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by

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Abstract

Governments situated on the same level of a multi-level governmental system compete with each other as well as with governments placed higher or lower. This paper is concerned with horizontal competition only. It discusses both competition based on the mobility of agents and competition based on comparisons of performance across jurisdictions - *i.e.*, yardstick competition. With regard to the first kind, the focus is on the capacity of governments and voters to decide policies in spite of the mobility of agents. Some attention is also given to non-standard mechanisms in which mobility is manipulated so as to change the structure of the electorate. The paper considers two forms of horizontal yardstick competition, one ('bottom-up') in which comparisons are made by voters, the other ('top-down') in which they are made by some authority higher up in a hierarchy. The second form is analyzed in the context of a more general discussion of horizontal competition acknowledging the existence of several levels of government, in particular the international one.

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1. Introduction

Governmental systems, whether federations, unitary states, or a *sui generis* entity such as the European Union, always include many governments (national, regional and local), which always compete with each other (Breton 1996). Thus competition among governments is first of all a fact - a feature of existing arrangements whose importance varies in time and space but is never completely absent and is seldom negligible. But it is also a perspective. As such its adoption could easily lead to addressing under a different angle all the topics discussed in the vast literature devoted to federalism and decentralization. I will not discuss vertical competition (Breton 2006, 2012), only competition among governments situated on the same tier of a governmental system -- horizontal competition. This makes the task less overwhelming. Still, if only to avoid duplication with the others, this chapter glosses almost completely over aspects of the subjects that are often considered essential, in particular normative implications. Conversely, special attention - with the objective of convincing readers that they deserve more attention - is devoted to relatively unheeded aspects of intergovernmental competition.¹

Two main forms of horizontal competition among governments are considered in the literature.² The best known -- hereafter mobility-based competition -- starts from the possibility that some individuals, goods, factors or firms move across jurisdictions as a response to the policies these jurisdictions implement. The second -- horizontal yardstick competition -- is based instead on the possibility that office-holders are rewarded or sanctioned on the basis of comparative assessments of performance across jurisdictions. Who makes the comparisons? A distinction can be made between what we may call *bottom-up horizontal yardstick competition*, in which (to simplify) comparisons of performance are made by voters, and what we may call *top-down horizontal yardstick competition*, in which comparisons of performance are made by office-holders higher up in some hierarchy.³ For convenience, I will often refer to the first type simply as *yardstick competition*. The chapter discusses the underlying mechanisms under the influence of three guiding thoughts.

¹ Some other aspects are briefly discussed in Salmon (2006).

² Several forms of horizontal competition are not mentioned in the paper. Governments compete to get grants from government(s) at a higher level or from other sources. They use loopholes in their regulated environment to engage in mercantilist if not outright protectionist policies. They promote the adoption in wider settings of their own regulations and standards.

³ A third form is horizontal yardstick competition generated by local elected officials using cross-jurisdiction comparisons to assess the performance of their subordinated administrations (Revelli and Tovmo 2007). It borrows characteristics from the first two forms.

First, competition constrains policy-making. It restricts the choices open to governments (even when it also gives them incentives to increase their effort and engage in new endeavours). A major concern pursued in this chapter is the question of how much discretion remains. The matter is different under the various types of competition but some features are common. Constraints are generated in particular by what we may call *latent* competition. At equilibrium each government may seem to pursue its own agenda without paying attention to what is done elsewhere. It knows, however, that, because of their effects under competition, some policy decisions should not be made.⁴ The constraints generated by competition may thus be more severe than what can be inferred from the observation of policies that are actually implemented. Another feature plays, at least apparently, in the other direction. Competition may not operate over single narrow variables. Compensations of various kinds may allow governments to take competition into account without feeling overly constrained with regard to variables taken separately. Thus competition may be simultaneously less binding and more influential in reality than what may be inferred from the observation of its effects, or absence thereof, on single variables.

Second, horizontal competition among governments is generally considered as if there were only one level of government. That assumption is unavoidable if the purpose is to present or investigate the basic mechanisms. It will be implicitly used most of the time also in this chapter. However, in some contexts, for instance to discuss top-down horizontal yardstick competition, it is clearly inappropriate, and in some other settings it may be misleading in a more subtle way. As indicated, vertical competition will not be considered here. Thus I will discuss only some direct effects on horizontal competition of the existence of several levels. Particularly important are the effects of horizontal competition among national governments on horizontal competition at the subnational level.

Third, politics is essential. The paper is mostly concerned with democratic settings. But because a degree of political support or acquiescence from the people is needed in all governmental systems (Breton 1996), politics is also important in the case of autocracies. How does that general need for political support affect horizontal competition among governments? In the case of (bottom-up) yardstick competition, as defined above, the question of political support is of course impossible to bypass. It is definitional. Mobility-based competition is another matter. In local public finance, it is often assumed that jurisdictions maximize the profits or rents of developers, land-owners or home-owners. In

⁴ Latent competition is reflected in empirical work by some form of endogeneity.

more general settings, the often implicit presumption is that governments maximize tax bases, net resource flows, or something of the kind. It seems natural for economists to think of intergovernmental competition as similar to the market competition they are familiar with. To what extent is this warranted? Our position will be that the political implications of mobility-based competition cannot be neglected (if only because there may be a feedback effect of politics on mobility). In the eyes of many people, even some economists, the main political question raised by mobility-based competition is the degree of autonomy it leaves to decision-making at the level of each jurisdiction. Although the matter is less central, it will also be useful to give some attention to cases in which electoral concerns motivate mobility-based policies quite opposite to those expected under the above presumption. These cases may seem uncommon but they signal the general possibility that political concerns play a more complex role in the setting of mobility-based competition than generally assumed.

In the analysis of top-down horizontal yardstick competition, the question of support from the people also tends to be glossed over. But that neglect seems sustainable only because officials' motivations at the top level of the system are assumed rather than investigated. If nowhere else, concerns with popular support certainly play a role at that level.

The paper is organized around underlying mechanisms and political assumptions rather than around the variables over which competition takes place (taxation, spending, welfare or regulation). Section 2 eschews the usual questions about spillovers and efficiency and focuses instead on the degree of policy discretion that mobility leaves to governments. Since Epple and Zelenitz (1981), a lot of work has been also done on that theme. I will only stress a few points. Section 3 is about the non-standard policies alluded to above, in which incumbents undertake to alter or shape their electorate so as to increase their probability of remaining in office. To my knowledge, Mingat and Salmon (1986, 1988) is the first attempt to present and document a mechanism of that kind. A more rigorous treatment of a similar mechanism is proposed in Glaeser and Shleifer (2005). In both contributions, interjurisdictional mobility is central and interjurisdictional competition only implied. Some related contributions are summarized in the same Section. In Section 4, I turn to (bottom-up horizontal) yardstick competition. I present personal views about some of its aspects and try to show that it has more implications than usually assumed. By contrast, top-down horizontal yardstick competition is simpler, being a direct instance of comparative performance incentives in a classical principal-agent context. It is mainly relevant in a context in which the existence of several levels of the governmental system is acknowledged. I discuss top-down

yardstick competition in Section 5, together with other vertical aspects of horizontal competition. Concluding remarks are presented in Section 6.

