An Introduction to Decentralization Failure

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I. INTRODUCTION

If we discard the assumption that politicians and public sector bureaucrats are somehow motivated to maximize a social welfare function, as the most superficial observation of the world entreats us to do, the most important reason for decentralizing the public sector is that decentralization makes possible and, in effect, stimulates intergovernmental competition.[1] Indeed, once it is accepted that public officials are like everyone else in society in that they are motivated, to a significant degree at least, to pursue their own interest, intergovernmental competition is required for two different, if related, reasons: a) as a check on political power much like market competition acts as a check on corporate power; and b) as an invisible hand mechanism capable of producing a maximum of social utility.

It is very important to be clear about the foregoing. Decentralization minimizes organizational costs – the cost of signaling preferences, of moving between jurisdictions, of coordinating intergovernmental affairs, and of administration of governmental bodies – a minimization that Breton and Scott (1978) showed is needed to achieve an optimal assignment of powers. Decentralization leads to that outcome, because it supports intergovernmental competition which, in turn, impels politicians and public sector bureaucrats to do what is required to make organizational costs as small as possible or, equivalently, to supply goods and services (including redistribution) in the quantities and qualities desired by citizens (see Breton, 1996).

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[1] Richard Bird (1999) distinguishes between deconcentration, delegation, and devolution as three different institutional forms of decentralization. That is helpful. In what follows, the word decentralization corresponds to devolution in Bird's nomenclature. I acknowledge that in the presence of delegation (and, unlike Bird, I would add deconcentration), problems of principal-agent relationship may arise. However, since 1978, following work with Anthony Scott (Breton and Scott, 1978), I have placed considerable emphasis on coordination – an activity in which all governments of decentralized systems participate. There are many problems of coordination that look like principal-agent problems (see section III, subsection B). There is not that much distance between Bird's and my own views on this matter, whatever the language may initially disclose.

There is a literature which explicitly or implicitly argues that intergovernmental competition leads to inefficient outcomes (see, for example, Mintz and Tulkens, 1986; Wildasin, 1988) where inefficient means suboptimal from the point of view of maximum social welfare. Given that this literature is based on the assumption that governments maximize a social utility function, we should not be surprised at the conclusion it reaches. As I will argue in section III, it is possible for competition to generate inefficient outcomes even if we jettison the assumption that public officials seek the common good and replace it with the assumption that they are motivated by their own interest. That is, indeed, the main concern of this paper.

Before addressing that concern, I wish to note that even if the main argument in favor of decentralized governmental systems is the encouragement it gives to competition, decentralization may have other derivative beneficial effects. Contrary to first impressions, these are, however, very poorly understood; the whole subject begs for careful systematic research. Consider two such benefits which occupy a large space in the literature of what is still sometimes called fiscal federalism: a) that central governments can only supply goods and services in uniform quantities and qualities over their territory and that as a consequence decentralization permits non-uniform provisions that better match the preferences of citizens; and b) that the more junior the government, the closer it will be to the people and the better therefore it will meet their demands. The two arguments are sometimes conjoined. Both, I need not insist, are ultimately propositions about the real world that only empirical analysis can elucidate.

The first proposition was to my knowledge initially put forward by Alexis de Tocqueville (1835) and was brought into Public Economics by Wallace Oates (1972). It is a generally accepted argument.[2] In Oates, the uniformity assumption is satisfied as a matter of definition.[3] The argument put forward is that if the central government is able to replicate the supply of goods and services undertaken by junior governments, then "in terms of the *economic definition* of federalism set down in Chapter One, this is equivalent to the operation of a federal system with a decision-making unit for each jurisdiction ... It is for this reason that I [Oates] associate centralized decision-making with a uniform level of consumption of public goods across all jurisdictions" (p. 37, n. 9, my italics). Though the arguments is repeated in Oates's (1999, p. 1123) excellent recent essay, it is not, as definitional solutions seldom are, very convincing.

In more recent literature, the uniformity assumption continues to play a fundamental role in discussions of decentralization and appears to be taken as reflecting the real world. Alan Hamlin (1991), who diagnoses weaknesses in the conventional analysis of decentralization, nevertheless accepts that central governments are "constrained to adopt policies that apply uniformly across the entire population" (p. 194). Jacques Crémer *et al* (1995) take the assumption to mean that "the central government is assumed to be institutionally compelled to adopt a uniformity constraint in service delivery" – a constraint that signals "government failure" (p. 99). Paul Seabright (1996) rejects the strong formulation of the assumption as "empirically false", but claims value for a weaker

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[2] What follows is largely taken from Breton, Cassone, and Fraschini (1998).
[3] This point is also made by Walsh (1992, p. 5) in his complete and well-balanced survey of the literature.

version which states "that centralized political systems do tend to implement policies that are regionally more uniform than decentralized ones" (p. 63).

