

# **Decentralization and growth: has the cross-country approach met a dead end?**

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## **Abstract**

The relationship between decentralization and economic growth is generally studied from a perspective stressing universal or quasi-universal regularities across countries. That approach has generated many insights but seems to reach its limits. The paper explains why it allows contrasting positions with regard to the benefits of decentralization even among proponents of free and competitive markets. And it seems from the empirical literature that no robust and economically significant cross-country relation between decentralization and economic performance or growth, except perhaps their independence, has been found. The absence of a relation valid across countries, however, does not entail the absence of relations specific to each country. That possibility justifies exploring a second approach. When country specificity is very strong, and in spite of some recent empirical work on single-country data, it is normally difficult to say, for any given country, if there is a relation between its observable decentralization arrangements and its observable economic performance. However, this may be different under particular circumstances reflecting disequilibrium. Some episodes, related to the way the people and governments respond to persistent economic underperformance, and the way decentralization arrangements then change, may allow a presumption that, in these cases, the relation exists. That presumption is to be verified by case studies.

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## I. Introduction

Is there a relation between decentralization and economic performance and especially growth? The case of China comes to mind. It has been claimed that economic growth in that country has much to do with the way it has organized the relationship between central and regional and local authorities (Xu 2011 and the references therein). China is particularly salient but the relation between a country's decentralization arrangements and its economic performance plays a role in the discussion of the economic situation and prospects of many individual countries. It has also been widely discussed in general terms.

The dominant approach to the relationship between decentralization and economic performance -- economic growth, to simplify<sup>1</sup> -- has consisted in a search for universal or general regularities, expressed in an abstract way or specified to apply across countries. That approach has been fruitful in many ways but it may be getting near its limits.

We will return to the reasons why this is so but the limits of the approach can be illustrated at the outset with the help of two examples. At a level of semi-ideological, policy-oriented, discourse, it has proved generally tempting to derive a positive relation between decentralization and economic growth from two underlying relations: one between decentralization and 'preservation of markets', to use Weingast's expression (1995); the other between enhanced markets and faster economic growth. But, even if we focus on the first relation, the matter is not so simple. To preserve or foster markets, should we rely on decentralization, as suggested by Weingast – and attempted by Ronald Reagan? Or should we increase centralization as did Margaret Thatcher and is insistently recommended in the context of the European Union (EU)? That dissimilarity may involve deep-seated differences in the interpretation of how governments and markets operate. In any case, it makes generalizing about what many consider an essential link between decentralization and macroeconomic performance somewhat doubtful.

The second instance concerns the empirical literature. A number of cross-country studies have found no relation, or only a weak (positive or negative) relation, between decentralization and economic growth (see, *e.g.*, Davoodi and Zou 1998, Woller and Phillips 1998, Martinez-Vazquez and McNab 2003, Thornton 2007, Bodman 2009, Baskaran and Feld

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<sup>1</sup> We think of something like medium to long term economic growth, corrected perhaps by some account for initial income levels. More precision is unnecessary.

2009).<sup>2</sup> If confirmed by future work, that is a valuable result in itself. But it is the way the result is sometimes expressed which is the most interesting for our purpose. Thus Baskaran and Feld (2009) summarize their findings on OECD countries by stating that “*fiscal decentralization is unrelated to economic growth*”.<sup>3</sup> Such a formulation seems perfectly natural or acceptable within the cross-country approach. But because we cannot believe that, in each country, there is really no relation between decentralization and growth, we will argue that the apparent acceptability of the formulation reveals the limits of the said approach. ‘*No relation*’ found or established in cross-country studies does not imply ‘*no relation*’ tout court.

The purpose of the paper is double. As indicated, it will mainly elaborate on the limits of what we have called the dominant approach to the relation between decentralization and economic performance, focused on a search for quasi-universal, law-like generalizations across countries. But, as a second, complementary, theme, it will also explore a different approach, directly centered on the possibly overwhelming idiosyncratic nature of each country. In cross-country studies, the specific nature of each country is usually addressed by introducing fixed effects or by undertaking to make explicit in the regressions some specific characteristics of the country. This often works. By ‘overwhelming’ we mean that the specificity is such that these practices fail to uncover a significant cross-country correlation between some measure of decentralization and performance although a significant relation may exist in each country. By definition, the problem cannot arise in the case of single-country empirical studies exploiting time series. But these single-country studies have other problems. We will explain why we distrust those among their findings which concern the relation of interest here.

In fact, we will argue that it is generally difficult to figure out the role played by decentralization arrangements in the macroeconomic performance, good or bad, of a given country. As a rule, if macroeconomic performance is good, all we might say is that, whatever they are, the decentralization arrangements in force have proved not to be a decisive obstacle to performance. If macroeconomic performance is bad, then the decentralization arrangements in force might have some responsibility in the outcome.