2. Mobility-based competition and jurisdictional autonomy

To repeat, the public debate on the effects of mobility-based competition among governments tends to focus on the question of autonomy or freedom to act rather than on the problems, central to the theory, raised by externalities, distortions, and other departures from optimality. As indicated, I also concentrate on the capacity to act.

2.1. Perfect or quasi-perfect competition

In the field of taxation, the assumptions of perfect competition among governments and perfect mobility of agents yield the proposition that, at equilibrium, taxes paid by mobile individuals, factors, and firms will necessarily be benefit taxes (Oates and Schwab 1988). The result seems arresting but it is not. It allows diversity across jurisdictions with policy discretion in each. Taxes on mobile agents are not equalized across jurisdictions because these agents have heterogeneous wants. So there will be much variation in the combinations of taxes and benefits that are offered (Tiebout 1956).

In addition, taxes paid by mobile agents will not be fully dissipated through the cost incurred by the public sector to produce goods and services. There will be a surplus that the government and/or voters will be able to spend as they wish. In Epple and Zelenitz (1981), the surplus is the consequence of fixed interjurisdictional boundaries, the presence of heterogeneous amenities being also acknowledged. This last reality is important. Space is heterogeneous not only because of the artificial boundaries of jurisdictions or of differences in natural endowments. At any point in time heterogeneity also follows from differences in the stock of collective capital (including social capital) that inhabitants have built up in the course of time. As a consequence, some of the benefits provided to individuals and firms, and even to capital, are largely independent of the current output of the public sector. They are situational rents which do not have to accrue only to the owners of the land; they may be shared with the jurisdictions themselves, as represented by their governments. This creates, in most if not all jurisdictions, a tax base that can be tapped, among other possibilities, to finance the goods and services that mobile agents are not willing to pay for.

The capacity to regulate may be treated more or less in the same way as the capacity to finance. The notion of benefits must be widened once more so as to include the utility (or disutility) provided to mobile agents by the laws and regulations in force in the various

jurisdictions - also a part of the collective capital of these jurisdictions, albeit not to be interpreted any more as exogenous, unrelated in particular to what the current incumbents decide. Under perfect competition and no mobility costs, at equilibrium, mobile agents must find in any jurisdiction a level of utility at least equal to what they could obtain elsewhere. Utility here must be seen as a function of goods and ‘bads’ of all kinds, including public output, taxes, situational rents, law and regulations, and so on. Focusing on an individual variable, like a tax, or a regulation of pollution, or the school system, though often unavoidable in practice, may be quite misleading because competition does not take place over single variables but over very complex and idiosyncratic packages. There is substantial ‘fungibility’ in the components of these packages. Compensations are the rule. This is another factor of diversity across jurisdictions. For instance, the implementation of rules (concerning work conditions, lay-offs, the environment, and so on) that impose a burden on mobile firms heavier than the one imposed in other jurisdictions may raise no problem if it is compensated, say, by a lower direct cost of labour or by less taxation. In spite of the high level of competition-cum-mobility, jurisdictions remain in this way capable of deciding important aspects of their social arrangements (for the interesting case of Switzerland, see Kirschgässner and Pommerehne 1996, Feld 2007).

Does that capacity, in the same competitive environment, extend to income redistribution or some of its aspects (helping the poor, taxing the rich, etc.)? The foregoing discussion provides part of the answer. First, as argued, most if not all jurisdictions keep some discretionary financing capacity -- that is, a tax base they can use for redistribution as for other purposes. Second, for various reasons (insurance, peace-seeking, altruism, etc.), part of what is usually considered as income redistribution is voluntary on the part of those who pay for it (Hochman and Rodgers 1969). In the context of competition among jurisdictions, income redistribution of that type can simply be included in the idiosyncratic packages already mentioned and submitted, as other components of these packages, to compensations of all kinds.

A problem, however, remains. Taken together the two reasons just offered suggest that resources may well be found to redistribute income, including by taxing the mobile rich. What seems more problematic, under the perfect competition-cum-mobility assumptions, is subsidizing the mobile agents and, in particular, helping the poor. The assumption of costless mobility, particularly plausible in the case of the poor or relatively large subsets thereof, implies, in the pure competition framework, that the demand curve for the assistance offered by a particular jurisdiction is infinitely elastic. Should we conclude, as is sometimes done in

the literature on fiscal federalism, that no policy of assistance to the poor is sustainable at the subcentral level of government? Formulated as a proposition concerning the real world, such an inference would be unacceptable since helping the poor is often a major task assigned to lower-level governments. A strategic interaction must be taken into account here, as explained in the next subsection.

The last important aspect of the perfect competition-cum mobility setting I want to mention is its implications for the well-known Leviathan view of government developed in particular in Brennan and Buchanan (1980) and, in somewhat different terms, in Weingast (1995).⁵ According to the Leviathan view (broadly understood), governments will use any discretionary power that they may be left with in a way which, as a rule, is unfavourable to the people. Under that perspective, one of the main advantages of federalism is horizontal intergovernmental competition depriving government in general of much of its discretionary power. I have argued that competition will definitely not eliminate discretion. However, as suggested in the Introduction, it certainly has a constraining influence on the activities of government in a more global and flexible way.⁶

2.2. *Small-number competition*

What is changed if we relax the assumption of pure competition? I will note two points. First, the equivalence between the outcomes of Bertrand (price) competition under oligopoly and pure competition does not usually apply when the competitors are governments or jurisdictions because, again, of the different incidence of territorial constraints (being the only one to undercut price cannot entail taking all the market as is the case under Bertrand competition). However, these territorial effects are sometimes absent or negligible, as may be the case with business firm registration or incorporation. Then, in principle something like Bertrand competition may apply, with the price (or the price/quality ratio) tending to what it would be under perfect competition. The role of Delaware in matters of incorporation provides an illustration.

Second, it is likely that interaction between a small number of governments will lead them to cooperate or to coordinate their actions in some areas (which does not imply that they will not compete actively, at the same time, in other respects or in general). Inequality of size

⁵ See also Sinn (1992).

