

Public Finance Review

<http://pfr.sagepub.com/>

Competitive Governments, Globalization, and Equalization Grants

Albert Breton and Angela Fraschini
Public Finance Review 2007 35: 463
DOI: 10.1177/1091142106296413

The online version of this article can be found at:
<http://pfr.sagepub.com/content/35/4/463>

Published by:



<http://www.sagepublications.com>

Additional services and information for *Public Finance Review* can be found at:

Email Alerts: <http://pfr.sagepub.com/cgi/alerts>

Subscriptions: <http://pfr.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://pfr.sagepub.com/content/35/4/463.refs.html>

Competitive Governments, Globalization, and Equalization Grants

Albert Breton

University of Toronto, Ontario

Angela Fraschini

Università del Piemonte Orientale

“Amedeo Avogadro,” Alessandria, Italy

The competition that permeates the public sector acts as a force to discipline public sector actors. But it also serves to build links between the volume of goods and services supplied by public bodies and the prices that citizens must pay for them. Globalization, by permitting a greater mobility of capital, makes it possible for larger business corporations to become more effective oligopsonists when bargaining with governments for the goods and services they need, thus weakening the links between the things provided to citizens and the prices the latter must pay. Equalization payments, by permitting more effective intergovernmental competition, reduce the negative effects of globalization on the links that competition forges.

Keywords: *intergovernmental competition; globalization; capital mobility; equalization payments*

1. Introduction

Economic globalization, by increasing competitiveness, increases the efficiency of market allocations worldwide. We can refer to neoclassical economic theory for an appreciation of why competitiveness generates such a result (see section 3). In this article, we inquire into the possible effects of economic globalization on the efficiency of governmental systems. The answer to that query will depend on the model of government

Authors' Note: We wish to thank Jan Vermeir for useful comments on an earlier draft. We are also grateful to Jim Alm, *Public Finance Review's* editor, and to three anonymous referees for comments that helped us improve the article. The usual caveat applies.

one adopts as well as on the relationship one postulates exists between the private and the public sectors.

We therefore begin by suggesting a particular model of government—one which we believe accounts for the historical and current observable patterns of production and supply of goods and services (including redistribution and regulation) by modern democratic governments. The views of economists regarding the efficiency of governmental production and supply of goods and services range over the entire panorama of possibilities. This dispersion is, once again, a consequence of the priors held regarding the nature of democratic governments. We suggest a hypothesis about efficiency that is consistent with the model of government we will be using.

In the next section, therefore, we propose a model of government followed in section 3 by a discussion of economic globalization and of its effects on the efficiency of governments as modeled in the previous section. In section 4, we turn our attention to intergovernmental equalization grants: we argue that these grants are not meant to be redistributive, but that their role is to act as stabilizing agents in the competition that regulates intergovernmental relations and the relationship of the private and public sectors. Section 5 concludes the article.

2. Competitive Government

Although a large and talented cohort of scholars—economists, jurists, political scientists, and sociologists—have been active for almost half a century in the discipline now known as *Public Choice*, the field still lacks a generally accepted positive paradigmatic theory of government.¹ In *Competitive Governments*, Breton (1996) attempted a classification, a brief summary, and a critical appraisal of a number of the more popular theories. All of them are still in circulation, with new ones being hatched! Because we both remain in basic harmony with Breton's theory of competitive governments, we make use of that model to analyze some possible effects of economic globalization on the efficiency of public sector provision of goods and services.

It seems to us that the evidence is consistent with the hypothesis that modern democratic governments are compound structures made up of a large number of autonomous and semiautonomous elected and nonelected centers of power. We further suggest that the evidence supports the view that these centers compete with each other. Before defending that view, we acknowledge that there are from time to time attempts at collusion

between centers of power that are sometimes successful. Still, not anymore than in the marketplace, do successful collusions in particular instances demonstrate the absence of competition generally.

Because it can be associated with observable behavior, it is best to conceive of competition among centers of power the way Schumpeter (1911/1934, 1942) understood competition in the market economy: a process of "creative destruction" in which new processes, products, sources of supply, etc., replace old ones. We also know from the work of Samuelson (1943, 1982) on Schumpeter's model of economic development, in which creative destruction plays a central role, that neoclassical economic price-quantity adjustments play a background role in Schumpeterian competition, even though the observed process and its manifestations as described by Schumpeter pay little attention to these underlying background forces. It is relatively easy to relate the fundamental mechanisms of Schumpeterian competition to those underlying the working of checks and balances between centers of power in politics—a notion that has been around, both as normative injunction and as positive reference point for over 2000 years (see Panagopoulos 1985). Indeed, the way Schumpeterian competition and checks and balances work are remarkably similar (see Breton 1996, chap. 3).

