Political fragmentation, party ideology and public expenditures

Benoît Le Maux · Yvon Rocaboy · Timothy Goodspeed

Received: 16 March 2009 / Accepted: 14 January 2010 / Published online: 29 January 2010
© Springer Science+Business Media, LLC 2010

Abstract In this paper we propose an original model of competition for effective political power between majority and opposition coalitions. The model indicates that the electoral margin of the majority and the fragmentation of both coalitions are key variables that determine their effective political power. We estimate the model in the case of the French départements. Our econometric results support the model and show that the per capita social expenditures in the French départements depend on the effective political power of the majority.

Keywords Political fragmentation · Local public services · Party ideology · Herfindahl-Hirschman index

JEL Classification C35 · D70 · H40 · H72

1 Introduction

Many papers have investigated the influence of political factors on public spending (see, for instance, Persson and Tabellini 2003). Political fragmentation is one of these factors. The intuition relies mostly on the common pool resource hypothesis. A politician belonging to a coalition of $n$ politicians is supposed to defend the interest of his or her own constituency by, for instance, expanding a particular item of public spending. Since the cost of the expansion is divided among the voters of the $n$ constituencies, a non cooperative politician sets an increase in public spending which is higher than the efficient one. This theory can be traced in Buchanan and Tullock (1962) and Olson (1965). Refinements are found in Weingast et al. (1981) and more recently in Velasco (2000). According to this theory, the larger the
size of the legislature, the higher the public expenditures. This result, sometimes termed the “weak government hypothesis” (Roubini and Sachs 1989) or “the law of 1/n” (Bradbury and Crain 2001), is the starting point of many empirical studies beginning with Gilligan and Matsusaka (1995). Political fragmentation is measured by the number of parties in a coalition, the number of spending ministers or the number of representatives (see Kuster and Botero 2008 for a comparison of the different measures of political fragmentation). Most of the studies find a positive correlation between political fragmentation and the level of public expenditures as suggested by the theory (for instance Volkering and de Haan 2001; Bradbury and Crain 2001; Padovano and Venturi 2001; Perotti and Kontopoulos 2002).

Yet, a different story can be told to illustrate why political fragmentation matters for policy outcomes. The story is based on the team production theory (Alchian and Demsetz 1972). As discussed by Crain and Tollison (1982), the activity of a political coalition may be seen as a team process where the members of the coalition compose a team in which it is not feasible to allocate rewards as a function of the productivity of individual parties. In that setting, the political power of a coalition would have the properties of a public good and the members of the coalition may have incentives to free-ride and devote time and resources to other activities. We use this framework in our paper. We assume that the implemented policy is the result of a majority/opposition confrontation in Parliament. Each coalition compromises according to a contest success function (Tullock 1980 and Skaperdas 1996) that represents its effective political power. While its political power (with full participation from members of the coalition) depends on the number of seats in parliament, its effective political power depends on each member’s participation decision as well, which in turn depends on the number of parties or fragmentation of the coalition. This result is due to strategic interactions among members of the same coalition which leads to free-riding: the greater the fragmentation of the coalition, the less the participation of parties in the coalition. Moreover we show that the effective political power of the majority coalition also depends on the fragmentation of the opposition. We develop a measure of a coalition’s effective political power based on these results and test our theory using data on French local governments.

Our theoretical approach is new and differs at least in two points from other studies. First, as far as we know, contests have not yet been used to analyse the provision of public goods. Second, contest success functions have been utilized for modeling conflicts between two or more agents but not between two coalitions subject to fragmentation. This novelty enables us to emphasize not only the importance of the opposition but also the way it is structured. Contrary to “the law of 1/n” we do not state that public expenditures are an increasing function of government fragmentation but that public expenditures depend on the effective political power of competing political coalitions which itself depends on the fragmentation of the coalitions.

A few empirical papers deal with the effect of political fragmentation on budgetary outcomes at the local government level: see, for instance, Pommerehne (1978) for the Swiss cantons, Poterba (1994) for US states, Borge and Rattsø (2002) for Norwegian municipalities, Rattsø and Tovmo (2002) for Danish municipalities or Ashworth and Heyndel (2005) for Flemish municipalities. Our study is different in that it takes account not only of the fragmentation of the majority but that of the opposition, as suggested by our theoretical results. There is an abundant literature on the impact of party ideology on government spending (see

---

1 Primo and Snyder (2008) show that this result might be reversed under certain conditions. We do not discuss this theory in our paper.

2 For instance Rogers (2002) applies this theory to the production of legislation in the American states.