⁶ Following Brennan and Buchanan (1980), the literature refers to the Leviathan for a tendency of government to be too large. On the empirical question of whether decentralization has a negative or a positive effect on the size of the public sector, see in particular Fiva (2006), Ashworth et al. (2012), Cassette and Paty (2010) and the references therein

may also affect the possibility of cooperation. Large jurisdictions may be willing to finance alone a service that has the dimension of a collective good benefiting all. For example, a large city assumes all, or most of, the cost of intercity cooperation. Conversely, a small jurisdiction (a 'tax haven' for instance.) draws a large profit, relative to its size, from not cooperating. For some issues, coordination can also be achieved by relatively large numbers. Assume, as argued, that, up to a certain amount, assistance to the poor can be financed by decentralized governments without problem, either because it can be included in the packages of benefits that at least some mobile agents (other than the poor) find valuable and are willing to pay, or because it can be one of the uses of the discretionary tax base discussed earlier. In many jurisdictions, the democratic pressure on policy-makers makes them willing to implement a policy of assistance provided that this does not generate an excessive inflow of recipients. Clearly, if a large number of jurisdictions implement the policy, no excessive inflow in any of them may occur. The set-up here is that not of a prisoners' dilemma but of a game of coordination or assurance. Provided many other jurisdictions go on helping the poor, and so long as the said pressure from voters remains the same, the incentive for the policy-makers of any jurisdiction is to pursue the assistance policy.

2.3. *Mobility costs*

In the real world, most agents cannot move without incurring significant costs. That fact is often considered as a decisive objection to models - like the Tiebout or the Oates and Schwab models - that are dependent on the assumption of mobility. The objection need not be taken too seriously as long as one respects two defining characteristics of the main approach, namely concentration on equilibrium and no explicit role for politics. Mobility costs are large only in the short and medium term. In the long run, thanks to depreciation, obsolescence or the renewal of generations, real capital, whether tangible or intangible, moves much more easily across jurisdictional boundaries. In the said models, anyhow, what counts is that adjustment takes place (mobility costs eventually ceasing to count). *When* -- that is at what point in time -- does not matter. In practice, the way to combine these models and the existence of costs of mobility is to divide agents or factors among those who are mobile and those who are not.

In reality, costs of mobility vary continuously across agents and in time.⁷ To take that fact into account, one must introduce in the analysis politics and something like dynamics and

⁷ Mobility costs, discussed in this subsection, should not be confused with the consumer surplus mentioned in the previous one. In both cases, an increase in tax will not make all mobile agents leave the jurisdiction. But the

path dependency. Let us start from equilibrium, with a perfect correspondence between what is offered by a jurisdiction and what is demanded from it, and assume the occurrence of a shock, creating a difference between the two. Some inhabitants or firms will instantly leave, others will be prevented from leaving quickly by mobility costs. The first consequence of their delaying their departure is that they will bear a utility loss. Thus it cannot be argued anymore that only land-owners are vulnerable to ill-effects of government policies. The second, related, consequence, then, is that losers, compelled to stay, will have an incentive to press policy-makers to change policies. Their demands will not be fully satisfied but some change of policy will take place if the political system is responsive. The third, also related, consequence, is path dependency. Soon after the shock, some agents will have left, others will have already induced some policy changes, not sufficient however to prevent other agents from leaving, and so on until a new equilibrium is reached (possibly). On the path to this new equilibrium, assuming that it exists, the two processes of *exit* and *voice* will interact in a highly idiosyncratic fashion, and this will also shape the final outcome.

3. Manipulating mobility to shape the electorate

It seems natural to assume, as I have implicitly done in the previous section, that the office-holders and the inhabitants of a jurisdiction assess in a positive way the resources available in that jurisdiction or flowing into it. This applies in particular to the abundance of land, the level of activity, the speed of economic development and the magnitude of the tax base. Conversely, it may seem strange that these politicians and voters prefer that the jurisdiction remain poor, that its economic development and the part of its territory used for human activities be as limited as possible, and that, as a consequence of the out-migration of many of its taxable agents, its tax base be made to shrink. Observation does confirm the manifestation, in some cases, of apparently perverse preferences such as these. To understand them, one must focus on politics, even at the cost of neglecting some market mechanisms.

There has not been much research undertaken in that direction, at least in economics. I will mention five contributions,⁸ devoting more space to the one which I happen to know more in depth and which is also chronologically the first. In the first two -- Mingat and Salmon (1986, 1988), Glaeser and Shleifer (2005) -- the main actors are the mayors of a

effect of the consumer surplus is valid in static terms, independently of time, whereas the effect of mobility costs normally diminishes over time.

⁸ See also Ortega (2010), Schone (2010).

central city in a metropolitan area. In the remaining three – Caplan (2001), Brosio and Revelli (2003), and Brueckner and Glazer (2008), the main actors are directly the (median) voters.

In Mingat and Salmon (1986, 1988), the analysis is specific to circumstances particular to France from the 1950s to the early 1980s, but its relevance is more general. Two political parties, Left and Right, operate at the national and local (municipal) levels. Voters tend to be loyal to one of the two parties depending on their relative income position (weighed up at the national level). The ‘poor’ tend to vote for Left and the ‘rich’ for Right.⁹ Elected office-holders belong either to Left or to Right. Communes whose inhabitants are mostly ‘poor’ tend to be governed by a Left mayor and communes inhabited mostly by the ‘rich’ tend to be governed by a Right mayor. This is only a statistical regularity. Incumbents may not be re-elected even if the composition of their electorate does not change.¹⁰

Mayors can affect the inflows and outflows of ‘poor’ and ‘rich’, and thus the ‘rich’/‘poor’ ratio in their jurisdictions. They use that capacity to increase their chances of being re-elected. A Left municipality will tend to support the construction of rent-controlled and other types of "social" dwellings, and a Right one will tend to prevent it.¹¹ Less directly, if, in an inner city whose boundaries are fixed, the ‘rich’/‘poor’ ratio is positively correlated with the price of dwellings (as was the case in France), and if price is increased by scarcity, indirect ways to increase the ratio are, for example, limiting the permissible height of new buildings, encouraging the construction of offices, or freezing as public parks a part of the city's territory. These policies are likely to be followed by mayors belonging to Right. Economic development in the whole metropolitan area puts pressure on the land available in the central city, makes its price rise, and, if the underlying mechanisms work as they did in France, increases the ‘rich’/‘poor’ ratio. This favours Right. A Left mayor of the central city may thus try to slow down the economic development of the metropolitan area, for instance by blocking the extension of the airport.