But there is more to competition in politics than competition between centers of power in compound governments. There is growing acceptance of the idea that governments in a given governmental system compete with each other. The mechanism that motivates that manifestation of competition is different from that underlying checks and balances but is a competitive mechanism nonetheless. It is an application of the theory of labor tournaments introduced in economics by Lazear and Rosen (1981). In a less formal but considerably more general formulation than one finds in more recent treatments, Salmon (1987a, 1987b) was able to show that governing and opposition parties are led to compete with each other when citizens can compare the performance of their government with that of governments in other jurisdictions.² That in itself will lead to intergovernmental competition.³ Moreover, the Salmon mechanism, initially crafted to explain horizontal competition—competition among governments inhabiting a given jurisdictional level—can be applied, with one important modification (see below), to vertical competition—competition among governments located at different tiers (see Breton and Fraschini 2003).

The initial formulation of what Breton (1987) called the Salmon mechanism assumed that citizens compared the performance of their own government to that of a benchmark government in terms of the "levels and qualities

of services, of levels of taxes or of more general economic and social indicators" (Salmon 1987b, 32). However, as argued by Breton (1996), competition in governmental systems compels all centers of power to forge "wicksellian connections" (defined immediately) so as to be granted the consent (vote) of citizens.⁴ In other words, citizens are assumed to be evaluating the relative performance of governments in terms of the tightness of wicksellian connections—both for horizontal and vertical competition.

Two questions must be answered: First, what are wicksellian connections? Second, why is it an improvement to articulate the Salmon mechanism on them rather than on the vector of goods, services, taxes, and other indicators on which the mechanism has hitherto been expressed? A *wicksellian connection* is a link between the quantity of a particular good or service supplied by centers of power and the tax price that citizens pay for that good or service. Wicksell (1896/1964) and Lindahl (1919/1964) showed that if decisions regarding public expenditures and their financing were taken simultaneously and under a rule of (quasi) unanimity, a perfectly tight nexus between the two variables would emerge. Breton (1996, *passim*) argued that competition between centers of power, if it were perfect and not distorted by informational problems, would also generate completely tight wicksellian connections. In the real world, competition is of course never perfect, and informational problems abound; as a consequence, wicksellian connections are less than perfectly tight. Still, as long as some competition exists, there will be wicksellian connections.

The virtue of a Salmon mechanism expressed in terms of wicksellian connections is that a given citizen can carry out comparisons of performance in terms of a common standardized variable, whether the benchmark government inhabits the same or a different jurisdictional level from that in which the citizen dwells. A variable that serves that purpose well is the size of the utility losses inflicted on citizens whenever the volume of goods and services provided by centers of power differs from the volume desired at given tax prices. Put differently, citizens experience the same kind of utility losses from decisions made by governments whatever the jurisdictional tier the governments inhabit. The goods and services supplied can differ, but the efforts to achieve tightness in wicksellian connections will not.⁵ Indeed, the ability to compare performances horizontally is likely to reinforce the ability to execute vertical comparisons and vice versa.

A look at some of the goods and services governments supply or have historically supplied cannot but lead to the conclusion that governments must be competing with families, churches, charitable organizations, cooperatives, and other bodies that supply goods and services that are

close substitutes to the goods and services supplied by governments. Among these are day care, health and nursing, old age security, unemployment insurance, and so forth. In addition, governments sometimes compete in markets by providing goods and services such as transportation, broadcasting, education, insurance, car production, oil exploration, and so on. The interdependence of the public and private sectors is in other words all-pervasive.

Let us initially assume that perfect competition rules everywhere in the economy, including the public sector. Given the interdependence just noted, the resulting general equilibrium configuration of resource allocation is one which, if subjected to an exogenous shock, will register changes in both the private and public sectors, irrespective of the origin of the disturbance. For example, given the interconnectedness, an external disturbance in one or more markets may not require adjustments only in other markets but in some parts of the public sector as well.

The idea of some behavioral interaction between the public and private sectors has already been examined in, for example, the theory of "unbalanced growth" (Baumol 1967)—a dynamic form of interaction. The interdependence we have in mind is more static in character; it is the interdependence we find in standard Walrasian general equilibrium theory. In that framework, efficiency in the (overall) allocation of resources is the product of competition, which insures that resources are channeled toward the alternatives in which their yield is a maximum. When competition breaks down, either because of collusion or monopolization or when it is distorted by ad hoc interventions, efficiency in resource allocation is reduced. In the conventional approach to (static) efficiency, the prime ad hoc distortive interventions are taxes, subsidies, and other like policies. However, in a frame of reference in which governments are competitive, taxes and subsidies are in the nature of tax prices—positive or negative—paid per unit of good and/or service provided. They are user fees, such as the price paid for a newspaper.