These statements notwithstanding, it is nevertheless difficult to know what the assumption really means. If we consider a single-tier unitary governmental system – one in which there is only one level of government and hence one central government – it makes little sense to assume that the unique government of that system is "obliged", "compelled", or "constrained" to, for example, remove snow where none actually falls. Seabright's formulation of the uniformity assumption is the only one that can possibly make sense in such a context. If we turn our attention to multi-tier governmental systems, even Seabright's weaker formulation of the assumption will not do.[4] The observation of some uniformity in these systems is not proof that more uniformity is provided than is required and/or desired by citizens. For example, in Canada the power to decide on capital punishment is federal and capital punishment is proscribed uniformly across the whole country, while in the United States the power is a state power, with "oversight" by the Supreme Court, and, as a consequence, there is considerable variation among states in the incidence of executions and in the manner of these executions. However, it cannot be assumed, but must be demonstrated, that Canadians are compelled to uniformity in this matter. In a fundamental sense, an American-type assignment regarding capital punishment was and remains available to Canadians, but so far they have not taken it. In Canada again, under the power it has to regulate the fisheries, the federal government not only implements different policies for different fish stocks, it also pursues different policy objectives on the Atlantic and Pacific coasts.

There are Samuelsonian (1954) public goods – such as international diplomacy, national defense (as deterrence), and exchange rate policies – which cannot easily be provided otherwise than uniformly. The observation of uniformity in regards to these services cannot be used as evidence that central governments are obliged to supply goods and services uniformly. There are also goods and services whose unit cost of production falls when they are produced uniformly and in large volume. Tax collection is an example. The observation of uniformity in these cases cannot either establish that central governments are compelled to uniform provision. Finally, there are goods and services which are neither public nor produced under conditions of decreasing unit costs, but are provided uniformly because citizens want a uniform provision. Among these we mention the right to a passport and the right to privacy. To say that the powers under which decisions in respect to the provision of these rights are made should be decentralized and diversified – in each case an easy thing to do – is to say that citizens can never have a preference for uniformity.[5,6]

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[4] It is not clear whether the uniformity assumption is supposed to apply only to central governments or whether it also reflects what provincial or state or even local governments do. The way that problem is dealt with is not without consequence (see Breton, Cassone, and Fraschini, 1998).

[5] Uniformity can also sometimes be found in the marketplace. A notorious example is the fixed uniform sales commissions that govern residential real estate transactions between sellers and brokers in Canada and the United States (and possibly elsewhere). For an attempt at explaining this uniformity, without assuming collusion, see Levmore (1993).

[6] The problem of uniform provision has an instructive counterpart in the marketplace. If one lives in Toronto and wishes to wear original Yves St-Laurent or Versace clothes, one had better travel to Paris or to

There are three institutions of governmental systems, which I label *concurrency*, *standards*, and *field administration* which shed considerable light on the question of uniform supply. Let us first look at concurrency. To understand the meaning of this institution, we must first be aware that what is assigned to jurisdictional tiers are powers, not policies. To have been assigned a *power* is to have been given the authority to design and implement *policies* in a particular domain. Authority over, say, agriculture or education is the authority to legislate in matters pertaining to these policy domains. It is because powers (not policies) are assigned that there is concurrency – that it is possible for a part of the authority to legislate in regards to agriculture and education to be centralized and at the same time for another part of that authority to be decentralized. Concurrency means that powers are shared to achieve a degree of uniformity consistent with technical requirements (publicness and scale economies) and the preferences of citizens, while sacrificing a minimum of diversity. But concurrency sheds light on uniformity in another way. Suppose that a central government is providing policies uniformly under the part of the authority it had been assigned and that the provinces or states are doing the same under the part they had been allotted, it would still not be possible to argue that the central government was compelled to uniformity as long as the degree of concurrency was adjusted to reflect changes in the relevant circumstances. The prevalence of concurrent powers is therefore *prima facie* evidence that central governments are not obliged to provide goods and services uniformly.

Let me now turn my attention to standards. Uniform minimum (or maximum) standards can be applied across the whole of a central government's jurisdiction in respect of certain dimensions of policies while allowing diversity in other dimensions. An example will clarify. In Canada, power over health, except for responsibility over military hospitals and health in the northern territories, is provincial. It is under that power that the provinces severally have provided their citizens with public health programs. There is, however, at the national level, an Act of the Canadian Parliament called the Canada Health Act which forces some uniformity on provincial programs. The federal government was not compelled to pass and implement that Act, except in the sense that if it had not done so it would have risked defeat at the ballot box. The Act which calls for some uniformity – minimum standards – in some areas is respectful of diversity in others. The presence of standards, like the use of concurrency, is evidence that central governments are not bound by a uniformity constraint – to the contrary, it shows that they have freedom in the matter.

Finally, there is field administration (sometimes also called field service).[7] Often central governments (say) assert control over the financing and the overall design of a policy, but give discretionary authority to an administrator in the field (to a prefect, say, as in France) who then implements the policy in a way that is respectful of local conditions. As a consequence, the policy – though formally uniform – is varied in its application. That institution also shows that central governments are not compelled to uniformity.

Milan, because in Toronto these designers' clothes are tailored to match the preferences of the local market. It seems easy not to be ruled by uniformity!

[7] This is what Bird (1999) calls delegation.