The mechanism analysed by Glaeser and Shleifer (2005), which they label ‘the Curley effect’, is very close to the one just discussed. They construct a formal model and illustrate it by three stories, that of Curley, an ‘Irish’ mayor of Boston, that of Young, a ‘black’ mayor of Detroit, and how Mugabe induced the ‘whites’ to leave Zimbabwe. I leave aside the third

⁹ The assumption mimicked reality fairly well over the period studied, 1953-1983. It would not at present. The main party of the ‘Left’ is no more mainly supported by the ‘poor’, who often vote for the (extreme) Right.

¹⁰ Uncertainty is an essential ingredient of the mechanism common to Mingat and Salmon (1986, 1988) and Glaeser and Shleifer (2005). It explains why the mayors whose behaviour is discussed were elected in the first place and why they behave as they do once elected.

¹¹ According to *The Economist* (cited in Mingat and Salmon 1988), the former policy was followed by the Labour Party, in power at the time in London, with the objective of countering an exogenous trend of "gentrification".

case, which I find problematic. To increase the probability of being re-elected, the first mayor managed to drive out the relatively richer ‘Anglo-Saxons’ and thus increase the electoral weight of the relatively poorer ‘Irish’, the second managed to drive out the relatively richer ‘whites’, and thus increase the electoral weight of the relatively poorer ‘blacks’. The main instruments used for these policies are generally different from those mentioned in Mingat and Salmon. They include public employment and patronage, targeted taxation and selective distribution of public services. But, in Detroit, Young also “lobbied for federally supported public housing...to keep his supporters, as opposed to whites, as city residents” -- an endeavour similar to the one noted above for France and Britain. A number of conditions (most of them implicit in Mingat and Salmon) for these policies to be undertaken or to work are derived formally from the model. For instance, the incumbents must be sufficiently forward-looking, the response elasticity of mobility to policies must be sufficiently large and the economic cost to the supported group (related to complementarity in production), must not be too large. As modelled and illustrated by Glaeser and Shleifer, electorate-shaping policies are clearly ‘wasteful’. I will not discuss that normative point, eschewed also in Mingat and Salmon. I will just note that Glaeser and Shleifer do not analyze the economic and electoral spillovers of central-city policies on other jurisdictions, in particular those located in the periphery.

The three other papers reason directly on median voter policies. In Caplan (2001), voters are loyal to one of two parties, Democrats and Republicans, but have a different preferred policy along one dimension. By a small margin, Democrats come to power in one jurisdiction and Republicans in another. Initially, they implement not very different median voter policies. Still, extreme voters within the minority in each jurisdiction move to the other jurisdiction, in which policies are somewhat closer to their ideal position. As a consequence, the two median voter positions become more apart. This makes new subsets of voters migrate to the other jurisdiction, and so on. The policies followed in the two jurisdictions become increasingly different and in the end each party benefits from a safe district.

Brosio and Revelli (2003) reason in terms of overlapping generations. A present median voter calculates that, when she retires in the next period, the future median voter will decide on a level of redistribution insufficient for providing her (the present median voter) with the pension she will need. To change the future median voter, the present one may decide now an inflow in the next period of low-income immigrants. They will work, vote, and by their sole presence, change the income distribution. The future median voter will occupy a lower position in the income distribution and decide more redistribution than would have

decided the future median voter if no immigrants had come in. Immigration of low-skilled workers is worth deciding only if the negative effect of the entailed reduction of the mean income is less than the positive effect of the reduction of the median income. The outcomes of such calculations will vary across jurisdictions and only some of them will adopt the policy.

The mechanism analyzed in Brueckner and Glazer (2008) is similar in different respects to those analyzed in Brosio and Revelli (2003) and Caplan (2000). The majority currently in power wants to increase the probability that the policies that will be adopted in the future are those that it prefers. For that purpose, by adopting now policies more extreme than it would want them to be currently, or intends them to be in the future, it induces a greater proportion of the voters opposed to these policies to leave the jurisdiction. An example given in the paper is the way the French-speaking majority in Quebec adopted in the 1970s extreme language laws that induced a substantial part of the Anglophone minority to leave the province. That increased the chances that a majority would approve separation from Canada (as almost happened in fact in the 1995 referendum).

Intergovernmental or interjurisdictional competition is present, explicitly or not, in some of these contributions and it could be present in the others with small changes in their assumptions. As proxies to competition or the absence thereof, difficult to document, we can reason in terms of conflict or convergence of interests. When it is assumed that there are other jurisdictions than the one discussed, there is a convergence of interests with jurisdictions governed by the other ‘side’, so to say, and a conflict with those governed by the same one. In Mingat and Salmon (1986, 1988), the Right in power increasing the rich/poor ratio in the central city is associated with a decrease of it in the suburbs, which is profitable there to Left incumbents or challengers and detrimental to Right ones. Although this is not discussed in Glaeser and Shleifer (2005) and in Brueckner and Glazer (2008), the same reasoning could apply to the effects of an increase in the Irish/Anglo-Saxon and black/white ratios in Boston and Detroit, even possibly to an increase in the Francophone/Anglophone ratio in Quebec. It would be interesting to know whether there has been in fact jurisdictions neighbouring the cities of Boston and Detroit and the province of Quebec in which the composition of the electorate has been modified in a politically significant way by the inflow of ‘Anglo-Saxons’, ‘whites’ and ‘Anglophones’.¹² In Caplan, the convergence of interest between the two parties is obvious but divergence of interest within each could be made relevant if the departing voters were assumed to move not to one but to several jurisdictions. And, in Brosio and

¹² But, I am told, most Anglophones leaving Quebec went to large cities such as Toronto and Vancouver.

Revelli, there would be some interjurisdictional competition – competition among the median voters of different jurisdictions - if the model did not implicitly assume the supply of low-income workers to be infinitely elastic.

To conclude the section, let me make two remarks. First, the contributions just reviewed confirm that interjurisdictional mobility, even a very high degree of it, does not eliminate the possibility for governments or majorities to make far-reaching political decisions. Second, although the mechanisms described and their real-world illustrations are quite special, they suggest a more general need to devote some attention to the effects of mobility on the composition of the electorate. Inasmuch as there are such effects, incumbents are unlikely to neglect them.¹³

4. Yardstick competition (bottom-up).

In the previous sections, the existence of information flows across jurisdictional barriers was of course a necessary condition for mobility to take place. People who decide to move to another jurisdiction must know something about what is waiting for them there. We can refer to this kind of information as “mobility-facilitating” or “arbitrage-facilitating” information. Its imperfections are part of the transaction costs that constrain mobility. But information about what obtains in other jurisdictions is not reducible to this important but nonetheless auxiliary function. It is central to the mechanism discussed now (referred to as yardstick competition tout court in this section). I will present briefly the mechanism and then note a number of points on which I think that there has been some confusion.