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<sup>2</sup> Some studies (e.g., Iimi 2005) do find a robust and significant relation. For extensive references to the empirical literature, see Breuss and Eller (2004), Feld *et al.* (2007), Feld and Schnellenbach (2011) and Esteban-Laleona *et al.* (2011).

<sup>3</sup> In fact, the authors find some relation in income levels. No criticism of the paper, which is quite interesting and convincing, is implied by the fact that it is used as an example. Similar ways to summarize negative findings are current in applied economics.

Can we never say anything more? We might albeit only under some particular circumstances. If we have some grounds to suppose that people in office in a country have an incentive to seek a good economic performance of the country, then we may assume that they know better than we do how to achieve that objective in the particular setting of the country. The proposition is not normally verifiable. But it may yield a presumption about the existence of the sought relation in episodes characterized by disequilibrium and change. Governments may make mistakes and/or be unable or unwilling to do what they think best for economic performance. In addition there are shocks. Thus there is no reason to assume that arrangements are always at equilibrium. We will concentrate on a particular kind of disequilibrium reflected in macroeconomic underperformance. We will formulate the hypothesis that serious and enduring macroeconomic underperformance will sooner or later trigger changes, and if these changes include changes in decentralization arrangements, this strengthens the presumption that a relation between decentralization arrangements and macroeconomic performance exists in the country. The inference should of course be verified by an in-depth study of the episode.

The paper is organized as follows. In Section II, we return to the question, synthesized above as an illustration, of whether it is centralization or decentralization which helps preserve or enhance markets. That question is central to our subject because of the widely shared supposition that enhancing markets also enhances growth. An important consideration is that real political decentralization, whatever its merits, has the side effects of fragmenting markets and distorting competition. Given these side effects, we discuss contrasting positions among partisans of markets. We also discuss how Weingast's theory of market preservation has evolved into a theory of growth-enhancing incentives in government. Our overall assessment of that part of the literature is that it largely fails in its objective of stating really robust law-like regularities relevant for growth.

Section III is a more general discussion of what we called the dominant approach, based on a mostly statistical search for universal or cross-country regularities. The achievements of the work done within the approach are remarkable in many ways, especially if we associate to it studies of effects of decentralization on variables like fiscal discipline, corruption or education levels, distinct from but related to economic performance. The empirical exposure of some dynamic effects is an instance. We note some of these achievements, indicate some characteristics of the approach, and return more in detail than above to its limits. An important by-product of the search for effects is an increased awareness of the

multidimensional and complex nature of the phenomenon. A response to that complexity has been the design of synthetic indicators, but in the context of this paper the complexity explains why we use the expression “decentralization arrangements”.

The second approach, focused on country-specific relations between decentralization arrangements and economic performance, is discussed in Section IV. We have already presented the main idea. We argue that relations of that kind can be identified or detected in particular circumstances only. We present a simple framework in which that can be achieved. Yardstick competition and growth trajectories play a major role in that framework. The empirical investigation suggested then is based on particular growth trajectories combined with case studies. Concluding comments are presented in Section V.

## **II. Preserving markets by decentralization, or by centralization?**

General opinions about economic governance involve beliefs about the nature of government and the nature of markets. In this section, we concentrate on the question of how views on political decentralization are often associated with such beliefs. We consider only differences within the liberal (*i.e.*, pro-market) doctrines. The general idea is illustrated in Table 1. Column 1 represents the idea that governments, if unchecked, are fundamentally predatory or a prey of interest groups, including their own bureaucracies. As a consequence, it is essential to find mechanisms that constrain government. To ‘tame the Leviathan’, the solution sought relies on mobility-based competition among subcentral governments together with constitutional limits to what they may do (Brennan and Buchanan 1980, Weingast 1995). The view, more traditional among economists, that governments are instruments which can be dangerous but may also be trusted to perform some indispensable tasks pertaining to economic governance is expressed in Column 2. Line 1 represents the view that markets must be competitive in a kind of neo-classical sense: no impediments to trade or exchange of goods and services and factors and no distortion of competition among business firms (there should be a ‘level-playing field’). Line 2 corresponds to a more relaxed view of market competition, stressing dynamic aspects (more or less as suggested from the Austrian perspective). The four combinations that ensue have different implications with regard to political decentralization or centralization.

*[Table 1 about here]*

Two characteristics of modernity are particularly relevant for our purpose. First, the question of internal free trade or common market completion within a single country (or, for that matter, within the EU) is not about border impediments to exchanging material goods but about non-border impediments to the mobility of factors and exchanging services. Second, in contemporary democracies, the population is accustomed to levels of regulation, public services and welfare provisions drastic reductions of which are politically unfeasible; in other words, the role of the state has little to do with what it was in the nineteenth century and ambitioning to return to what it was then is utopian (see Rodden and Rose-Ackerman 1997).