The point is not that in the real world there are no significant departures from competitive allocations as a result of distortions (collusions, monopolizations, corruption, and a host of other factors) in the private and/or public sectors. There are. However, we are suggesting that we can better understand the meaning of these barriers to competition in a framework in which it is recognized that there is intragovernmental, intergovernmental, and extra-governmental competition and in which the allocation of resources is seen to take place in a general equilibrium framework in which the private and public sectors are organically interdependent.

3. Globalization

We are concerned with economic globalization⁶ and assume that this phenomenon is a consequence of the operation of the following three factors: (1) the virtual elimination of all restrictions on the free movement of capital made possible by the removal of quantitative and nonquantitative barriers to trade; (2) the increasing harmonization and standardization of the rules that govern trade, investment, employment, property rights, environmental policies, and so on; and (3) as a consequence of (2), that is, as a consequence of the adoption of common standardized rules regarding investments—rules that necessarily tend to reflect the practices prevailing in the dominant economies of the world where at present more or less all assets are traded or tradable—the elimination of impediments to the private ownership of all assets.

Economic globalization is still only incipient. It is, however, sufficiently present to produce observable results. In respect of governments and governmental systems, globalization's main consequence is to undermine wicksellian connections. It does this in the following way. The capital of large corporations being increasingly mobile as trade in goods and services becomes freer, corporations can threaten to leave a jurisdiction unless the government of that jurisdiction provides the public services they demand. Corporate enterprises make similar threats to put downward pressure on the tax rates that apply to the income they earn. That by itself undermines wicksellian connections. But that is only the first step. The necessity to provide goods and services to corporations at tax prices that are not high enough to cover the jurisdiction's unit costs of production and delivery implies that goods and services will be provided to the citizenry in general at tax prices that are higher than unit costs. That finishes the job of undermining wicksellian connections.

The foregoing can be given a more analytical twist. *A ceteris paribus* increase of, let us say, 1 percent in the degree of economic globalization increases the market power of business corporations, because globalization increases the mobility of capital. As a result, a government that chooses to attract capital or decides to hold onto capital already in its jurisdiction but at the margin of moving will accept to provide goods and services demanded by corporate interests at lower tax prices and/or in greater quantity or quality than it would if capital was less mobile. The greater mobility of capital, in other words, will have made corporations into more effective oligopsonists in their purchases of governmentally supplied goods and services and,

as a consequence, will benefit from larger oligopsonistic rents—rents that will inflict a deadweight cost on society. The "transfer" to oligopsonists means that citizens would have to pay more for the goods and services provided them, assuming, as we must, no change in the government's budget constraint. The quantity of publicly supplied goods and services demanded by citizens will therefore decline. Citizens will search for alternative suppliers.⁷ The proposition that globalization undermines wicksellian connections therefore means that in the new equilibrium—because this is an equilibrium story of a once-for-all adjustment to the *ceteris paribus* 1 percent increase in the degree of economic globalization—corporate interests benefit from larger oligopsonistic rents, while the citizenry at large demands fewer governmentally provided goods and services. The increment in globalization will then have been accompanied by a transfer of supply from public to private institutions.⁸ In the process, globalization changes the distribution of political power in society in favor of corporate capital against the institutions that have responsibility for the general welfare of the citizenry. The special treatment of some groups in society—in this case, corporate interests—that has been ascribed to capture or to rent-seeking, we impute to globalization, a process that has been receiving considerable attention recently but which has been unfolding for decades.

The foregoing argument is admittedly cast in a comparative static framework. A dynamic formulation would require the parameterization of the underlying functional relationships: By how much does globalization increase gross world product? By how much does capital mobility increase the oligopolistic power of business corporations? By how much does the increased oligopolistic power of corporations undermine wicksellian connections? And so on. If parameterization were within our reach, the dynamic analysis it would make possible would be fascinating. There is no reason to believe, however, that it would force us to conclude that the comparative static analysis is wrong.