4.1. *The mechanism*

The idea is exposed in some detail, in an informal way, in Salmon (1987).¹⁴ A more formal treatment and a test of a somewhat different mechanism (see below) are offered in Besley and Case (1995). In many policy domains, voters are placed in a situation of information asymmetry vis-à-vis government. Given circumstances that they do not know, or whose impact they cannot assess, the voters of one jurisdiction, say J, cannot say whether the performance of their government is good or bad. If changing circumstances are sufficiently

¹³ A way to change the structure of the electorate which does not require mobility and is not considered here is the amalgamation of several municipalities into a single one.

¹⁴ In the literature on information, monitoring and incentives, yardstick competition is usually associated with Shleifer (1985) even though it was modelled earlier. In Salmon (1987), whose topic was decentralization in a governmental system, the analysis was directly inspired by the then recent literature on tournaments, in particular Lazear and Rosen (1981). Differences between tournaments and yardstick competition can be disregarded for our purpose.

correlated rather than idiosyncratic, the observation of what obtains in some jurisdictions other than J may help voters in J to form an opinion on the performance of the government in J. If voters do engage in these comparisons and if what they make of them does influence their votes, we have what has been called ‘yardstick voting’. If yardstick voting, or the fear of it, induces incumbents to make the governments they lead attempt to have a good place in the comparative cross-jurisdictional assessments made by voters, we have yardstick competition proper.

4.2. *In defence of the pure incentive approach*

In Salmon (1987), the effect of yardstick competition is on incentives. However, following Besley and Case (1995), most theoretical discussions of yardstick competition refer to selection and assume that office-holders or candidates are of different types -- “good” or “bad”, to simplify (alternatively they may be assumed to be “competent” or “incompetent”). In recent years, the theoretical discussion has tended to focus on mixed models, which combine incentives and selection. The incentives discussed in these models are those of the “bad types” – the incentives of the “good types”, called ‘angels’ by Fearon (2011), being unproblematic by definition. In the analysis of electoral accountability in general, the reasons to give an important role to selection are quite strong -- see Fearon (1999), Besley (2007), Besley and Smart (2007), Ashworth (2012). And the superiority of mixed models on pure ones seems obvious, if only because the former may include the latter (the pure cases) as limits. In addition, the mixed models are intellectually seductive, yielding in particular the interesting possibility that the effects of better information on selection and on incentives play in opposite direction, which entails that yardstick competition may be perverse (Besley and Smart 2007).

The selection and mixed modelling approaches are certainly fruitful to investigate some types of circumstances. Yet, there are reasons to claim that the pure incentives approach remains generally convenient and appropriate to reflect on systemic issues in democratic settings. The distinction between good and bad types in political matters is tricky (a distinction in terms of competence being less so only marginally). It is relevant with regard to extreme and relatively exceptional types -- ‘angels’ and devils or crooks – but questionable in the vast majority of cases. That assertion is an instance of a more general proposition. Following Ross and Nisbett (1991), there is a literature in social psychology and in history showing that explanation of individual behaviour by situation (understood broadly) is as a rule better than explanation by personality (see Elster 2007, chapter 10). One may also observe

that, in general, votes are at least in part for or against incumbent political parties rather than incumbent politicians. It is difficult to extend the good type/bad type or the competent/incompetent distinctions to political parties, at least to those credibly contending for office.

More importantly from a methodological perspective, the theoretical analysis of accountability relies perhaps too much on game-theoretical considerations. In particular, votes against incumbents are assumed to be decided by rational forward-looking individuals and reflect only two sets of motives: creating incentives through credible commitments to sanction or reward or replacing incumbents by candidates likely to be better. Some discussions ascribe these motives to a single median or representative voter, others stress the need for, and the difficulty of, coordination among diverse voters. In reality, in the case of well-established and ongoing democracies, one should consider diversity as essential and coordination as unnecessary.

There is a well-known objection to adopting the incentive approach which I have always felt to be irrelevant in democratic settings. A recent article by Fearon (2011) supports and helps clarify that feeling. The objection itself runs as follows. To credibly give an incumbent an incentive to keep temptation under control, voters must pre-commit to sanctioning whenever a threshold is crossed (Ferejohn 1986). But that sanction needs voter coordination, which is difficult to achieve. As a response to that objection, one may simply reiterate the description of the mechanism in Salmon (1987): any single voter who feels disappointed by the performance of an incumbent may be less inclined to vote for that incumbent. Incumbents know that disappointing voters may have a negative effect on the total vote they will get and then, possibly, depending on the intensity of electoral competition, on their probability of being re-elected. There is no need to stress strategic behaviour on the part of voters, who may be inspired by any kind of motivation, including for instance “irrational” retribution. However, following Fearon (2011), one should say that this is correct only if it can be assumed, first, that fair elections will be regularly held and, second, that incumbents will step down when defeated. In well-functioning democracies, both conditions are satisfied because of a credible threat of coordinated rebellion in case they are not.¹⁵

Lastly, a point sometimes made against the incentive approach is that incumbents who cannot or do not want to be candidates again can no more be influenced by these incentives

¹⁵ The threat is credible because not holding a regular election and refusing to step down after being defeated would be “public signals for coordinating rebellion”. The matter is different in autocracies and in the case of massive electoral fraud or information manipulation.

and may decide to shirk (or to pursue policies less likely to be approved by voters). Indeed, that phenomenon is observable in many contexts and its presence has been used, already in Besley and Case (1995), to detect empirically the presence of yardstick competition. Thus, it is not an objection to a positive analysis of yardstick competition based on incentives – indeed, it supports it -- but only to the virtues ascribed to it. And it is likely to be less important when incumbent individuals are integrated in long-lived and forward-looking incumbent political parties or teams.¹⁶

4.3. Observable and unobservable strength of the mechanism

There are now a sizeable number of empirical contributions documenting the presence of yardstick competition among subcentral governments -- municipal or regional (see in particular Besley and Case 1995, Bordignon et al 2003, Solé Ollé 2003, Allers and Ellhorst 2005, Vermeir and Heyndels 2006, Bartolini and Santolini 2011, Allers and Ellhorst 2011 and the references therein). There are also studies reporting negative results (for instance Foucault et al. 2008) as well as, here and there, informal manifestations of scepticism. That scepticism is often based on quantitative evidence that most voters are uninformed about the current situation prevailing in other jurisdictions. But the implications of that evidence are far from straightforward. For instance, to substantiate the claim that “citizens are poorly informed about fiscal variables in jurisdictions other than their own,” Hindriks and Lockwood (2009) cite a study on school districts reporting that “*only* 21 per cent of all respondents are well-informed about the tax and expenditure of their own school district relative to others in the county” (my emphasis). *Only?* I will make four points.