A consequence of the two points is that the first combination (noted 1.1) in Table 1 is unfeasible. If there is political decentralization, policies demanded by the public, and consequently policies provided by subcentral governments, will fragment and distort markets in ways that are incompatible with completing the internal market in the ('neo-classical') sense given to that task in Line 1.<sup>4</sup> In other words, the two requirements are incompatible. One of the two must yield. If it is the requirement about competition which gives way, we move to combination (2.1) in Table 1: taming the Leviathan by political decentralization and mobility-based competition among subcentral governments under a conception of competitive markets that allows for some impediments to trade and distortions of competition. If the requirement which is relaxed is the one about government, we move to combination (1.2): reliance on political centralization to satisfy the incompressible demand of the population for public services and regulation and, at the same time, to maintain or promote a complete internal market -- that is, at the same time, to eliminate all barriers to trade and distortions of competition. In the case of combination (2.2), the level of political decentralization is, in our framework, indeterminate.

The taxonomy is useful to explain the difference between Reaganomics and Thatcherism with regard to political centralization or decentralization. The first corresponds

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<sup>4</sup> See Breton and Salmon (2001). Genuine political decentralization both fragments markets and distorts competition among firms. This is necessarily so whenever subcentral governments, whether regional or local, are given significant powers and autonomy, and in particular are encouraged to undertake innovative policies (a good thing). Even when efficiency-enhancing and market-friendly, these policies generate differences in regulation and taxation across regions. Such differences may be also a consequence of differences in local conditions, including political equilibrium. Whatever their causes, regional differences in regulation will generate non-tariff impediments to the exchange of services and the movement of factors across regional borders. Competition among subcentral governments to attract people or investments takes the form of state aids, tax holidays and various forms of in kind support. All have in common the consequence, at least as a side effect, of distorting competition among firms – and thus of precluding the maintenance or establishment of a perfectly “level-playing field.” Observation of decentralized federations such as Canada and Switzerland, in which the question of the internal common market is recurrently on the agenda, confirms these facts. And so does, to a lesser degree, observation of the United States.

to combination (2.1) – or, from a dynamic perspective, to a move from combination (2.2) to combination (2.1). The second corresponds to combination (1.2), or to a move from (2.2) to (1.2). Political decentralization in the first case, political centralization in the second, in both cases as a manifestation of economic liberalism. In the case of Thatcher, the logic manifested itself a little in the United Kingdom (UK) but mostly at the level of the EU. At that level, the objective of “completing the internal market” was almost enthusiastically endorsed by the British Conservatives, especially on the occasion of the Single Act of 1986. It has been and still is the main engine of centralization in favor of Brussels. Admittedly, hostility, not to centralization in general but to its expression in the EU context imposed some limits to the actual movement (in the UK the limit resulted from the fact that the country was already very centralized). In the case of Reagan, decentralization was eventually limited not only because the country was already very decentralized, but also because of the need for some government level to respond to demands without that response being the cause of excessive impediments to internal competition and trade.<sup>5</sup> In both cases conflicting concerns and necessities of compromise limited the magnitude of the changes. It remains that they were divergent.

The framework presented above is useful also to interpret the system advocated by Weingast (1995) under the name of “market-preserving federalism”. In it, “the authority to regulate markets is not vested with the highest political government in the hierarchy” and “the lower governments are prevented from using their regulatory authority to erect trade barriers against the goods and services from other political units”. According to the author, that was more or less the system adopted in the United States in the nineteenth century and then it was constitutionally entrenched and enforced by the Supreme Court. The basic underlying mechanism, in Weingast’s contributions of that period, is that of mobility-based competition, more or less as in Brennan and Buchanan (1980). Its virtues were presented as follows by Qian and Weingast (1997, p. 88): ‘Just as market competition pressures firm managers to reflect the interests of shareholders, competition among local governments helps to limit government’s predatory behavior. Mobile resources can quickly leave jurisdictions with inappropriate behavior. Competition for mobile sources of revenue prevents local political leaders from imposing debilitating taxes or regulation.’