The second proposition, that which holds that local governments are closer to the people, rests on the notion that the preferences of individuals in smaller communities are more homogeneous than the preferences of individuals in larger ones. Casual evidence is not obviously supportive. The notion that the preferences of citizens in the provinces of Prince Edward Island and of Newfoundland are less homogeneous than those of the citizens of the city of Toronto with its more than 120 different ethnic groups is not a compelling one.

II. INTERGOVERNMENTAL COMPETITION

In the absence of collusion and other like impediments, governments compete horizontally with other governments located at the same jurisdictional level as the one they occupy and vertically with governments situated at jurisdictional tiers above and below them, if such exist. More precisely, it is elected and nonelected centers of power which make up compound governments that engage in competition. They do so by attempting to supply goods and services in quantities which, given their taxprices, match the quantities desired by citizens. Discrepancies between actual and desired supplies generate utility losses (k). To understand the role that these play in the analysis that follows, assume that the notion that those who inhabit these centers of power pursue their own interest is captured by the hypothesis that centers of power maximize expected consent ($\Updownarrow$).[8]

For center of power a, I define expected consent as the probability that citizen j will grant her consent to that center of power. Formally,

$$\Updownarrow_a = \mathsf{S}_{j = 1, 2, \ldots, J} \, \boldsymbol{f}^j_a \qquad\qquad 1 \geq \boldsymbol{f}^j_a \geq 0 \qquad\qquad (1)$$

in which $\boldsymbol{f}^j_a$ is the subjective probability of center of power a that j will grant it her consent.

I now borrow from the probabilistic theory of voting (see Calvert, 1986) the notion that the probabilities of consent ($\boldsymbol{f}^j_a$) are continuous and twice differentiable functions of the actions of centers of power, which in the present context means that they are functions of utility losses ($\boldsymbol{l}$). To be specific, I assume that there are N elected and non-elected centers of power, indexed n ($= 1, 2, \ldots, N$), and that the probability that citizen j will grant her consent to one of them, let us say center a, is a function of the utility losses which that center and the others impose on j. Therefore,

$$\boldsymbol{f}^j_a = \boldsymbol{f}^j_a (\boldsymbol{l}^j_a, \boldsymbol{l}^j_n) \qquad\qquad \forall \, j, n \neq a \qquad\qquad (2)$$

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[8] For elected centers of power, I presuppose that expected consent is proportional to expected electoral support or votes.

with $\partial f^j_a/\partial l^j_a < 0$ for all js and $\partial f^j_a/\partial l^j_n > 0$ for all js and all $n \neq a$. I also borrow from the probabilistic theory of voting the assumptions that the l^j_n functions are strictly concave in l_a and strictly convex in l_n (with $n \neq a$).[9]

A consideration of equation (2) reveals that centers of power necessarily compete with each other. In other words, equation (2) tells us that the probability that citizen j will give her consent to center of power a depends on what a does, but also on what some of the other N-1 centers of power do. Since these last centers must be assumed to be seeking their own advantage and not that of a, it follows that they will, of necessity, be competing with a and, incidentally, with each other. It also discloses that the electoral success of an elected center of power depends on the actions of other centers of power, including nonelected ones. To put it differently, the expected vote of an elected governing party can be adversely affected not only by the actions of opposition parties, but also by the actions of nonelected centers of power such as a supreme court, a commission of inquiry, or a central bank.

But the fortunes of a center of power such as a can also be affected by the actions of centers of power inhabiting governments that are horizontally and vertically positioned vis-à-vis center a. That is,

$$\underline{}^j_a = y^j_a (k^j_a, d^j_{gh}, d^j_{gv}) \qquad \forall j; h = 1,\ldots,H; v = 1,\ldots,V \qquad (3)$$

with g_h indexing governmental centers of power at the same tier as a, and g_v centers above and below a. d^j_{gh} and d^j_{gv} are surrogate measures of the utility losses suffered by j, consequent on comparing the benefits she derives from a with those she would get from a were that center of power doing what g_h and g_v are doing (see below for a discussion of the mechanism underlying this reality). If $y^j_{a1} = \partial \underline{}^j_a/\partial k^j_a$, etc., we have $y^j_{a1} < 0$ for all js, $y^j_{a2} > 0$ and $y^j_{a3} > 0$ for all js and all $g_h \neq a$ and $g_v \neq a$.

The conventional rationalization of horizontal intergovernmental competition is rooted in Charles Tiebout's (1956) model of preference revelation through fiscal mobility. There is, indeed, an enormous, mostly American, literature which has anchored a theory of federalism and decentralization on Tiebout mobility. Some, like Dieter Bös (1983), have argued that there is simply not enough fiscal mobility in the real world – at least outside the United States – to motivate a Tiebout-based theory of federalism and decentralization. However that may be, the difficulty with what we may call the Tiebout mechanism as a basis for a theory of federalism and decentralization is much more radical.