First, cross-jurisdiction comparisons are facilitated by an increasing flow of information, in particular in the form of league tables. Voters only need spot the position of ‘their’ jurisdiction in some ranking or with regard to some average. There is no significant cost involved in access to such information.

Second, a probabilistic view of voting -- adopted here -- makes the mechanism much more plausible than it would be under the median voter assumption. Making the median voter respond to information from outside the jurisdiction may seem a tall order. Under the probabilistic view, candidates consider all voters as having a positive endogenous probability of voting for them. Thus the opinion of even relatively small groups might count, and

¹⁶ More generally, if ‘situation’ is understood sufficiently broadly, as it should, it can be characterized so as to constrain also last-term incumbents.

consequently deserves some attention. If electoral competition is sufficiently tight, politicians will be attentive to interjurisdictional comparisons even if they know that only relatively few voters make them.

Third, as a rule yardstick competition encounters many obstacles. What is the consequence? The matter is particularly clear in the case of non-democratic settings, in which, as we saw, the problem of coordination as interpreted by Fearon arises. But, as stressed by Breton (1996), voting is only one of the ways for the population or segments thereof to award or withdraw support. Thus yardstick competition is also relevant in non-democratic contexts, as the fall of the Iron Curtain demonstrates. Only, to have an effect performance gaps, actual or potential, must be particularly pronounced. This is also true with regard to obstacles possibly encountered by yardstick competition in democratic settings. The principle is thus quite general: the greater the obstacles encountered, the larger the gap necessary for the mechanism to work.

Fourth, to return to a point suggested in the Introduction, the ‘actual’ and even more the ‘observed’ should definitely not be considered to tell the whole story. The strength of yardstick competition may precisely be the reason why the values of the variables compared are not very different across countries and thus why one may observe little interest in cross-jurisdiction comparisons. Given the lack of actual differences, why would voters bother to engage in comparisons? And, given the probable existence of noise, what could these comparisons tell them? But a question that office holders are unlikely to neglect is: what would be the case if their decisions happened to generate larger differences?

4.4. *The variables concerned*

A distinction is needed between variables *compared* and variables *affected*. The variables compared by voters must be relatively visible and of some concern to them. Many regulations, taxes or services provided by the public sector cannot be compared across jurisdictions except by professionals and the results of such comparisons, if they are made, are of little interest to voters. That does not mean, however, that these regulations, taxes or services are not affected by yardstick competition operating over variables that do attract the attention of voters. Thus, to ensure that their jurisdiction performs comparatively well in terms of growth, governments may reconsider many features of their policies.

We can formulate the general presumption that voters are mainly concerned with policy outcomes rather than policy instruments. That presumption, which is not a strict rule, is related to the distinction between direct and indirect effects. The direct effect of yardstick

competition is mainly a pressure on policy outcomes and -- through mimicking and competition for rank -- it tends to make these outcomes converge across jurisdictions. But the indirect effect is an incentive for governments to adapt or change their policies in a way that may make them more alike or more different across jurisdictions, depending on how office-holders see the matter. To obtain policy outcomes that rank well in cross-jurisdiction comparisons made by voters, office-holders may learn from and imitate policies that are working well elsewhere (see the large literature on the diffusion of innovations, laboratory federalism, best practice), but they may also decide to innovate and go their own way.

That distinction has escaped the attention of researchers in public finance and fiscal federalism who discuss yardstick competition because it is not very relevant in the case of the variables they study, mainly highly visible taxes or spending on services directly available to the public.¹⁷ A tax, in particular, is both an instrument and an outcome. Thus it is natural to assume that yardstick competition, if it works, will lead to some mimicking or copycatting of what happens in other jurisdictions with regard to that tax. There are other instances of variables that are both policy instruments and plausible objects of yardstick competition – in particular in matters of regulation. But there are also many cases in which the distinction is worth making to understand mimicking and diffusion processes or the absence thereof.

5. Vertical aspects of horizontal competition

The existence of several tiers does not necessarily reduce the importance of horizontal competition among governments but it complicates its analysis. Complication has many aspects. In the case of yardstick competition, which is centred on the notion of accountability, a major problem stemming from the existence of several levels is the blurring of responsibilities (see e.g. Brosio 2007). Complication is perhaps less serious but still significant in the case of mobility-based competition. When all levels of governments have a significant share in the complex bundles of services and taxes offered and collected by the public sector, mobility responds to differences in the combinations provided jointly by these different levels (Breton 1996, pp. 191-192).

¹⁷ Yardstick competition over a variable like a single tax makes sense mainly when formulated in terms of variations, and under a *ceteris paribus* clause. Otherwise, as argued above, what counts is cross-jurisdiction differences in combinations of taxes, public services and regulation. These combinations are difficult to apprehend analytically. Breton (1996, 2006) models competition in terms of ‘Wicksellian connections’ between services received and taxes paid, an idea which can also lead to study competition over ‘efficiency rates’, that is more or less in terms of public output divided by public expenditure (Geys 2006).

In this section, I concentrate on yardstick competition. I discuss the form that top-down horizontal competition takes when office-holders at subcentral levels of government are non-elected managers (subsection 5.1) or elected (subsection 5.2). Lastly, I consider some effects of yardstick competition at the top – that is, among national governments (subsection 5.3).

5.1. Top-down horizontal yardstick competition between office-holders as managers

In the pure case, the whole governmental system is seen as a single organization controlled from the top. Mayors, governors of regions and provinces -- or local party leaders if the ruling party is the main locus of power - are unelected managers. These managers are given substantial autonomy. They are rewarded or punished according to the relative performance of the governments or jurisdictions they lead. Thus they are in a situation of horizontal yardstick competition but the performance comparisons are made from above -- by other managers at a higher subnational tier or by the political rulers themselves at the top. The main reward is promotion to a higher tier. As analyzed in Maskin et al. (2000), that organization of government makes it similar to an M-form corporation. Its main strength is the provision of incentives by way of yardstick competition. Its main drawbacks are spillovers and the non-exploitation of some economies of scale.

