I, Chapter 1, Richard A. Musgrave shares with readers his treasure chest of ideas that shaped the development of public finance and his own vision of what the field should be about. This vision is clearly articulated in his *The Theory of Public Finance: A Study of the Public Economy* (1959). How to structure the whole spectrum of public finance into a manageable framework was Musgrave's first task. Every one who has ventured into the field identifies the structure by his three branch model. In the chapter Musgrave revisits the structure. Reflecting upon it, he believes that this framework is as useful today, almost half a century later, as it was then. He acknowledges that 'difficulties arise when the tripartite division is employed as a guide to fiscal practice and to sort out the various policy instruments'.

Translating a theoretical construct into budget statements requires identification of goals, notably the goal of the distributive branch. Chapter 2, by Attiat F. Ott, provides an exercise which gives rise to a budget statement as laid out by Musgrave in his 1959 volume. Using actual data (2001, 2002) for a sample of 22 countries, Ott calculates separate budgets for the allocation and distribution branches of government as well as the consolidated budget. Heroic assumptions about the 'proper state of income distribution' were made so that the income base for the assignment of tax shares could be calculated. The study shows that had the sample of countries in effect been a 'global village', then a redistribution of income between developed and de-

veloping economies which raises the actual distribution (per capita income) by a mere two or three percentage points would have greatly enhanced societal welfare. By way of conclusion the chapter points out that, as correctly stated by Musgrave, budget-making is a very complex process; indeed, a simple model such as the three branch model cannot reconcile the myriad of conflicts, goals and constraints that arise in the process.

Wagner's Law is the subject of the next two chapters. In Chapter 3, Sir Alan Peacock sets the records straight about what Wagner's Law is about in contrast to some of the statistical parameters used in testing the Law. As he points out in this chapter and elsewhere, statistical tests most often ignore two important features of Wagner's thesis. These are, first, his definition of state activity and, second, the time framework relevant to Wagner's observation.... Wagner was quite clear that the Law applied primarily to the period of emerging industrial societies (Peacock, p. 26). Given that interest in Wagner's Law is likely to continue for many years to come, Peacock makes a strong case for clarity in empirical testing, especially in view of the fact that the study of public finance places greater emphasis on the factors that determine the evolution of the public sector.

In Chapter 4, Payne, Ewing and Mohammadi re-examine the validity of Wagner's Law, adopting advanced econometrics in the form of the autoregressive distributed lag bounds testing procedure (ARDL), using annual US data over the period 1947–2003. Their findings with this procedure did not seem to support Wagner's hypothesis. The findings are robust to alternative specifications of Wagner's hypothesis as well as lag length selection criteria. Contrasting these findings with those reported earlier by other researchers (including Payne and Ewing's 1996 study) where the hypothesis was supported, the authors interpret the new findings as evidence that 'Wagner's hypothesis is perhaps more relevant for developing economies'. This goes at the heart of the observation made earlier by Peacock about the relevant time framework of which Wagner spoke.

Chapter 5 by Ott and Devaraj focuses on the budget constraint in a Wagnerian sense, why governments grow. The budget constraint in a macro model was emphasized when the construct called for an estimate of the size of the multiplier associated with fiscal action (Ott and Ott, 1965). At the time, the constraint was viewed as a hard constraint. Government had to balance its budget. Not until Kornai (1986) coined the term 'soft budget' did students of public economics link this form of constraint with the growth (and inefficiency) of the public economy. Having offered definition and measurement of what constitutes hard and soft budgets, the authors provide a framework for the analysis of budget constraints in the form of a pyramid where who is bailing out whom and the reasons for bailout are advanced. The chapter reviews empirical studies of bailouts. The examples are varied: from bailout

of enterprises in a socialist economy, local/state governments by national government to IMF, World Bank and the US Treasury rescue of the national government in Mexico and other Latin American countries. To test for the relevance of the practice of soft budget to the size of government, the study re-tests the hypothesis advanced by Moesen and van Cauwenberge (2000) that decentralized governments have harder budget constraints and thus a smaller size government.¹ The model was estimated using both OLS and random and fixed effects procedures. Appropriate diagnostic tests were employed. The overall results show that the more centralized regimes result in softer budget constraints. The regression also shows that soft budget constraint do lead to larger sized governments.