However, globalization does not undermine wicksellian connections equally across all jurisdictions of governmental systems. It is reasonable to suppose that junior governments, whose inability to compete in a non-globalized (or in a less globalized) world was already a fact, would be particularly hard hit by economic globalization. Junior governments will not, however, be impacted in the same way by globalization; some jurisdictions will be more severely affected than others. Some jurisdictions will even gain from globalization. It is essential that we assume that junior governments will meet the effects of globalization as they meet any other

disturbances that come their way. If they are incapable of competing, it must be because of a lack of resources, not a failure of entrepreneurial spirit.⁹

4. Equalization Grants

We now turn our attention to the particular form of intergovernmental transfers known as equalization grants. We begin by arguing that their purpose cannot be to cause a change in the interpersonal distribution of income, that is, to deal with an equity problem. We wish to be as clear as possible on the meaning of that proposition. We have adopted Breton's (1996) model of competitive governments and with it the notion that income redistribution is a service not unlike other services supplied by governments: justice and injustice, national defense and war, price stability and inflation, environmental protection and degradation, and legal and illegal immigration, to name a few (see Breton 1996, 5-9, for a definition of goods and services congruent with his model of competitive governments). In other words, competitive governments, like competitive market enterprises, seek to supply the goods and services demanded by the public. But all goods and services demanded and supplied have standard "income" and "income redistribution" effects.¹⁰ Our statement that equalization grants are not supplied to change the interpersonal distribution of income, therefore, does not imply that these grants do not have income and income redistribution effects, only that they are not supplied for that purpose.¹¹

There are many analytical traditions in the economic literature on intergovernmental grants. There is, for example, an interjurisdictional spillover tradition (Breton 1965; Oates 1972), an income redistribution tradition (Buchanan 1952; Scott 1952), a fiscal imbalance tradition (Musgrave 1961), and an "inefficient" mobility of labor tradition (Flatters, Henderson, and Mieszkowski 1974; Boadway and Flatters 1982). These are still not integrated and unified in any meaningful sense and, in all likelihood, cannot and never will be. The theoretical work in these various traditions has, however, one assumption in common: it treats junior governments—the recipients of money from senior governments—as conduits for transfers to individuals and/or firms for the purpose of achieving prestated objectives (the sources of the various traditions just noted): internalization of spillovers, redistribution of net fiscal benefits, and so forth.

Sometimes the junior government-as-conduit assumption is camouflaged by a prior supposition that all citizens have identical preferences.

But even in these cases, the assumption delivers its payload. To understand the meaning of the assumption, it suffices to recognize that all the objectives assigned to transfer programs can be more efficiently achieved by an interpersonal than by an intergovernmental transfer system. Indeed, one can probably make the case that, as a matter of historical fact, to the extent that governments have been preoccupied with the objectives that grant theorists impute to them and to the extent that they have used grants to achieve these objectives, they have resorted to interpersonal grants, namely to grants made to persons (families) and/or firms but sometimes "mediated" by or effected through more junior governments.¹² In this connection, it is well to recall that in most societies, income redistribution policy is embodied in a variety of welfare programs based on the age, the employment situation, the family status, the health conditions, and on other characteristics of the individuals, families, and groups that are recipients. Moreover, Akerlof (1978) has shown that the patchwork of programs that form the income redistribution policy of very many societies is more efficient than some proposed "streamlined" systems would be, because for any given volume of redistribution the excess-burden of the revenues needed to pay for it is smaller in the patchwork than in the streamlined system. What Akerlof calls "tagging," namely the use of certain characteristics to identify the individuals and groups in need, is simply a device that insures that resources are not transferred to those who are not in need.

There has been much theoretical work on tagging (now often called "targeting") following Akerlof's contribution (for example, Besley and Coate 1992; Parsons 1996; Boadway, Marceau, and Sato 1999). This work has, to a degree but by no means completely, weakened some of the strength initially placed on tagging or targeting. For our part, we hold to the view that the prevalence and persistence of tagging across countries and across time is *prima facie* evidence of its effectiveness in the design of interpersonal income redistribution programs.

Why, then, do senior governments often make use of transfers such as equalization grants? Is it that senior governments are not pursuing through these grants the objectives that analysts think they ought to be pursuing? Is it possible, in other words, that the objectives that senior governments are pursuing require intergovernmental grants programs in addition to the interpersonal grants programs they are implementing? Our answer to this query is in the affirmative. Intergovernmental grants are needed to stabilize the outcomes of competition among junior governments and, by achieving that objective, make competition more effective and more

efficient. This does not mean that these transfers do not have effects on the distribution of income (a point we have already emphasized), on mobility, on the expenditure patterns of recipient governments, and on other variables, but it means that grants programs should be analyzed and evaluated in terms of their contribution to the stability of horizontal intergovernmental competitive outcomes, not on some other basis. At the very end of section 3, we noted that the economic status of some junior jurisdictions could improve as a consequence of economic globalization. We can now see that when this happens, the need to stabilize intergovernmental competition can be even greater than when all jurisdictions are adversely affected by globalization.