Fiscal mobility à la Tiebout is easily modeled in a world in which there is a central (federal) government and *only one* jurisdictional tier. If there are two jurisdictional levels in addition to the central government, a serious problem arises. How, under such circumstances, does a citizen who wishes to consume the bundle of goods and services made available by the government of Laramie, but does not like the basket supplied by Wyoming, choose where to reside? That citizen may find a Laramie-like bundle of goods

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[9] For criticisms of this assumption, see Usher (1994) and Kirchgässner (2000).

and services in a given city in the Canadian province of Saskatchewan, due north of Laramie and she may, in addition, very much like what Saskatchewan has to offer. She cannot, however, imagine herself consuming what Ottawa provides – it is Washington's basket of goods and services that she wants! What will that citizen do? Probably stay put in Laramie, Wyoming, U. S. A., thus generating zero mobility.

A consideration of real world democratic governmental systems reveals that not a single one has elected governments at less than three jurisdictional levels and that, indeed, most have more. If nonelected tiers are included (even if nonelected, they do provide goods and services), the number is much larger. For the mass of citizens, Tiebout mobility would be a nightmare – it is in all likelihood quite weak.

But if fiscal mobility à la Tiebout is a tenuous reed on which to hang a theory of federalism and decentralization, we have a strong alternative that can substitute for it. We owe that substitute to Pierre Salmon (1987a, 1987b) and for that reason I will call it the Salmon mechanism.[10] Salmon uses the economic theory of rank-order tournaments, initially proposed by Edward Lazear and Sherwin Rosen (1981) and refined by many others, to develop a mechanism to explain why governments are motivated to compete across tiers as well as within tiers. Greatly simplified, the Salmon mechanism can be summarized as follows: citizens use the information they acquire about the supply performance of one or more benchmark governments to appraise and evaluate the supply performance of their own governments. Opposition parties, therefore, have ready-made platforms, based on the same information as that of their citizens, from which to challenge incumbent governments. The latter's response is a manifestation of competition between them and the benchmark governments. For example, a citizen observes the performance of governments at tier i as it pertains to the supply of, say, road maintenance, education, research incentives, broadcasting, police protection, or health care, and compares that performance with the performance of governments at tier k. Because the citizen can influence government by granting or withholding consent, the governments at tier i and k are induced to compete in supplying whatever is the object of comparison.

III. DECENTRALIZATION FAILURES

In the older literature – the *locus classicus* being possibly Francis Bator's (1958) authoritative synthesis – market failures were associated with the "technocratic data", realities such as increasing returns and neighborhood effects. In the more recent literature – that which follows Ronald Coase's (1960) seminal contribution to the question – market failures have come to be imputed to one transaction cost or another (see Arrow, 1970, for one of the first formal explicitation of that position). That is the approach I will follow.

At the outset, I note that the decentralization failures I am concerned with pertain to the incapacity of intergovernmental competition to produce the most desirable outcome. Decentralization failures are, in other words, associated with factors that cause

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[10] The mechanism was independently rediscovered by Timothy Besley and Anne Case (1995) who, in addition, have empirically tested one dimension of the model, obtaining satisfactory results.

competition to break down or to produce undesirable outcomes.[11] I look at four such factors. I have tried to be exhaustive, but I cannot be certain that some significant factor has not escaped my attention.

A. INFORMATION COSTS

Information problems are pervasive both in the marketplace and in the public sector. I am concerned with only one of these problems here, namely that which may obstruct the operation of the Salmon mechanism and thus either bias or altogether impede intergovernmental competition. The proposition is a simple one: the higher the information costs the smaller will be y^j_{a2} and y^j_{a3} in equations (3) above – measures of the effect of the actions of benchmark governments on the consent j grants her own government. There is decentralization failure if the costs of obtaining information about the policies of benchmark governments are higher for more junior than they are for more senior governments.

This particular information problem has two sources. Donald Wittman (1995) has persuasively and correctly insisted on the role of oppositions as critics of governing parties in making information available to citizens. When oppositions lack resources, are weak, or are simply nonexistent, some basic relevant information about what benchmark governments are doing will not reach the public. The same will happen if the media do not report that information once oppositions have unearthed it. If the information reported is distorted – as was the case when the American media decided, some years ago, to inform its public about the "Canadian health system", the outcome may be even worse in that flawed policies may be implemented. Whether oppositions and media are as effective as providers of information about policies and policy-making of governments at the more junior tiers as they are of governments at more senior tiers is an empirical matter. However, if they are not and if powers are decentralized, there will be failure.

To say that knowledge of the influence oppositions and media have in conveying information about the policies of benchmark governments to citizens located at different jurisdictional levels is an empirical question, does not mean that one cannot use casual observation to form an opinion on the matter, only that one should be cautious in doing so. If I do a superficial evaluation of the information provided by oppositions and media about what benchmark local, provincial, and central governments do in Canada, it seems to me that I have to conclude, after noting that the information is not that good, that as regards Toronto, Ontario, and Canada, the information is worse regarding the first, and best for the last. If one believes that local governments should be given responsibility for the provision of much of what the public sector supplies – according to a shrewd analyst, all policies "except national defense, foreign policy, and surprisingly few others" (Bird, 1993, p. 211) – on the ground that local governments are closer to the people, that is have

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[11] It should be clear, therefore, that my concerns are totally different from those that have engaged the attention of Rémy Prud'homme (1995). A concern for decentralization failures does not bespeak of a preference for centralization any more than a concern for market failures reveals a preference for planning. Given the conventional framework of the discussion in which Prud'homme's critique is cast, I have nothing to add to Charles McLure's (1995) and David Sewell's (1996) apt rejoinders.

more information about local preferences, one must also be told how this information is acquired and, not unimportantly, why local governments would act on it if they had it.