In Chapter 6 Robert Deacon and Sarani Saha provide a comprehensive review of those institutional structures – regime type – that give rise to different public sector outcomes. They ponder the question: why do levels of provision of public goods differ between dictatorship and otherwise similar democracies? Some theoretical treatments of this phenomenon emphasize differences in the degree of monopoly power enjoyed by dictators versus leaders of governments, whereas others stress differences in the size of the group that a dictatorial versus democratic government must satisfy in order to remain in office or in power. Empirical analysis is still at an early stage and has been oriented mainly toward determining the magnitude of the governance effect on public good provision, rather than devising tests that would distinguish between alternative theories of dictatorial behavior. Although the empirical record is far from unanimous, the weight of evidence indicates that dictatorships under-provide public goods relative to democracies and that the estimated effects are both large in magnitude and statistically significant.

The next chapter, Chapter 7, by Rita Babihuga, offers an analysis of the productivity of public goods and the optimal size of government. Barro's (1990) seminal paper sets the criterion by which the optimal size of government can be measured. Barro's rule is used in the study to examine the productivity of government services and the optimal size of government for the average country in sub-Saharan Africa by considering the role of public services in the production process. Additionally, Babihuga tests for the productivity of different components of government expenditures. The empirical estimation leads to the following results: government services are found to be growth-retarding in the 1980s, but productive in the latter part of the period analyzed, that is, in the 1990s, coinciding with a change in the fiscal policy focus in sub-Saharan African countries; government services are found to be overprovided in the majority of sub-Saharan African countries; the optimal government size is estimated at 35 (\pm per cent) for the average sub-Saharan African country.

Part II turns to public sector provision. The first chapter, Chapter 8 in this section is by Thomas Borchherding and Dong (Dan) Lee. The authors raise

two questions: first, what are the worth of government services to users, hence their demand for these services, and second, what are the costs of provision. In a democratic society, voters and influential interest groups through the intermediation of public officials determine the quantities demanded. The costs of provision or the supply side depend on the opportunity costs of policy choices. The chapter provides a comprehensive survey of issues relating to these two questions.

Chapter 9 by Soma Ghosh, also deals with public sector provision but infuses in the analysis the concept of spillover which was recognized earlier by Williams (1966), Buchanan (1968) and Pauly (1973b), to name a few. In the 1990s, spillovers were reintroduced into the literature to highlight fiscal interdependence among jurisdictions or local governments. The new vintage literature posits that the expenditure decisions on public goods by local governmental units are not independent of the expenditure levels of their neighbors. In other words, the level of provision in one can no longer be explained by its locality-specific variables. Rather, strategic interaction among local governments is a significant determinant of the supply of local public goods. The study tests whether local governments in the US incorporate the expenditure decisions of neighboring jurisdictions into their own decision making process. Using a sample of 2645 US counties and county-equivalents for 1992, spillovers are examined with reference to five local public goods categories (police, fire, health and hospitals, highways and public welfare) to determine how such spillovers affect expenditures on those goods in the neighboring counties. To estimate the model of strategic interdependence, both geographic (first-order contiguity, nearest neighbors and counties within a threshold distance) and socioeconomic (based on population and racial composition) weight matrices are employed to capture 'neighborliness'. Spatial econometric procedure was used in the estimation. The empirical models indicate the presence of spatial dependence, justifying the hypothesis that expenditure on a public good in a given county is not independent of the expenditures in the neighboring counties. Moreover, the spatial analysis made possible the identification of the source of dependence – whether arising from strategic interaction (lag dependence) or whether simply due to the presence of common shocks (error dependence).

Chapters 10 and 11 are topical. The Keith Hartley, Chapter 10, analysis deals with costs and benefits of conflict. He asks the question: why is conflict, given the massive resource cost involved (especially in wars) usually the 'preserve of disciplines other than economics'? Hartley's chapter corrects the imbalance in the conflict literature by providing a case study of the Iraq conflict using the economists' framework. Conflict disrupts markets and re-allocates scarce resources to protect lives and property, thus reducing resource availability for producing civil goods and services.