Maskin et al (2000), and more in detail Xu (2011), discuss China as an illustration. One reason for the success of the M-form in China, according to these authors, is that cross-jurisdiction structural variation there is relatively limited, regions and lower jurisdictions being relatively diversified and self-contained or self-sufficient. Thus, there are less negative spillovers and an evaluation based on relative performance is easier to make.¹⁸

Two remarks may be appropriate at this stage. First, the discussion in Maskin et al, (2000), Xu (2011) and others has tended to focus on economic performance. But top rulers may find the blueprint – yardstick competition among subordinates -- convenient for many other policy objectives, even mass murder in the case of Nazi Germany (Breton and Wintrobe 1986). Now, it must be noted that interjurisdictional diversity (which makes comparisons more uncertain) may vary substantially across policy domains. Thus, in a given country, although yardstick competition may not work well for economic performance it may work better for some other policies top rulers are concerned with. Second, a question (already

¹⁸ In fact, for comparisons to make sense it is not necessary that all jurisdictions at a given level are broadly similar. In their study of Khrushchev's "Sovnarkhoz" reform as an attempt to adopt M-form governance, Markevich and Zhuravskaya (2011) show that in a subset of regions sufficiently diversified and self-contained, the reform was successful and resulted in higher growth. In general, tournaments between subcentral managers may be segmented so as to take place between jurisdictions sufficiently homogeneous to make performance comparisons relevant.

mentioned) which comes to mind is: why, particularly in China, so much obsession with economic performance? To address that question, considering the objectives and constraints of the top rulers is clearly necessary, a matter to which I return in subsection 5.3.

5.2. Political centralization with elected subcentral officials

The M-form organization of government just described has been mainly discussed with the context of an autocracy (China) in mind. But in itself it does not imply an absence of democracy. In the preceding subsection, only subcentral managers were specified to be unelected. A democratic unitary state may adopt an M-form organization by entrusting ‘prefects’ with many tasks, leaving them much autonomy and making them compete, on the basis of their relative performance (as assessed by the central government), for some promotion to a more important position.¹⁹

In this subsection, however, I suppose subcentral office-holders to be democratically elected politicians. I assume also that they are concerned with their career, defined so as to include as possibilities both re-election and promotion to some job at a different tier of the system.

The structure of political parties, which is quite diverse across countries, becomes an important determinant in that setting. In a first mechanism, political parties are independent across jurisdictions (as is more or less the case in Canada). In the context of the present discussion, they play no role. Comparisons of performance are made by voters only.²⁰ Voters compare the performance of incumbents at the same level. Incumbents who are well placed in these comparisons gain a reputation which increases their chance of success if they decide to be a candidate to another job.²¹ For instance, having a good relative performance record as a governor or a mayor may be useful to be elected to a position at the national level, possibly at the top. Although another motivation than the desire to be reelected is thus provided, the incentive to be well placed in a bottom-up tournament, as discussed in Section 4, is not really changed.

The matter is different when political parties cover different jurisdictions and are centralized. That configuration, called political centralization, has attracted the attention of

¹⁹ A difference between France before the decentralization reforms of the early 1980s and China as described by Xu (2011) is that French prefects had much less responsibilities and autonomy than the corresponding subcentral office-holders in China. There was also much less focus on economic performance.

²⁰ As noted, the object of this paper does not include vertical competition. Consequently, vertical yardstick competition will not be discussed at this point of the discussion, although it is likely to play a role (Breton 1996, 2006, Bodenstein and Ursprung 2005).

²¹ In that context, the preference for moral hazard over selection expressed in subsection 4.2 must be qualified.

several scholars, perhaps starting with Riker (1964). Enikolopov and Zhuravskaya (2007) find some empirical support for Riker's view, which they summarize as follows (p. 2262):

‘According to Riker, only strong national political parties achieve the necessary balance between national and local interests. On the one hand, even with very strong national political parties, the presence of local elections ensures political accountability of local politicians to their constituencies. On the other hand, strong national parties align political incentives of local politicians with national objectives by affecting career concerns of local politicians. First, strong parties have higher leverage over promotions of local politicians to national-level politics compared to weak parties. Second, political support of a strong national party during local elections is more valuable to local politicians than that of a weak party. Local politicians internalize interjurisdictional externalities of their policies in the search for promotion and political support by their national governing party because the party cares about national-level performance.’

One may note that Enikolopov and Zhuravskaya – like Riker himself and other authors stressing the benefits of political centralization -- are quite tolerant with regard to democratic credentials. Elections at the subcentral level are an essential part of their reasoning, but electoral competition between centralized political parties of the type they assume is not.

When that inter-party electoral competition is fully taken into account, several configurations become possible. Centralization may have a different meaning than the one it has in the citation.²² To illustrate, let us abstract from the central government and focus on centralization within ‘national’ parties in the context of local elections. Parties are concerned with the aggregate electoral success of their candidates. The party leadership can replace party incumbents with other party candidates. That possibility gives incumbents an incentive to please party bosses as well as voters, the reward being respectively to be re-endorsed and reelected. The effects may be an internalization of interjurisdictional externalities of the (mainly economic) kind referred to in the citation above, but also an internalization of externalities of a political kind if voters use “party cues” (Geys and Vermeir 2008).

If now we consider several tiers of government proper, the configuration may be very similar to the M-form arrangements discussed in the previous sub-section except that it applies to the overall organization of two or more competing political parties. An objective of each party may be to have many successful candidates at all levels. As a way to pursue that objective or as an alternative to it, the party may also give precedence to remaining or getting into power at the top, which may give him an interest in overall coherence. An incumbent interested in getting a position at a higher level may want to be judged performing better than his rivals at the same level both by party bosses (top-down horizontal yardstick competition)

²² See also Wrede (2001).

and by voters (bottom-up horizontal yardstick competition). The exact interaction may be quite specific to the internal organization of parties, the electoral system and the ensuing strategies of voters (Zudenkova 2009).

5.3. *Horizontal intergovernmental competition at the top*

The top level is that of national governments. The existence of that level affects horizontal competition below in many ways. For instance a national government may decide to foster yardstick competition at subnational tiers or to make it more efficient. For that purpose, it may organize the provision of comparative performance data (Revelli 2006) or promote fiscal equalization (Allers 2012, see also Kotsagiannis and Schwager 2008). International agreements (including the European Union itself) may compel a central government to limit subcentral horizontal competition in areas like taxation, ‘state aids’, regulation or, as is currently the case in the Eurozone, when it has a bearing on total public expenditures, deficits and indebtedness.

The consequences of horizontal competition at the top on horizontal competition below are an important subset of these effects. Among national governments, horizontal yardstick competition can only be bottom-up.²³ National governments compete to be well-placed in the comparative assessments made by voters (or, more generally, public opinion). That competition is an important element of the overall set of competitive interactions among governments at all levels. To that extent it should be treated as an integral part of the governmental system in place in each country, in particular when the system is studied from the perspective of decentralization. The phenomenon is largely overlooked and not only by economists (but see Salmon 1991, Breton 1996, or, recently, Kayser and Peress 2012). Its presence is implicit however in some analyses of decentralization.