B. COORDINATION COSTS

Decentralization of powers may cause interjurisdictional spillovers of both the benefits and costs of certain policies. If the costs of intergovernmental coordination are low, decentralization may still be possible, because coordination can internalize the spillovers.

Coordination costs vary through time as trust among politicians and public bureaucrats at different levels of government ebbs and flows, as the incidence and intensity of personality and other conflicts vary, and as the extent of free riding changes. It is virtually impossible to change the division of powers to match the variations in the above variables and in others like them. Consequently, one must expect to observe the presence of non-internalized positive and negative externalities, unexploited economies of scale, and so on more or less at all times. This signals decentralization failure. Whether such a failure calls for less decentralization can only be decided by weighing the marginal benefits against the marginal costs of centralization.

If decentralization is pursued as a "way of escaping from the traps of ineffective and inefficient governance" (Bird, 1993, p. 207), then the cost associated with the failure is the cost of more effective and more efficient governance. That sort of problem arises often when two or more policy objectives are pursued.

C. DIMINISHING SUPPLY COSTS

If the marginal cost of producing and delivering public sector goods and services were constant for all goods and services, the disparity in size of jurisdictional units – measured by per capita income or wealth as well as by the population size of provinces or states, regions, and localities – would *ceteris paribus* be of no consequence for intergovernmental competition. However, in general, the size distribution of units matters because for many goods and services the marginal supply costs are diminishing. That is also true of the marginal cost of tax collection, of bond finance, and of insurance premiums in matters such as art exhibitions and public buildings.

If powers are assigned to more junior levels of government and if a rule of political laisser faire is in effect, the smaller jurisdictional units at the more junior levels will lose capital and labor because they will not be able to compete. In the marketplace, firms in that position simply go bankrupt. Given that bankruptcy is not an alternative in governmental systems, citizens in the jurisdiction would be left to live resigned to their lot. We would have decentralization failure.

The remedy for this state of affairs need not be centralization, at least as this notion is usually construed. Cures for decentralization failures associated with diminishing supply costs are numerous. I mention four which are used in Canada, a decentralized governmental system in which the largest province is more than eighty-five times the size

of the smallest province, a reality that is compounded by the fact that six provinces are quite small relative to the other four.[12]

One of the oldest ways of dealing with diminishing marginal supply costs is through purchasing agreements. For example, in the case of police services in Canada, the larger provinces produce their own, while the smaller provinces (and the territories) purchase what they need by hiring the services of the federal police – the Royal Canadian Mounted Police.[13] In the case of tax collection, the federal government collects personal and corporate income taxes for some provinces and not others.[14] The list could be extended.

Another way of dealing with this type of decentralization failure is through the creation of consortiums that bring together a subset of provinces that adopt a common policy in some particular matter. The Canadian Atlantic provinces – New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland-Labrador – have created structures to deal, *inter alia*, with educational policy. A third way to approach the problem is through what has been called "asymmetric assignments". Through that device, the central government plays a different role in different provinces. In Canada, asymmetric assignments rule in road construction, export promotion, regional development, grants to the arts, and so on.

Finally, another very important way Canada has dealt with the decentralization failure that derives from diminishing supply costs is through the implementation of a program of equalization payments based on tax effort and population size. These equalization grants are unconditional and, since 1982, are entrenched in the Canadian Constitution.

D. DYNAMIC INSTABILITY[15]

In the literature of federalism, the phenomenon I consider in this subsection is known as a "race to the bottom". It is generally agreed that the expression is inappropriate (for example Wilson, 1996, Oates, 1999), but it is deemed to have such currency that it continues to be widely used. This consecration notwithstanding, I will refer to what I perceive to be the reality in search of an explanation as *dynamic instability*.[16] Anthony Scott (2000) has correctly in my view noted that the phenomenon is, at the theoretical level at least, the same as the "beggar-my-neighbor" tariff policies that were so widely implemented between the first and the second world wars. He could also have mentioned the competitive exchange rate devaluations that were prevalent during the same period. Scott, as does Oates (1999), mentions the literature on the setting of property taxes which appear to have responded to the same sort of forces.

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[12] Adding the northern territories – the Yukon, the Northwest Territories, and Nunavut – to the picture would only make the size distribution more skewed.

[13] Each province negotiates a separate contract with the federal government. In that way, uniformity in provision can be avoided.

[14] In this case also, uniformity is avoided by the existence of individual contracts.

[15] As will become apparent, decentralization failure that originates with diminishing marginal supply costs and that which has its source in dynamic instability have a family resemblance. They are, however, sufficiently different, it seems to me, to warrant separate treatment.

[16] In Breton (1996), I called the phenomenon a race to the bottom!