The economists' model of strategic interaction is useful for the analysis of conflict. Hartley points out that the game-theoretic approach is one which allows nations to assess potential risks and develop the proper strategy to address such risks. The chapter offers a theoretical framework for assessing conflict in general, and the UK–Iraq conflict in particular. Costs and benefits of engagement are also provided. Cost assessments require enumerating both types of costs: human and physical capital. Evidence of the UK costs of the Iraq conflict is reported. Both published data and the author's own estimates are provided. For 2002–2003, the UK military costs of conflict and post-conflict was put at £1.5 billion, with a further £2.5 billion for 2003–2005. To capture the loss of human capital, the Jones-Lee (1976, 1990) method was used to cost out losses to UK military personnel. The estimate was put at £71.3 million. The costs of other UK conflicts are also reported along with estimates of costs of US conflicts. Do conflicts yield benefits? Is war cost effective? Both of these questions are dealt with in this chapter.

In Chapter 11, Rati Ram evaluates the impact of defense expenditure on economic growth. Using annual data for 119 countries covering the period 1991–2002, three parsimonious growth models are estimated with several econometric procedures applied to pooled panels of five groups of countries. OLS estimates for each of the 12 full-sample cross-sections are also obtained. Several conclusions are drawn. Full-sample panel estimates indicate that the form in which the defense-spending variable is entered might matter as much as the model or the estimation procedure. The predominant pattern in the pooled sample of developed countries (DCs) is one of no significant relation between the defense and growth variables. This was also true in transition economies. Major oil exporters show a pattern which is opposite of that noted for the less-developed countries (LDCs) and transition economies. The study's findings suggest that since the defense–growth relation seems to vary greatly across country-groups, models and time periods, conclusions stated in the literature about the defense–growth nexus being significantly positive or negative should be interpreted with much caution.

The last chapter in Part II, Chapter 12 by Yildirim, Sezgin and Öcal, provides case studies of determinants of defense spending for Middle Eastern countries and Turkey. According to the authors, although a number of cross-country studies have dealt with the defence–growth nexus, little attention is given to the determinants of defense spending, especially for the Middle Eastern countries. This is an important issue for understanding which variable(s) contribute to the determination of the demand for military expenditure. They point out that developing a general theory or a standard empirical approach for the determination of the demand for military expenditure is a bit complex. Hence, in the study they model and estimate the demand for military expenditure for the Middle Eastern countries and Turkey for the time period 1989–1999, using

static and dynamic panel data estimation techniques. The empirical findings indicate that the external security considerations, military spending of allies and the trade balance significantly affect the military burden of these countries. When the dynamic effects are taken into account, it emerges that the prior year military burden is also an important determinant of the military burden. Contrary to earlier empirical findings for developing economies, the threat variable turned out to have a negative effect on military burden; the democracy variable was not significant.

Part III consists of six chapters, four of which are fundamentally empirical in nature. In Chapter 13, entitled 'Fiscal policy and direct democracy: institutional design determines outcomes,' Lars Feld and Gebhard Kirchgässner provide a very comprehensive survey of the impact of 'direct democracy' on fiscal policy decisions. The focus is on fiscal referenda and initiatives. Referenda are labeled as 'fiscal' if either statutes or budgetary decisions are put to a referendum test solely because of their financial characteristics.

Fiscal referenda are hypothesized to restrict elected representatives by means of what amounts to a form of veto. Thus, when voters disapprove of fiscal policy decisions agreed upon by their representatives, the fiscal referendum provides a vehicle for rejecting those proposals by the representatives. Alternatively, initiatives provide voters the means to establish their own agendas, that is, agenda-establishment power is shifted from representatives to the voters. Empirical evidence drawn from Switzerland and the US effectively supports these two hypotheses on the impact of direct democracy. Indeed, it appears that direct democracy, as manifested in fiscal referenda and initiatives, leads to reduced spending and revenue collections and increased economic performance.