As noted, an M-form governmental hierarchy can serve very different objectives. In the work reviewed so far, top rulers are assumed to be interested mainly in economic performance and more specifically growth. That supposition reflects a priority that is observable in reality. Why? In the case of Soviet Russia and China, one might evoke Marxist ideology. But such ascription would not be very convincing. The focus on growth has become really universal. With regard to China, the main link between growth and the concerns of rulers is suggested almost incidentally by Xu (2011, p. 1091): “perhaps more than ideology, economic

²³ This is not perfectly true. Governments may compete to be well placed in comparative assessments made by international organizations such as the World Bank not only because that may have an influence on voters in their respective constituencies but also because that may affect the way the organizations distribute their support.

development is regarded as essential for the survival of the regime” and “the collapse of the Soviet Union and the whole Eastern Bloc made the CCP top leaders feel that continued economic development was crucial for the survival of the regime”. Survival of a Communist Party was perhaps viewed as particularly challenging in the late 1970s, when the main reforms were engaged, but the link is quite general. In the contemporary world, to remain in power, individual office holders or governing political parties, and even dictatorships, must seek a comparatively good economic performance of the country they rule.

There are two reasons why economic performance has come to dominate -- at least potentially, in the background – all other possible objectives. First, the current pace of economic growth is such that small differences in rates produce within a relatively short span of time very large differences in income levels. That was not the case in the distant past, when the annual rate of growth of income per head was a small fraction of one per cent.²⁴ Second, cross-country information flows have intensified so much that the inhabitants of a country (or a substantial subset thereof) cannot remain unaware that the country “falls behind” or “surges ahead”. These are comparative concepts. Except in the very short run, the economic growth rates of most countries are positive; thus what counts for an evaluation is how much. Assessing the growth rate of one’s country requires comparisons with other countries or categories of countries judged comparable in some sense.

The fact that there is yardstick competition at the top, that its object is mainly (though certainly not exclusively) economic, and that it is potentially so compelling has, *inter alia*, the following implication. Many of the systemic arrangements adopted in a country are subordinated to comparative economic performance. This applies to the arrangements that concern decentralization. That subordination is only potential or latent. For many values of the relative performance, all kinds of arrangements are conceivable. But, if the economic performance of the country were to become very bad (comparatively) and if incumbents or their challengers were to consider the decentralization arrangements in force to be a serious obstacle to improving performance, one may expect the said arrangement to be eventually changed, whatever the merits they may present along other dimensions.

²⁴ At some levels of development, economic growth brings about or requires social changes that rulers in authoritarian systems may dislike. Rulers may even fear that such changes will threaten their survival. As a consequence authoritarian rulers may adopt policies whose direct or indirect effects hamper growth. Let me note that, instead of rulers, the argument could be rephrased in terms of a ruling class, or of a subset of society whose power is based on extractive institutions (Acemoglu and Robinson 2012). In general, however, the mathematics of rapid growth in a context of international comparisons will make such behaviour prove eventually unsustainable.

Recalling the discussion of subsection 4.4, we may note that the same reasoning applies to major characteristics of the economic system -- the reliance on markets, for instance. These characteristics are mainly instrumental in the sense suggested in subsection 4.4. Voters look at the rate of economic growth as a policy outcome. If they are satisfied with it, they can fairly easily be persuaded that the economic system that has produced it is a good one. The literature on the diffusion of markets (see the contributions in Simmons et al. 2008) gives no role or almost no role to voters or citizens.²⁵ This seems reasonable if only the direct effects of yardstick competition are considered: normally, voters do not compare countries in terms of their reliance on markets. But if one takes into account also the indirect and latent effects of yardstick competition, the fact that voters compare growth rates combined with the fact that markets are currently considered more growth-enhancing than collectivist solutions induces incumbents, concerned with relative growth as a condition of their political survival, to promote markets. I will not venture further and discuss whether democracy itself is or is not perceived by many politicians and voters as mainly instrumental along the same lines.

6. Concluding remarks

Two important dimensions of competition among governments were excluded from the present discussion at the outset: normative assessments (in particular regarding efficiency) and vertical competition. The exclusion of the first did not imply neglecting the degree to which voters or citizens are enabled to assess and influence public policies. That question can be addressed in positive terms, without any normative connotation, as a pure matter of fact. The two forms of horizontal competition among governments (mobility-based and yardstick) discussed in the paper have different implications with regard to citizens' influence. Political economists tend to stress the constraints that mobility-based competition imposes on governments or politicians. But, currently, a more widespread concern is about the constraints which that form of competition imposes on the peoples themselves, in their collective capacity to influence policies. Our discussion of mobility-based competition did not distinguish between the two concerns -- our focus being on the room left in each jurisdiction to autonomous policy-making in general. If such room is reduced to zero, politicians and citizens are deprived together of any influence on policies, which are completely determined from outside. It is important from a systemic perspective, therefore, that we found several

²⁵ The 'institutional competition' tradition, Hayekian in origin, relies on mobility rather than on the political institutional preferences of citizens – see e.g. Vanberg and Kerber (1994) and, for a historical and conceptual analysis, Vaubel (2008).

reasons for that room to remain substantial – larger in fact than often felt – even in a context of intense mobility-based competition.

To what extent is the said autonomous capacity shared between office-holders and voters? Moving to yardstick competition -- the second form of horizontal competition -- was the main way for us to address that question (a completely different approach was implicit in our analysis of ‘alterable electorates’). In the setting in which yardstick competition is relevant, the question of whether voters can influence policies is narrowed down to that of whether they can influence incumbents’ behaviour. I stressed some unheeded dimensions of yardstick competition, but much more must be done to take the full measure of the role played by the mechanism in giving citizens a better-informed say on policy-making.

The exclusion, mentioned above, of vertical competition did not prevent us from discussing some consequences on horizontal competition of the existence in reality of several levels of government (at least four as a rule: local, regional, central and international). Our discussion focussed on two aspects of the matter. The first is ‘top-down’ yardstick competition, related to what has been called ‘political centralization’, illustrated mainly by the behaviour of provincial officials in China, but having counterparts in the centralized party systems of many countries. The second is the importance of horizontal competition among national governments (i.e. international competition). The two aspects are related. When international competition becomes intense and focussed on a major dimension like economic performance, this cannot but have important consequences for the way competition is shaped at the subnational level, including in settings in which centralized political parties play a major role. Regarding these consequences, whether general regularities can be found or only context-specific stories be told is a moot point.²⁶

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²⁶ See Salmon (2013).

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