A number of scholars believe that races to the bottom are not *de facto* empirically important (see Oates and Schwab, 1988; Wilson, 1996; Oates, 1998, 1999; and Scott, 2000). I personally believe, to the contrary, that the presumption must be that the phenomenon, if not ubiquitous, is frequent. Indeed, tariff wars (Kindleberger, 1986), competitive exchange devaluations (Nurkse, 1944), and destructive tax competition (Break, 1967; Rowell-Sirois Royal Commission on Dominion-Provincial Relations in Canada, 1940[17]) during the 1930's did take place. I think it significant, in addition, that in the post-World War II era, we have not had serious tariff wars – some skirmishes but no wars – and no sustained competitive devaluations of currencies. This, I suggest, is not an accident. Indeed, a large literature (see, for example, Keohane, 1984; Kindleberger, 1986) attributes the relative stability of the post-war era in these areas to the existence of international bodies such as the GATT (now the WTO) and the IMF. I concur with the conclusions of that literature. The absence of tariff wars and of competitive devaluations point to dynamic instabilities that have been mastered.[18]

I do not propose a model of dynamic instability; I only want to suggest a different way of approaching the problem. To do so, I begin by assuming that the discrete trajectories – the histories – of expected consent for center of power or government a at time zero is $\Updownarrow_{a0}$. The time sequence of that state variable starting at $t = 0$ is:

$$(\Updownarrow_{at})_0^\infty = (\Updownarrow_{a0}, \Updownarrow_{a1}, \Updownarrow_{a2}, \ldots, \Updownarrow_{at}, \Updownarrow_{at+1}, \ldots) \qquad a = 1, 2, \ldots, N \qquad (4)$$

The change in the behavior of the system between discrete time intervals is given by:

$$\lambda\Updownarrow_{at} = \Updownarrow_{at+1} - \Updownarrow_{at} \qquad t = 0, 1, \ldots ; a = 1, 2, \ldots, N. \qquad (5)$$

If we assume that $\lambda\Updownarrow_{at}$ is determined by the state variable at time t, we can write:

$$\Updownarrow_{at+1} = \hbar(\Updownarrow_{at}) = \Updownarrow_{at} + f(\Updownarrow_{at}, \mathbf{m}_a) \qquad t = 0, 1, \ldots ; a = 1, 2, \ldots, N \qquad (6)$$

a first-order difference equation which profiles the trajectories of the system in which $\hbar$ is the structure of the process and $\mathbf{m}_a$ is a vector of parameters such as the sensitivity of group members in granting consent when utility losses vary (the first derivatives of equations such as (3)), and the size of groups.

The simplest structure of the process, inspired by the logic underlying equations (2) and (3), can be visualized by assuming two jurisdictions and two groups in each jurisdiction. Suppose that the government in one jurisdiction (*a*) responds to an action of the government in the other jurisdiction (*b*) and that this response increases the utility loss of one group in *a* while reducing it for the other group. The size of the response will depend

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[17] The origin of Canada's Equalization Payments system is to be found in that Report which diagnosed some instability in intergovernmental relations in Canada during the great depression and proposed the equalization grants, administered by the federal government, as a remedy for that instability.

[18] What is referred to as *Pax Americana* is certainly the product, as the expression implies, of American foreign policy. It is also, at least until recently, due in no small measure to the actions of the United Nations.

on the parameters in equation (6) – to repeat, the sensitivity of the groups in granting consent when utility losses vary, and the size of the groups. The government in b may or may not counter that response depending on the values of $\mathbf{m}_b$ it faces. Assuming that the marginal utility functions are diminishing in both directions (for gains and losses) as the size of the response increases, the system will generate trajectories determined by the values of $\mathbf{m}$. The challenge is to formulate a model that would allow us to examine under what values of $\mathbf{m}$ the system would converge to a stationary state or generate periodic cycles (would be ergodic), or would bifurcate and produce a nonperiodic behavior (become nonergodic).

Suppose that a system converges to a stationary state. It may, in that case, be far from the "bottom", but it may also be far from the "top". That could possibly explain what happened in Canada as regards securities regulation – a problem that is currently being recognized and for which alternative solutions are being considered, one in which the federal government is involved, another which would involve only the provinces. It could also possibly explain the situation that characterized the provincial management of natural resources, in particular the forests. In Canada, natural resources belong to the provincial governments. They do not belong in the sense that the power to legislate in the matter of resources belongs to the provinces – they belong to the provinces in the sense that they are owned by provincial governments. Until just a few years ago, the provincial governments literally gave the resources away in order to attract firms that would exploit these resources and not the equivalent resources in an other province. That instability was, to a considerable extent, put in check by the GATT and the check was reinforced by the FTA and NAFTA. All are cases of decentralization failure would then be understood to be originating in dynamic instability.

It is imperative that the virtues of decentralization – the capacity of competition to check the exercise of political power and the invisible hand mechanism it provides to nudge governmental systems toward optimality – be preserved to the extent possible. What are the remedies available to deal with the decentralization failures associated with dynamic instability? To my knowledge, two have been considered: a) centralization – that is a re-assignment of one or more powers to a higher jurisdictional tier (for example, Carey, 1974); and b) harmonization through, for example, the adoption of common standards (for example, Klevorick, 1996; Oates, 1998). The way the literature defines harmonization tends to make it a form of centralization. Both of these remedies are destructive of competition – whether they have worse effects than some types of instability is surely a possibility.