How do intergovernmental grants contribute to competitive stability? Simply by equalizing the capacity of junior governments to compete with each other, that is, by insuring that some (poorer) junior governments are not permanent losers in the competitive struggle that characterizes their relationship with other junior governments. If the grants were interpersonal instead of intergovernmental, the relative positions of junior governments would be unchanged by grants, even if that of their constituents was, unless of course the tax rates were such as to fully recapture, jurisdiction by jurisdiction, the sums granted by senior governments. Since the jurisdictions in which governments are recipients of grants are made up, like those from which the funds are derived, of rich and poor persons, a tax recapture scheme would, of necessity, be quite complicated and not obviously constitutional in democratic states.

To have a more equal capacity to compete is not the same thing as providing the citizens of every junior jurisdiction with the same bundle of governmentally supplied goods and services: the same schooling facilities and programs, the same health services, the same number and quality of public libraries, the same number of hectares of public parks, and so on. That would amount to a denial of the very nature of decentralization and federalism. For a government to possess a more equal capacity to compete means that it is in a position to provide a volume and quality of goods and services that yield to its citizens a level of utility reasonably comparable to those provided in other jurisdictions without having to resort to unduly burdensome levels of taxation, again relative to the levels collected elsewhere.

Citizens have a demand for tighter wicksellian connections, because the tighter the connection, the smaller the volume of utility loss they have to bear. However, as we have seen, tightness of wicksellian connections is a (positive) function of the strength and effectiveness of intergovernmental competition. If that effectiveness is increased by intergovernmental

equalization grants, we must assume that citizens have a derived demand for efficient competition-inducing equalization grants. These grants are arguments in their utility functions. Tax prices collected to pay for them create utility losses only to the extent that the tax prices exceed or fall short of the marginal value citizens place on these grants.

A first motivation for equalization grants therefore is a demand by citizens for tighter wicksellian connections, a demand that these citizens reveal to senior governments. It tells us why these governments care about effective and stable competition among junior governments and supply equalization grants to guarantee that it obtains. A second, less basic, motivation for why senior governments want competitive stability among junior governments is to insure that these do not go bankrupt. Although competitive instability is not the only reason junior governments become insolvent, it is one that has historically had importance. One, indeed, expects the incidence of equalization grants programs to be greater in countries in which the incidence of bankruptcy among junior government has been greatest.

If we now return to economic globalization, we can be more precise about the cost and benefit calculus implicit in the foregoing discussion. The increment in equalization grants that will make it possible for a weaker government to compete with the other governments of a given polity will do so, for example, by attracting capital, whether physical or human, that would otherwise have gone elsewhere. The intergovernmental grant, in other words, reallocates capital from a higher to a lower yield opportunity. The difference between the two yields multiplied by the volume of displaced capital is a measure of the total cost of the intergovernmental transfer and a measure of the loss in economic efficiency in that economy. It is a trivial exercise from there to calculate the cost of any increment in economic globalization.

It is very important, however, not to bring the analysis to a close at this particular point. The equalization grant also increases the capacity of the weaker recipient government to compete and as such allows a closer link between tax prices and the goods and services supplied by that government to its citizens. It makes for tighter wicksellian connections, and the tighter the wicksellian connections, the smaller the utility losses suffered by citizens. In other words, equalization grants, by allowing for tighter wicksellian connections, improve the allocation of resources on the consumption side of the ledger and thus increase efficiency from that point of view.

The reduction in utility losses—the gain in consumer welfare—consequent on the transfers must be matched against the cost in terms of distortions in the capital market for human and nonhuman capital. The optimal

size of intergovernmental grants is one that would equate the two margins. If competition is vigorous enough, that point would be reached.

In *Competitive Governments*, Breton (1996) examined a variety of empirical economic, sociological, and political science literatures that tell stories that he interpreted as manifestations or indications of the workings of intergovernmental competition. One of these stories describes the rate of diffusion of policies over junior jurisdictions after an initial introduction by one junior government. To visualize how an intergovernmental grants program can help stabilize competition, consider how it would affect the operation of that diffusion process. Assume, therefore, that a junior government innovates by introducing a new policy that receives support in the jurisdiction in which it is implemented and consequently henceforth serves as a Salmon benchmark. The expected response within the competitive paradigm is for the governments of some other jurisdictions to follow. But what if one or more other junior governments cannot follow suit because they lack the necessary resources to do so? Presumably, labor, capital and/or technology will leave these jurisdictions, worsening their position relative to the preinnovation one, while improving that of the host jurisdiction. That describes instability, and it is apparent that an intergovernmental grants program can prevent this from happening.