Where should we put ‘market-preserving federalism’ in the framework of Table 1? There are two possibilities. We can decide that it corresponds to combination (1.1), and assert that it is not and cannot be realized or approximated in the contemporary world (the

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<sup>5</sup> See Rose-Ackerman (1991, p. 163).

nineteenth century is another matter).<sup>6</sup> Or we can categorize it as combination (2.1), and concede that it may preserve markets albeit only inasmuch as this is understood in the less demanding sense used to define that combination. Because Weingast illustrated ‘market preserving federalism’ not only with the experience of the United States in the nineteenth century, but also with the system currently in place in Communist China, the second interpretation probably corresponds better to what he had in mind.<sup>7</sup>

Anyhow, in recent years, there has been a shift in Weingast’s analyses, reflecting perhaps a more general evolution in the focus of the debate to which they purport to contribute. In his more recent writings (*e.g.*, Jin, Qian and Weingast 2005, Weingast 2009), pro-market policies are no more in the fore. They are subsumed under pro-growth policies. Decentralization is claimed to be an essential component in the economic success of the Chinese system because, in that system, subcentral governments are given a large share of the surplus generated by growth. Given the actual rate of growth, that distribution of the surplus may be claimed to have provided subcentral governments with a financial incentive to adopt pro-market policies if one thinks that pro-market policies are mainly responsible for economic growth. If one has a more qualified opinion, the incentives given to these governments by the distribution of the growth surplus may still be deemed important by having induced them to adopt the policies which they thought, correctly, to be the best for growth, whether or not these policies were pro-market.

The argument, however, may reflect a continuing distrust of central government. As noted by Treisman (2007, p. 12 and p. 148), an implication of a larger share of the surplus given to subcentral jurisdictions is a smaller share retained by central government, whose incentives to adopt pro-growth policies are, following the logic, diminished as a consequence. But, if there is no reason to distrust central governments more than subcentral ones, one may interpret Weingast’s financial incentives approach as relevant not for the justification of political decentralization but for the way financial resources should be shared in an already existing decentralized system. In fact, a generalized interpretation of his argument could be simply that financial incentives should follow the assignment of competencies, nothing being logically asserted about the assignment itself —as (as we just saw) nothing is really implied by the financial incentives argument regarding the role of markets.

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<sup>6</sup> Bird and Vaillancourt (2006) adopt that interpretation when they write: “It should be understood that Canada is not, and never has been, a full internal common market’ and ‘Regulatory federalism in Canada... does not easily fit the Weingast (1995) conception of ‘market-preserving federalism’.”

<sup>7</sup> Whether Weingast’s interpretation of the Chinese system is compelling is another matter. See Xu (2011).



### III. Cross-national generalizations: a more general discussion

The contributions we associate with that approach are numerous and varied. They include verbal argumentations such as the theory of ‘market-preserving federalism’ discussed in Section 2, purely theoretical models such as Brueckner (2006), many quantitative studies. That variety of styles and methods raises no particular problem. But three characteristics of the work covered by the approach are important for our discussion. We present them briefly before turning to the achievements and limits of the approach.

#### *3.1 Three characteristics of the first approach*

First, it must be observed that a considerable amount of work has been done not directly on the relation between decentralization and economic performance but on the relation between decentralization, or some dimensions thereof, and variables themselves thought, often in a different part of the literature, to have an effect on economic performance. For convenience, we refer to these variables as ‘intermediate variables’. They may be a proper functioning of markets (as we saw in Section 2), the size of the public sector (see Rodden 2003, Ashworth *et al.* 2009a, Cassette and Paty 2010 and the references therein), corruption (Fisman and Gatti 2002, Fan *et al.* 2009, Dincer *et al.* 2010 and the references therein), service delivery and education level (Barankay and Lockwood 2007), and so on. The relationship between decentralization and any of these variables is usually interesting and important in itself, but it is also treated as relevant for growth in many discussions. Thus, although our subject is the relation between decentralization and economic growth, we cannot ignore the work done on the relation between decentralization and at least some of the ‘intermediate variables’.

Second, although mostly concerned with decentralization’s *effects*, the dominant approach (understood broadly as indicated) has given us a better understanding of decentralization’s complex *nature*. Many dimensions of decentralization have emerged as essential determinants or preconditions of effects. As a consequence, decentralization and federalism are now discussed as multifaceted phenomena (Voigt and Blume 2012). Some aspects of the complexity have always been analyzed -- for instance, decentralization varying across policy areas (education, health, etc.) and even tasks therein (provision, infrastructure, personnel, regulation, etc.). But the importance of other dimensions, such as the degree of tax autonomy, has been stressed only relatively recently. It has been also acknowledged that

many dimensions can be apprehended only in qualitative or even counterfactual terms.<sup>8</sup> That is true even if we confine our attention to purely fiscal variables. Relying on a single quantitative indicator such as the ratio between subcentral and total government spending, which was a standard practice, seems hardly acceptable anymore (Rodden 2003, Stegarescu 2005).