I would like to propose a distinction between the sort of harmonization discussed in the literature which we could call 'strong harmonization', and the sort we need to deal with dynamic instability while remaining respectful of decentralization and intergovernmental competition, which may be labeled 'weak harmonization'. Without going into questions of administration, let me suggest that this sort of harmonization is achieved through institutions that have the *de jure* or *de facto* power to intervene whenever the interaction among centers of power or among governments threatens to generate a dynamic instability in the system with negative effects such as those described above. The

intervention should not be one that alters the assignment of powers, simply one that deals with the instability.

There are many such institutions already in existence. Others could be created. A prime example of such an institution are federal or central governments. I illustrate. A few years ago, an American automobile manufacturer announced that it had decided to build a plant in Canada. It did not, it said, as yet know where it would locate the plant. The manufacturer, no doubt, wanted to ignite a bidding war between the provinces which could assume that they were eligible candidates, and it succeeded. However, the war was not allowed to progress because the Canadian government intervened by, in effect, bribing the likely losers to desist. That is a manifestation of weak harmonization which is respectful of decentralization. If the instability is chronic, it may require setting up standing tribunal-like institutions that will monitor the situation at all times and intervene when it is deemed necessary. The European Court and other tribunal at times have played that role.

IV. CONCLUSION

I have argued that the case for decentralization is the case for intergovernmental competition as an instrument to check the exercise of political power and as an invisible hand mechanism to move the public sector toward optimal outcomes. I have also noted that the "classic" benefits imputed to decentralization, though possibly real, are far from obvious. Decentralization, I have argued, may, however, sometimes fail. I have looked at four cases of decentralization failure. In each case, I have pointed, nothing more, to remedies that could deal with the failures while preserving decentralization and hence intergovernmental competition.

REFERENCES

Arrow, Kenneth J. (1970), "Political and Economic Evaluation of Social Effects and Externalities", in Julius Margolis, ed., *The Analysis of Public Output*, (New York: Columbia University Press, NBER), 1-23.

Bator, Francis M. (1958), "The Anatomy of Market Failure", *Quarterly Journal of Economics*, Vol. 72, No. 3, August, 351-379.

Besley Timothy and Anne Case (1995), "Incumbent Behavior: Vote-Seeking, Tax-Setting, and Yardstick Competition", *American Economic Review*, Vol. 85, No. 1, March, 25-45.

Bird, Richard M. (1993), "Threading the Fiscal Labyrinth: Some Issues in Fiscal Decentralization", *National Tax Journal*, Vol. 46, No. 2, June, 207-227.

Bird, Richard M. (2000), "Fiscal Decentralization and Competitive Governments", in Gianluigi Galeotti, Pierre Salmon, and Ronald Wintrobe, eds., *Competition and Structure. The Political Economy of Collective Decisions: Essays in Honor of Albert Breton*, (New York: Cambridge University Press), 129-149.

Bös Dieter (1983), "Commentary on Roger Gordon's 'An Optimal Taxation Approach to Fiscal Federalism' ", in Charles E. McLure Jr., ed., *Tax Assignment in Federal Countries*, (Canberra: Centre for Research on Federal Financial Relations, Australian National University), 43-47.

Break, George F. (1967), *Intergovernmental Fiscal Relations in the United States*, (Washington DC: Brookings Institution).

Breton, Albert (1996), *Competitive Governments. An Economic Theory of Politics and Public Finance*, (New York: Cambridge University Press).

Breton Albert and Anthony Scott (1978), *The Economic Constitution of Federal States*, (Toronto: University of Toronto Press).

Breton, Albert, Alberto Cassone, and Angela Fraschini (1998), "Decentralization and Subsidiarity: Toward a Theoretical Reconciliation", *University of Pennsylvania Journal of International Economic Law*, Vol. 19, No. 1, Spring, 21-51.

Calvert, Randall L. (1986), *Models of Imperfect Information in Politics*, (Chur, Switzerland: Harwood Academic Publishers).

Carey, William L. (1974), "Federalism and Corporate Law: Reflections Upon Delaware", *Yale Law Journal*, Vol. 83, No. 4, March, 663-705.

Coase, Ronald H. (1960), "The Problem of Social Cost", *Journal of Law and Economics*, Vol. 3, October, 1-44.

Crémer Jacques, Antonio Estache, and Paul Seabright (1995), "The Decentralization of Public Services: Lessons from the Theory of the Firm", in Antonio Estache, ed., *Decentralizing Infrastructure: Advantages and Limitations*, Discussion Paper No. 290, (Washington: World Bank).

Hamlin, Alan P. (1991), "Decentralization, Competition and the Efficiency of Federalism", *The Economic Record*, Vol. 67, No. 196, September, 193-204.

Keohane, Robert O.(1984), *After Hegemony. Cooperation and Discord in the World Political Economy*, (Princeton: Princeton University Press).

Kindleberger, Charles P. (1986), *The World in Depression, 1929-1939*, Revised and Enlarged Edition, (Berkeley: University of California Press).