In Chapter 14, 'Direct democracy and the Tiebout exit', Nirupama Devaraj empirically examines the effect that direct political participation has on consumer-voters' location decisions. Devaraj tests the hypothesis that in a *direct democracy*, where agenda-setting power is vested in the hands of the voters, consumer-voters are less likely to exercise the 'exit' option. In other words, in a direct democracy, where voters are the agenda setters exercising their choices through initiatives, the option of voice reduces the probability of consumer-voters' 'voting with their feet'. The basic model is essentially a two-equation choice model consisting of a utility function and budget constraint. An assumption essential to the model is that exit is an option of last resort because the individual faces a variety of tangible and non-pecuniary costs when engaging in exit/out-migration. In the empirical analysis, the location is defined not in terms of the jurisdiction but rather in terms of the state; this is because in the US, most of the initiatives and referenda are observed at the state level. Devaraj provides, within the context of two models, four logit estimates for the US with a sample consisting of 49 states,

24 of which are direct democracy states. She investigates two time periods, 1985–1990 and 1995–2000. Model 1 estimates the exit-behavior impact of direct democracy, as measured by an initiative dummy variable. In Model 2, the fiscal surplus variable in the system is interacted with a fiscal dummy variable; this variable is used as an indicator of the role played by tax and expenditure measures as signaling devices of voter preferences to state legislative bodies. Both models include a variety of fiscal, demographic, and economic factors. The estimates provide strong empirical support for the hypothesis that in states where voters have the voice option (through initiatives and referenda), they are less likely to adopt an exit option as a means of securing their preferred fiscal package.

‘An extension of the rational voter model’, Richard Cebula’s and Gordon Tullock’s, Chapter 15, seeks to broaden the interpretation and explanatory power of the rational voter model. The study begins by providing a model in which the probability of voting is hypothesized to be an increasing function of the *expected* benefits (broadly interpreted) of voting and a decreasing function of the *expected* costs (broadly interpreted) of voting. The empirical model differs in three ways from most of the existing literature: in its adoption of aggregate voting and other data; its use of data that are non-demographic in nature; and the use of time series rather than cross-section data. Two estimates are provided. The period covered consists of even-numbered years from 1960–2000. One of the unique variables in the analysis is the Presidential approval rating, with the idea being that the higher this rating, the greater the voter turnout as voters *express* their positive approval of the sitting President, *ceteris paribus*. The empirical results indicate that aggregate voter participation is higher when the public strongly approves of the President’s job performance.

The Presidential approval rating is also the subject of Chapter 16. In ‘A preliminary analysis of the Presidential approval rating’, Richard Cebula provides *preliminary* insights into the factors that may determine the Presidential approval rating. In this chapter the Presidential approval rating is hypothesized to be a function of the public’s positive perceptions of the President and the public’s negative perceptions of the President. Positive perceptions of the President are directly related to *perceived* successes while in office and *perceived* positive character traits while in office, whereas negative public perceptions of the President result from *perceived* failures while in office and *perceived* negative character traits while in office.

Over the 38-year period 1960–1997, the estimates modeled show that the Presidential approval rating is increased by participation in a ‘popular’ war, increases in the *real* federal personal income tax exemption, *perceived* genuine efforts at reforming the federal income tax, and well-performing equity markets. Participation in an unpopular or controversial war reduces the approval rating, as do formal impeachment proceedings against the President.

In 'Line item veto: lessons from the literature', Chapter 17, David Schap provides a thorough review of the line item veto in the context of the US federal budget process. His presentation of the basic literature is intended in part to elaborate upon and clarify the theoretical foundation of the line item veto so as to facilitate more appropriate empirical testing of its effects and to provide the basis for evaluating the empirical work reported in the literature. Schap stresses the extraordinary complexities involved when one attempts to make generalizations regarding the impact of executive veto power in the budgetary process. He explains the concept of a 'structure-induced equilibrium' and its role in the development of an extensive theoretical literature modeling the legislative/budgetary process. Integrated into the analysis is the role of a requirement of a supermajority to override a Presidential veto and the extremely complex strategies that legislators, especially the chair of the appropriations committee, can manifest. It became apparent to researchers modeling the line item veto and override provisions that enhanced executive veto *authority* does not necessarily imply increased executive *power* to achieve the executive's preferred budget. The most basic reason is *strategic behavior* within the legislature. In sum, Schap emphasizes that, in this game-theoretic setting, enhanced veto authority for the President cannot be expected, unambiguously, to concentrate more power in the executive branch nor to necessarily reduce budget size.