There is currently an effort to devise synthetic indexes of decentralization taking into account several dimensions -- fiscal ones (Stegarescu 2005, Ashworth *et al.* 2009a), as well as others (Hooghe *et al.* 2008). Such indicators are most welcome for the empirical search of cross-county regularities. Their availability increases the reliability and relevance of the work done under the first approach. But we are not in the same position, especially in view of the approach to be discussed in Section IV. Thus, as noted in the Introduction, we prefer to use the expression ‘decentralization arrangements’,<sup>9</sup> which has the advantage of covering all the multilevel configurations of powers, tasks, resources, relations, etc. that we can observe or imagine, including, at the limit, the simplest of all: full *centralization*. The expression refers to *states*. To capture the *process* or dynamic dimension, we use the expression ‘changes in decentralization arrangements’, which allows taking into account changes that are purely qualitative and informal.<sup>10</sup>

Third, normative or policy concerns lie in the background of most discussions and are often a major motivation underlying the search for cross-country generalizations. Because, in much of economics, economic growth now plays the role that efficiency or welfare used to play earlier, many apparently positive analyses referring to growth are de facto inspired by, or assessed from, a policy perspective. In the case of decentralization, the salience of policy concerns also reflects the influence of international organizations such as the World Bank, which have been stressing, over many decades, the merits of decentralization in general and its favorable effects on development in particular (see some references in Treisman 2007, pp. 1-4).

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<sup>8</sup> To what extent would subcentral governments be allowed to adopt policies different from those they implement? When they perceive some taxes, to what extent could they change their bases and/or their rates? Etc.

<sup>9</sup> More or less synonymous with what Breton (1996) calls the ‘organization of the governmental system’ and Treisman (2007) the ‘architecture of government’.

<sup>10</sup> In many parts of the paper, however, we do go on using the terms ‘decentralization’ and ‘centralization’. This is generally only for convenience, or because this is how the matter is addressed in the literature which is being discussed. It may also be the case that the context of the discussion is not directly reality but an abstract framework in which a degree of decentralization can be defined along a single dimension. And, even in the case of complex decentralization arrangements, degrees of decentralization or centralization may be unambiguous if there is sufficient commensurability. A sufficient condition for commensurability involves a *ceteris paribus* clause: nothing changes except along the dimension(s) discussed.

### ***3.2 Achievements***

The achievements of the empirical search for cross-country generalizations are impressive. First, there has been considerable progress in that area with regard to econometric modeling, estimation techniques, and interpretation. Reverse causality and measurement errors are problems that are now addressed routinely. Several combinations of methods and assumptions are presented and robustness is checked or discussed. Caution in the interpretation of the results is recommended by the authors themselves. Only a few years ago, most empirical studies were based on cross-section regressions, which reflected a comparative statics perspective and more or less assumed all the variables to be stable – a very unrealistic assumption as far as growth is concerned, as we will see in Section 4. More recent cross-country studies use panel data with country or period fixed-effects, and some concentrate on effects over time. Contributions display increasing econometric know-how. Many techniques discussed and used in a panel data context are only a few years old (see Ashworth *et al.* 2009a, Cassette and Paty 2010, *e.g.*).

Second, very important insights on effects of decentralization arrangements have been gained. We leave for the next subsection the assessment of the negative results mentioned in the Introduction. The most assured positive assertions of regularities concern ‘intermediate variables’, not directly growth. We note here a few of these insights and discuss in the next subsection the way they may affect our discussion. A strong and important result is that effects of more decentralized government spending depend very much on the way it is funded. Common tax bases and shared revenues may raise a ‘common pool’ problem, with governments competing among themselves to increase their share (Von Hagen 2006 and references therein). Grants and horizontal transfers dilute the responsibility or accountability of subcentral governments. Under these conditions, expenditures decentralization may have perverse effects. For supposedly beneficial effects to obtain (with regard to excessive public spending, corruption, etc.), it is preferable that subcentral governments finance their expenditures as much as possible by specific taxes decided autonomously. In other words, decentralization should concern spending and revenue simultaneously. There is a substantial empirical support for that analysis (Rodden 2003). It applies to decentralization in general or to decentralization in particular domains such as health, education, etc. (Ashworth *et al.* 2009b).

Another interesting empirical result concerns the dynamics of decentralization -- a new development allowed by the availability of time series and technical progress in the treatment of panel data (Cassette and Paty 2010). Several studies show that the effects of changes in decentralization arrangements on some “intermediate variables” are different in the short and the long run. Thus, more decentralization may increase public spending in the short run but decrease it in the long run (Ashworth *et al.* 2009a). The analysis of the trajectories generated by or associated with decentralization is an important contribution of these studies *within* the first approach. Trajectories or dynamic patterns of another kind will play a major role in Section IV.