These grants must be unconditional. To see that this must be the case, it suffices to note that if they were conditional and if the conditions were set by senior governments, as they would have to be, the grants programs would simply suppress competition. Senior governments may want to do this in certain circumstances or in respect of specific policy areas, but if they did this on a broad front, it would simply extinguish the decentralized and/or federal character of the governmental system itself. Conditional grants can be seen as equivalent to a centralization of constitutional powers.

It is possible (easy?) to design intergovernmental equalization grants programs in which the marginal gains in utility from tighter wicksellian connections fall short of the marginal costs of distortions in the capital market. That is especially likely to be the case if equalization payments are rationalized as redistributive grants by those who design them. The tendency in that case is to configure the transfer system in such a way that the outcome is one that "harmonizes" the relationship between the governments of a polity by making them all essentially alike. That sort of harmonization reduces and ultimately suppresses intergovernmental competition and, in this way, makes utility gains from grants approach zero, while leaving the cost side unaffected.

The evidence seems to indicate that both Australia and Germany have designed intergovernmental grants systems that equalize to such a degree

the position of all governments in the federations that interstate and *interl  nder* competition has been, in fact, greatly reduced, possibly extinguished.¹³ The situation in these two federations raises a problem on which the foregoing has been silent. We have indeed been concerned only with the size of intergovernmental equalization grants without paying any attention to the arrangements from which they flow.

This problem is important because the arrangement—the formulae that select what counts and what does not count in setting the size of the grants—is crucial in determining their effectiveness as stabilizing agents. If we accept the view that intergovernmental grants, although they have redistributive consequences like all other economic activities, should not be designed as redistributive but as stabilizing, then the needs side—what citizens in a jurisdiction need by way of public services—should not enter the calculus that determines their size. Adjusting the calculus by introducing a vector of needs belongs to the same family of pursuits as those associated with the desire to make equalization grants conditional: achieving more centralization. Fiscal capacity and fiscal effort relative to some benchmark—relative to the average of x representative jurisdictions—are the only relevant variables.¹⁴ To put it differently, the transfers should be such that the government of each jurisdiction is in a position to provide (is capable of providing) its citizens with a reasonably comparable level of basic services (as the benchmark) without having to resort to unduly burdensome levels of taxation. We suggest that as long as the definition of "basic services" is not too restrictive—it allows, for example, for the provision of training programs that lead to high-quality jobs or to the possibility of concert halls if that is the way the government wants to compete with other neighborhood governments—a formula based on these principles would introduce minimal distortions in factor and product markets and permit tighter wicksellian connections.

5. Conclusion

We have proposed a model of government in which intragovernmental, intergovernmental, and extragovernmental competition works to build links between the quantities of goods and services that are publicly supplied and the tax prices that are paid for them. These links, which we have called wicksellian connections, can be more or less tight depending on how vigorous are the various forms of competition that affect the public sector. We have then argued that economic globalization, through a redistribution of political power that we have described, acts to reduce the tightness of

wicksellian connections. Finally, we develop the point that intergovernmental equalization grants can counter some and even all of the negative effects of globalization on wicksellian connections.

Notes

1. *The Calculus of Consent* (Buchanan and Tullock 1962), arguably *Public Choice*'s first explicit manifestation, was initially published in 1962, and the first issue of the discipline's journal appeared in 1966 under the title of *Papers on Non-Market Decision Making* (Tullock 1966). If the origin of the field is placed in the 1950s following Kenneth Arrow's (1951/1963) and Duncan Black's (1958) path-breaking work, the truth of the proposition in the text is simply magnified.

2. Salmon's first article on the subject was published in 1987 but was delivered at a seminar on federalism in 1984.

3. Under the heading of yardstick competition or, less often, of benchmark competition, the mechanism was rediscovered by Besley and Case (1995), who applied their model to interstate tax competition in the United States. The number of applications to that particular policy area is now quite large (see Ashworth and Heyndels 1997 for Belgium, Büttner 2001 for Germany, and Schaltegger and Küttel 2002 for Switzerland).

4. For a defense of that assumption, see Breton (1996, 48-57).

5. As in the tournament or yardstick competition model suggested by Nalebuff and Stiglitz (1983), the comparison of performance will be more precise if the random disturbances affecting performance are common to all centers of power instead of being idiosyncratic to each.