In Chapter 18 'An analysis of the UN Security Council veto', Nevila Kote provides an empirical analysis of the use of veto power in a context other than the budget process. Kote estimates logit models that are applied to the voting records of three of the Security Council's permanent members, the US, the UK, and the USSR. No estimates were made for China and France since they exercised the veto power relatively infrequently. Two separate models are estimated for each of the three countries studied, and the data are time series. The model examines both economic factors and political variables (including civil liberty and political freedom) as determinants of the use of the veto. Economic factors specific to the nations voted upon are significant in determining the permanent member's use of the veto. However, the direction of the impact varies between members. For instance, an increase in the GDP per capita of the voted-upon nation raises the probability of a US veto, whereas it reduces the probability of a USSR veto. Other economic variables for the nations voted upon, such as government spending as a percentage of GDP, and exports and imports as a percentage of world trade for the permanent member also were significant in determining the permanent member's use of the veto. Political factors such as the civil liberty and political freedom variables also were statistically significant. Of interest is the finding that the USSR exhibited a lower probability of using its veto, the freer the country being voted upon was. Also interesting is that only in the

case of the USSR was a veto more likely if a draft resolution concerned a nation from Western Europe.

Part IV presents an analysis of public sector behavior. Chapter 19 by Dolgoplov, Orcutt and Ott evaluates propositions about incentives of the public sector. In a public economy, characterized by a two-party system and where a politician's tenure is uncertain, the ruling government uses deficit and debt accumulation strategically, to influence the fiscal decision of its successor. Two strategic models are estimated: Alesina and Tabellini and Persson and Tabellini. An alternative model, the tax smoothing theory, is also evaluated. The strategic model predictions were tested using a sample consisting of 53 countries for the years 1980–2001 and for a sub-sample of 14 OECD countries. The tax-smoothing model was estimated using the OECD sample for the period 1973–2003. The findings were mixed. The verdict as to whether governments behave strategically or use the deficit to smooth out the path of taxes has yet to be reached.

Trufat Woldeesenbet, Chapter 20, revisits an issue discussed earlier by Deacon and Saha. Why do democratic regimes behave differently from dictatorships? The author provides empirical tests of two competing models: McGuire–Olson and Besley–Coate. The study employs these two theoretical models to empirically test their predictions, to assess policy outcomes of different political institutions using data from 61 countries for the period 1970–1999. The results suggest that the political regimes influence public resource allocation between productive and distributive activity. Democratic societies, owing to electoral uncertainty, are subject to commitment problems and as such the level of public resources allocated to productive public goods is lower as compared to less democratic societies. However, the results are not robust across specifications and the inclusion of other explanatory variables. There is strong and robust evidence to support Besley and Coate's model prediction that the presence of a built-in distributional system in the fisc mitigates the impact of electoral uncertainty on democratic 'inaction'. The two models' prediction that policy makers or ruling groups with longer time horizons invest more on productive public goods was also supported. The prediction that heterogeneity of society affects productive public investment found no support in the data.

The last two chapters are about secession. In Chapter 21 Vjacheslav Dombrovsky asks: what kept the Russian Federation intact? The question is answered by framing it in the context of Buchanan and Faith's internal exit model. The theory of internal exit is tested using the data on intergovernmental transfers in the Russian federation over the period 1995–2000. The theoretical model developed in the chapter predicts that in the Russian federation the central government would use fiscal transfers to appease rich regions and stave off secession. The findings reported in the chapter are

broadly consistent with the theoretical predictions. High income regions have indeed received generous transfers from 1995 to 1998. However, fiscal appeasement with transfers seems to have stopped in 1999–2000. The estimated model confirms the theoretical construct that differences in incomes across regions can be a powerful separatist force when secessions are not institutionally foreclosed.

Constantine Alexandrakis and Robert Jones's chapter is also about secession and exit. But unlike Dombrovsky, where the focus was on testing the secession theory, the authors in this chapter develop a framework to discern conditions under which a community would opt for secession. In the context of a federation, they consider a region that pays taxes to a central government, but receives a fraction of the central government's transfers that is smaller than the region's relative tax contribution. The residents of this fiscally 'exploited' region have three choices: continue to subsidize the other regions in the federation, move to a different region, or secede. Which of the three alternatives will the residents of the exploited region choose? The chapter explores these choices. It also investigates whether the course of action taken is likely to change if regions were to differ in their per capita incomes and ethnolinguistic characteristics.

Note

1. Using a sample of 19 OECD countries for the period 1990–1999, Moesen and Cauwenberge's study uses 19 OECD countries but the average of variables for only two years, 1990–1992.