### **3.3. Limits**

We consider first positive assertions of effects regarding the ‘intermediate variables’. As noted, important results have been obtained. However, it must be stressed that their implications for economic growth are much less straightforward than is often believed. It seems now established that financing decentralized spending by grants, rather than by taxes decided autonomously by subcentral governments, reduces financial discipline and political accountability. It is also possible that discipline and accountability, in addition to their own virtues, have positive effects on economic performance. However, grants have other effects that may be desirable from the perspective of the economic growth. For instance, they may be a way to increase overall spending on education or infrastructures, or to orient such spending in a direction particularly favorable to growth. More indirectly, grants may be necessary to obtain sufficient popular and political support for growth-enhancing policies.<sup>11</sup>

Another example is the often stressed ideal of a distribution of responsibilities among levels of governments sufficiently clear-cut, transparent and binding, so as to prevent that several levels of government be involved and make decisions in the same policy areas (see Brosio 2007). That is an old and familiar recommendation. The virtues of such steadfast assignments, if they could be achieved, would be again accountability plus avoidance of what looks like wasteful duplication and confusion of efforts -- with a favorable effect on fiscal discipline and possibly on economic growth. But the argument neglects the virtues of vertical competition à la Breton (1996), allowing inaction or inefficient action at one level to trigger an involvement of other levels, multiplying points of access to public services for citizens and business firms, inducing policy innovations, and possibly, in the end, enhancing economic

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<sup>11</sup> See Fiva (2006) for a possible impact of tax revenue decentralization on social transfers and redistribution.

growth. Some degree of confusion may be a price to pay for Breton's vertical competition to operate fully -- possibly in a way favorable to overall economic performance.

We turn now to the negative result about the relation between decentralization and growth mentioned in Section I. The phrasing of the citation from Baskaran and Feld (2009) was somewhat blunt. The fact that all economists understand what it means and find it perfectly natural should alert us about the epistemic significance of cross-area generalizations. As noted, the negative results they stress are important, with many policy implications (on the role of international organizations, of experts, etc.). But, one should not be misled by them. They leave intact the possibility or even likelihood that there exists a country-specific relation in all or some countries.

#### **IV. Country-specific relations**

Decentralization arrangements in a country are entangled in a web of idiosyncratic relationships between various features, many of them not of an economic and/or measurable nature. Suppose that no robust horizontal cross-country correlation between decentralization and economic performance is found. That leaves open a possibility of country-specific relations. We explain first why it does not seem possible to uncover such relations directly. We present then a framework in which they may be revealed under particular circumstances. In the third subsection, we turn to the search for empirical evidence related to the framework.

##### ***4.1. Searching directly for idiosyncratic relationships?***

A part of the empirical literature on the relation between decentralization and growth consists of studies of single countries. These studies are quite interesting, especially when they include local as well as regional and central levels of government. Some of them claim to have found a significant relation between decentralization (or one of its dimensions such as revenue or spending) and the economic performance of the country as a whole. Their authors even feel able to suggest that a change in the degree of decentralization in a particular direction would have increased, decreased, or left unchanged the rate of growth (Xie *et al.* 1999, Akai and Sakata 2002, Akai *et al.* 2007). A great merit of the underlying reasoning is that it recognizes that the relation between decentralization variables and growth is not linear and that (from the perspective of growth enhancement) there should be an optimum or an optimum range.<sup>12</sup>

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<sup>12</sup> As noted by Martinez-Vazquez and McNab (2003), it is unlikely that 100 per cent decentralization or centralization would maximize growth. In cross-country studies, a non-linear relation is displayed in Thiessen

Indeed, it would be nice to know, for the country studied, the interval within which decentralization maximizes growth, and where the actual state of decentralization stands in relation to the interval.

Is the above claim to provide such information fully credible? Many queries come to mind. The theoretical model these empirical studies use (an endogenous-growth equation typically) seems crude compared to the complexity of the matter, growth variation in the short run is sizeable but dominated by the business cycle, decentralization variation in the short run is generally small, its effects are likely to be delayed, the time span of available time series is not long enough to take full account of lags without losing too many degrees of freedom, and so on. Thus one may consider the results found with a degree of skepticism.

Negative results -- that is, no significant relation found (Bodman et al. 2009) -- are less puzzling, but they must be interpreted with caution for the deeper reason already mentioned. To paraphrase a formulation we used in Section 1, '*no relation*' in the country's time series does not imply '*no relation*' in reality. Treating a country's complex nexus of relationships as a *real system*, one would like to be able to get to its *causal* structure and find a relation between decentralization variables and economic growth holding among all the *possible* values of the decentralization variables, not only the *actual* ones. For the reasons just given in relation to the empirical work done on single countries, we do not consider such knowledge to be currently obtainable for the domain and question concerned in this paper.

#### ***4.2 An indirect approach***

That approach takes full account of our ignorance. It can be expressed in the form of four sets of propositions. All concern a given country.