6. Unless the context makes it clear, the word *globalization* should never be used without an epithet. Economic globalization, cultural globalization, technological globalization, human rights globalization, and so forth, although sometimes closely related, are different from each other. Indeed, as recent history has documented, some countries support (indeed promote) economic globalization, while seeking at the same time to curtail human rights globalization. We focus on economic globalization.

7. In the short term, alternative suppliers may not even exist. However, it must be assumed that in the longer run, supply will respond to demand. If the services supplied cannot be privatized—street lighting or street cleaning may be examples—we expect the quality or the quantity supplied to be reduced.

8. Some countries are less affected by globalization. This will be the case if, for example, a large fraction of corporate interests are family owned and controlled. That ownership pattern will act as an impediment to the inflows and outflows of capital.

9. Henceforth, we use the word *junior* as encompassing cantonal, provincial, regional, state, and other governments lower in the territorial hierarchy of governmental systems. Governments that are higher up are *senior*. Note that a government can be at once junior and senior depending on the direction considered.

10. On the latter, see Johnson (1957). Income redistribution effects are generally neglected because for commodities taken one at a time, they are necessarily very small. If one is discussing exports and imports—as Johnson was—they can be significant.

11. It is true that the idea of a wicksellian connection in section 2 is derived from the Wicksell-Lindahl model of public supply. The same model can be and has been put to other

uses. If employed in a welfare economics framework, it is essential to appeal to a social welfare function that resolves the income redistribution problem from, as it were, outside the public supply model (for a clear discussion of this point, see Samuelson 1955, 354-355, especially n. 9). But in a positive frame of reference, income redistribution must be the result of the operation of endogenous forces—the assumption must be that societies get the income redistribution they want and that competitive governments supply. No more, no less.

12. For example, to make effective the right of all youth to benefit from primary and secondary education, the Italian central government transfers funds to the regions, which in turn hand the funds over to the municipalities. These then proceed to award grants to families in support of scholastic expenditures.

13. In a recent paper, written with Oliver Franz, Paul Bernd Spahn, a foremost student of the German federation, was unsure as to whether *interländler* competition in Germany had been only reduced or completely extinguished. See Spahn and Franz 2002.

14. In this connection, we note that the recent change to Article 119 of the Italian Constitution (Constitutional Law no. 3, 2001, which modifies Title V, second part, of the Constitution), mandating that equalization be based on per capita fiscal capacity alone and no longer on needs, is a significant improvement.

References

- Akerlof, George A. 1978. The economics of "tagging" as applied to the optimal income tax, welfare programs, and manpower planning. *The American Economic Review* 68 (1): 8-19. Reprinted in 1984 in *An economic theorist's book of tales*, edited by George A. Akerlof, 45-68. New York: Cambridge University Press.
- Arrow, Kenneth J. 1951/1963. *Social choice and individual values*. New York: Wiley.
- Ashworth, John, and Bruno Heyndels. 1997. Politicians' preferences on local tax rates: An empirical analysis. *European Journal of Political Economy* 13: 479-502.
- Baumol, William J. 1967. Macroeconomics of unbalanced growth: The anatomy of urban crisis. *The American Economic Review* 57 (3): 415-26.
- Besley, Timothy, and Stephen Coate. 1992. Workfare versus Welfare: Incentive arguments for work requirements in poverty-alleviation programs. *The American Economic Review* 82 (1): 249-61.
- Besley, Timothy, and Anne Case. 1995. Incumbent behavior: Vote-seeking, tax-setting, and yardstick competition. *The American Economic Review* 85 (1): 25-45.
- Black, Duncan. 1958. *The theory of committees and elections*. Cambridge, UK: Cambridge University Press.
- Boadway, Robin, and Frank R. Flatters. 1982. Efficiency and equalization payments in a federal system of government: A synthesis and extension of recent results. *Canadian Journal of Economics* 15 (4): 613-33.
- Boadway, Robin, Nicolas Marceau, and Motohiro Sato. 1999. Agency and the design of welfare systems. *Journal of Public Economics* 73:1-30.
- Breton, Albert. 1965. A theory of government grants. *Canadian Journal of Economics and Political Science* 31 (2): 175-87.
- . 1987. Toward a theory of competitive federalism. *European Journal of Political Economy* 3 (1-2): 263-329.
- . 1996. *Competitive governments. An economic theory of politics and public finance*. New York: Cambridge University Press.