Kirchgässner, Gebhard (2000), "Probabilistic Voting and Equilibrium: An Impossibility Result", *Public Choice*, Vol. 103, Nos. 1&2, April, 35-48.

Klevorick, Alvin K. (1996), "Reflections on the Race to the Bottom", in Jagdish Bhagwati and Robert E. Hudec, eds., *Fair Trade and Harmonization. Prerequisite for Free Trade?*, Volume 1, Economic Analysis, (Cambridge MA: The MIT Press), 459-467.

Lazear, Edward P. and Sherwin Rosen (1981), "Rank-Order Tournaments as Optimum Labor Contracts", *Journal of Political Economy*, Vol. 89, No. 5, October, 841-864.

Levmore, Saul (1993), "Commissions and Conflicts in Agency Arrangements: Lawyers, Real Estate Brokers, Underwriters, and Other Agents' Rewards" *Journal of Law and Economics*, Vol. 36. No. 1, Pt 2, April, 503-539.

McLure Jr., Charles E. Jr. (1995), "Comment on 'The Dangers of Decentralization' by Prud'homme", *World Bank Research Observer*, Vol. 10, No. 2, August, 221-226.

Mintz, Jack and Henry Tulkens (1986), "Commodity Tax Competition Between Member States of a Federation: Equilibrium and Efficiency", *Journal of Public Economics*, Vol. 29, No. 2, March, 133-172.

Nurkse, Ragnar (with William A. Brown) (1944), *International Currency Experience*, (League of Nations).

Oates, Wallace E. (1972), *Fiscal Federalism*, (New York: Harcourt Brace Jovanovich).

Oates, Wallace E. (1998), "Environmental Policy in the European Community: Harmonization or National Standards?", *Empirica*, Vol. 25, 1-13.

Oates, Wallace E. (1999), "An Essay on Fiscal Federalism", *Journal of Economic Literature*, Vol. 37, No. 3, September, 1120-1149.

Oates, Wallace E. and Robert M. Schwab (1988), "Economic Competition Among Jurisdictions: Efficiency-Enhancing or Distortion-Inducing?", *Journal of Public Economics*, Vol. 35, No. 3, April, 333-354.

Prud'homme, Rémy (1995), "The Dangers of Decentralization", *World Bank Research Observer*, Vol. 10, No. 2, August, 201-220.

Report (1940), Royal Commission on Dominion-Provincial Relations – the Rowell-Sirois Report, (Ottawa: Queen's Printer, 1954).

Salmon, Pierre (1987a), "The Logic of Pressure Groups and the Structure of the Public Sector", in Albert Breton, Gianluigi Galeotti, Pierre Salmon, and Ronald Wintrobe, eds., *Villa Colombella Papers on Federalism, European Journal of Political Economy*, Vol. 3, Nos. 1&2, 55-86.

Salmon, Pierre (1987b), "Decentralization as an Incentive Scheme", *Oxford Review of Economic Policy*, Vol. 3, No. 2, Summer, 24-43.

Samuelson, Paul A. (1954), "The Pure Theory of Public Expenditure", *Review of Economics and Statistics*, Vol. 36, No. 4, November, 387-389.

Scott, Anthony D. (2000), "Assigning Powers over the Canadian Environment", in Gianluigi Galeotti, Pierre Salmon, and Ronald Wintrobe, eds., *Competition and Structure. The Political Economy of Collective Decisions: Essays in Honor of Albert Breton*, (New York: Cambridge University Press), 174-219.

Seabright, Paul (1996), "Accountability and Decentralization in Government: An Incomplete Contracts Model", *European Economic Review*, Vol. 40, No. 1, January, 61-89.

Sewell, David O. (1996), " 'The Dangers of Decentralization' According to Prud'homme: Some Further Aspects", *World Bank Research Observer*, Vol. 11, No. 1, February, 143-150.

Tiebout, Charles M. (1956), "A Pure Theory of Local Expenditure", *Journal of Political Economy*, Vol. 64, No. 5, October, 416-424.

Tocqueville, Alexis (1835-1840/1969), *Democracy in America*, Translated by George Lawrence (Garden City, NY: Doubleday Anchor Books.

Usher, Dan (1994), "The Significance of the Probabilistic Voting Theorem", *Canadian Journal of Economics*, Vol. 27, No. 2, May, 433-445.

Walsh, Cliff (with contributions by Jeff Petchey) (1992), *Fiscal Federalism. An Overview of Issues and a Discussion of their Relevance to the European Community*, (Canberra: Federalism Research Centre).

Wildasin, David E. (1988), "Nash Equilibria in Models of Fiscal Competition", *Journal of Public Economics*, Vol. 35, 229-240.

Wilson, John Douglas (1996), "Capital Mobility and Environmental Standards: Is There a Theoretical Basis for a Race to the Bottom", in Jagdish Bhagwati and Robert E. Hudec, eds., *Fair Trade and Harmonization. Prerequisites for Free Trade?*, Volume 1, Economic Analysis, (Cambridge MA: The MIT Press), 393-427.

Wittman, Donald (1995), *The Myth of Democratic Failure. Why Political Institutions Are Efficient*, (Chicago: University of Chicago Press).