A first category is about the information we are assumed to have as observers. We have full knowledge of decentralization arrangements in force at any point in time (past and present) in the country. These arrangements concern not only fiscal variables and the assignment of functions, but also constitutional provisions, regulation, implementation, mandates, contracts, and so on. We also know the country's macroeconomic aggregates such as GDP per head, and their evolution. Moreover, on the basis of these aggregates and other information that we also have (growth rates in other countries, namely), we can say whether or not, and to what degree, the growth performance of the country is deficient and if it is

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(2004). But, if idiosyncratic, optimality in each country is not necessarily reflected in a non-linear cross-country relation.

improving or deteriorating. What we do not know is the *relation* between the decentralization arrangements in force in the country and its macroeconomic performance.

A second set of assumptions concerns political effects of underperformance. We assume that serious and lasting macroeconomic underperformance has political consequences that generate an increasing pressure on government and a growing incentive to act so as to improve that performance. Alternatively, these political consequences may consist in incumbents being eventually replaced by office-holders who have the motivation. A major underlying mechanism in both cases is yardstick competition (Salmon 1987).<sup>13</sup>

The assumptions in the third set are economic, informational and political. First, macroeconomic performance is not wholly exogenous and can be improved by government. Second, a country's government knows best what should be done to improve performance in that country. Third, governments can eventually overcome or get round political obstacles to acting toward improved performance. As a consequence of these three assumptions, we may assume that macroeconomic performance will eventually tend to improve.

The last category includes a single proposition. If the changes implemented to improve macroeconomic performance include changes in decentralization arrangements, this justifies the presumption that there is a relationship between decentralization arrangements and macroeconomic performance. If there are no changes in decentralization arrangements, we can say nothing.

It must be stressed again that these changes need not be quantitative or formal. Let us mention three ways in which they may be involved in the effort to improve macroeconomic performance. First, a reform contemplated to improve economic performance may have nothing to do with decentralization arrangements but its implementation may require changing them. That is particularly likely to happen in countries (federal/and or decentralized) in which subcentral governments constitute powerful veto players. To overcome vetoes, one way is to change the distribution of powers but doing that may require a modification of the

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<sup>13</sup> We need not explain in detail why we limit our investigation to cases of serious and enduring macroeconomic underperformance. The assessment of performance, especially when in terms of growth, is largely based on cross-country comparisons. There are obstacles for these comparisons to become sufficiently compelling and politically salient so as to generate the required pressure on office holders. The latter can try to respond to pressure in ways that do not improve performance. However, whatever the obstacles to the working of the comparative mechanism, they are unlikely to be resilient in the face of persistent and serious underperformance – and that not even in dictatorships (Wintrobe 1998). The ‘logic of compound interest’ (Pritchett 2000) is at work. In a world in which growth rates are a few per cent (and not a small fraction of one percent as they were in the distant past), apparently small differences in growth rates result relatively rapidly in unbearable differences in income per head.

Constitution which will often prove difficult (possibly because of the veto powers of the same actors). Thus negotiation and contracting will often be the path followed to get the acquiescence of subcentral governments. Decentralization arrangements are typically changed in that kind of process, albeit in an informal way.

A second possibility is institutional redesign. Central government and/or other decisive political actors judge that existing decentralization arrangements are in part responsible for underperformance and must be replaced by others. By assumption we, as observers, are not able to say whether the contemplated arrangements are more favorable to performance than the existing ones, but political decisions-makers within the country have reasons to think that they are.

A third possibility relies on the virtues of *change per se*. Olson (1982) and Wintrobe and Breton (1986) argue that networks may build up over time in a form generating sclerosis and underperformance, and that their disruption (by wars in Olson's book) may improve performance. These processes may be active in the context we are concerned with. Office-holders may expect reassignments of competencies among levels of government, upwards or downwards, to be disruptive in the growth-enhancing way suggested by these authors.

In the first two cases, the part of the arrangements which is changed reveals having had a negative relationship with performance. In the third, the negative relation is between the stability of the arrangements (as one of their properties) and performance.

### ***4.3. Empirical evidence***

The framework above assumes growth trajectories consisting of sequences of two relatively long periods (8-10 years, say) with a brief transition period in-between (2-3 years, say).<sup>14</sup> In the first period, average growth is low in comparison with that of other countries, so that we can diagnose serious and lasting macroeconomic underperformance. In the second period, the growth rate is significantly higher than in the first, so that we can say that there has been an improvement. Is such a pattern sufficiently common? The growth rate of most countries is instable, as documented in Pritchett (2000). As a consequence, growth accelerations are a fairly widespread phenomenon. Over the period 1957-1992, Hausmann *et al.* (2005) find 80 growth accelerations involving 60 countries out of the 106 they consider. Our concerns in this paper do not coincide with theirs, but the magnitude of their result suggests that it is not

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<sup>14</sup> See Hausmann *et al.* (2005).



difficult to find cases presenting the growth pattern we are looking for. In Table 2, that pattern is apparent in six of the eight cases.