- Breton, Albert, and Angela Fraschini. 2003. Vertical competition in unitary states: The case of Italy. *Public Choice* 114 (1-2): 57-77.
- Buchanan, James M. 1952. Federal grants and resource allocation. *Journal of Political Economy* 60 (3): 208-17.
- Buchanan, James M., and Gordon Tullock. 1962. *The calculus of consent: Logical foundations of constitutional democracy*. Ann Arbor: University of Michigan Press.
- Büttner, Thiess. 2001. Local business taxation and competition for capital: The choice of the tax rate. *Regional Science and Urban Economics* 31:215-45.
- Flatters, Frank R., J. Vernon Henderson, and Peter Mieszkowski. 1974. Public goods, efficiency, and regional fiscal equalization. *Journal of Public Economics* 3 (2): 99-112.
- Johnson, Harry G. 1957. Factor endowments, international trade and factor prices. *Manchester School* 25 (3): 270-83.
- Lazear, Edward P., and Sherwin Rosen. 1981. Rank-order tournaments as optimum labor contracts. *Journal of Political Economy* 89 (5): 841-64.
- Lindahl, Erik. 1919/1964. Just taxation: A positive solution. In *Classics in the theory of public finance*, edited by Richard A. Musgrave and Alan T. Peacock, 168-76. London: Macmillan.
- Musgrave, Richard A. 1961. Approaches to a fiscal theory of political federalism. In *Public finances: Needs, sources, and utilization*, NBER, 97-122. Princeton, NJ: Princeton University Press.
- Nalebuff, Barry J., and Joseph E. Stiglitz. 1983. Information, competition, and markets. *The American Economic Review* 73 (2): 278-83.
- Oates, Wallace E. 1972. *Fiscal federalism*. New York: Harcourt Brace Jovanovitch.
- Panagopoulos, Epaminondas P. 1985. *Essays on the history and meaning of checks and balances*. Lanham, MD: University Press of America.
- Parsons, Donald O. 1996. Imperfect "tagging" in social insurance programs. *Journal of Public Economics* 62:183-207.
- Salmon, Pierre. 1987a. The logic of pressure groups and the structure of the public sector. In *Villa Colombella papers on federalism*, edited by Albert Breton, Gianluigi Galeotti, Pierre Salmon, and Ronald Wintrobe. *European Journal of Political Economy* 3 (1-2): 55-86.
- . 1987b. Decentralization as an incentive scheme. *Oxford Review of Economic Policy* 3 (2): 24-43.
- Samuelson, Paul A. 1943. Dynamics, statics, and the stationary state. *Review of Economics and Statistics* 25 (1): 58-68. Reprinted in *The collected scientific papers of Paul A. Samuelson* (Volume 1), 1966, edited by Joseph E. Stiglitz, 201-11. Cambridge, MA: MIT Press.
- . 1955. Diagrammatic exposition of a theory of public expenditure. *Review of Economics and Statistics* 37 (4): 350-55. Reprinted in *The collected scientific papers of Paul A. Samuelson* (Volume 2), 1966, edited by Joseph E. Stiglitz, 1226-32. Cambridge, MA: MIT Press.
- Samuelson, Paul A. 1982. Schumpeter as an economic theorist. In *Schumpeterian economics*, edited by Helmut Frisch, 1-27. London: Praeger. Reprinted in *The collected scientific papers of Paul A. Samuelson* (Volume 5), 1986, edited by Kate Crowley, 301-327. Cambridge, MA: MIT Press.
- Schaltegger, Christoph A. and Dominique Küttel. 2002. Exit, voice, and mimicking behavior: Evidence from Swiss cantons. *Public Choice* 113 (1-2): 1-23.

- Schumpeter, Joseph A. 1911/1934. *The theory of economic development*. Trans. Redvers Opie. New York: Oxford University Press.
- . 1942. *Capitalism, socialism and democracy*. New York: Harper Brothers.
- Scott, Anthony D. 1952. Federal grants and resource allocation. *Journal of Political Economy* 60 (6): 534-6.
- Spahn, Paul Bernd, and Oliver Franz. 2002. Consensus Democracy and Interjurisdictional Fiscal Solidarity in Germany, in *Managing Fiscal Decentralization*, Ehtisham Ahmad and Vito Tanzi, eds., 122-143. London and New York: Routledge.
- Tullock, Gordon. 1966. *Papers on non-market decision making*. University of Virginia: Thomas Jefferson Center for Political Economy.
- Wicksell, Knut. 1896/1964. A new principle of just taxation. In *Classics in the theory of public finance*, edited by Richard Musgrave and Alan T. Peacock, 72-118. London: Macmillan.

Albert Breton is a professor emeritus in the Department of Economics, University of Toronto, Ontario.

Angela Fraschini is a professor in the Dipartimento di Politiche Pubbliche e Scelte Collettive, Università del Piemonte Orientale "Amedeo Avogadro," Alessandria, Italy.