Growth patterns constitute only one part of the required investigation. Case studies are essential. They include the followings tasks. First, check whether there has been a change in policies, including institutional arrangements. Some growth accelerations, even when defined in relative terms, may be due to exogenous circumstances like positive changes in the terms of trade, more favorable weather, or the end of wars and other disruptions. Second, check whether these changes include changes in decentralization arrangements. As noted, changes in decentralization arrangements may be purely qualitative, informal and subtle. They may go in the direction of more decentralization, more centralization or include aspects that go in inverse direction. Third, verify that the changes in the decentralization arrangements have something to do with economic performance. A country's growth pattern may have the required shape, and there may be changes in the decentralization arrangements at the turning point, and yet there may be no relation between the two, concomitance being accidental.<sup>15</sup>

In three of the eight cases included in Table 2 (Australia, Russia and the United Kingdom), improved macroeconomic performance was obtained by reforms involving more centralized arrangements, and in two others (India and Mexico) reforms leading to improvement involved more decentralized arrangements. The existence of a relation between performance and decentralization arrangements seems thus revealed in the five cases.<sup>16</sup>

The three remaining cases are more problematic. As generally acknowledged in retrospect, the Single European Act was a major change in the 'architecture of government' at the EU level. It was adopted in 1986 in a context of yardstick competition. Comparisons with performance elsewhere generated a state of public opinion, 'Europessimism', which put some pressure on politicians to do something and address the problem perceived at the time as a manifestation of 'Euroclerosis'. The implementation of the Single Act, completed in 1992, did improve along some important dimensions the performance of the European economy.

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<sup>15</sup> In some countries, growth trajectory was as required but decentralization programs were implemented for political reasons. Spurious correlation looms. It should be noted, however, that changes in decentralization arrangements which seem to have no relation with economic performance may have a strong link in reality. Finding solutions for apparently unrelated issues may be a precondition for improving performance. If, for instance, more autonomy to a region is conceded for political reasons, and if that increased autonomy is accompanied by a diminution of transfers, the incidence (via better incentives) on the growth rates of both the region and the rest of the country may be positive. There may also be an important indirect growth impact of changes in decentralization arrangements that involve natural resources (Brosio 2006). Without some consent about ownership and revenue sharing, exploitation of these resources, and with it overall growth, may be hampered.

<sup>16</sup> There is no space here to document the changes; see the references given in Table 2.

However, no clear-cut growth acceleration shows in the statistics. One reason is an increased heterogeneity in growth patterns due to EU enlargement and German unification. The case is thus compatible only with a somewhat relaxed version of our hypothesis.

*[Table 2 about here]*

Two China cases are included in Table 2: decentralization started in the late 1970s, and recentralization started in the early 1990s. In both cases, changes affecting decentralization arrangements were significant, and leaders' motivation in deciding and implementing them was certainly related to observation of what was happening abroad -- the success of market oriented policies first, the collapse of the Communist regimes and the break-up of the USSR later. The filter in Hausmann *et al.* (2005) records growth accelerations corresponding to these two episodes: from 1.7 to 6.7 per cent over the 8-year periods before and after 1978, from 4.2 per cent to 8 per cent over the 8-year periods before and after 1990. A growth of 4.2 per cent hardly qualifies as serious underperformance. A growth of 1.7 per cent might. Thus the first sequence might fit our hypothesis. Did rulers feel some pressure from the population in 1978? It is difficult to say in the case of a secretive political system.<sup>17</sup>

## **V. Concluding remarks**

We have argued that the approach to the relation between decentralization and growth based on cross-country regularities is approaching its limits. The literature is evolving toward a point at which it is tempting to say that there is no relation between the two – that is, no relation of a universal or cross-country kind. If confirmed, such result would be a real contribution, with important policy implications. It would preclude general recommendations to decentralize as a way to foster development and growth.

May we say also that the result makes us free to discuss the effects of decentralization on other concerns, such as democracy and accountability, without being bothered by its incidence, negative or positive, on growth? Such reasoning presumes that the absence of a cross-country or universal relation implies that there is no relation at all. We have argued that

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<sup>17</sup> The two sequences concerning China might be better accounted for by a version of our hypothesis reformulated so as to integrate *anticipated* yardstick competition – that is, the anticipated dynamics of comparisons made by the population. It seems plausible that such anticipation did play a role in the way the Communist Party succeeded in remaining in power under circumstances that were not particularly propitious. The stress it put on economic growth is amazing (see Xu 2011). Anticipated yardstick competition may be a major reason.

such implication is unwarranted. If each individual country is special in many ways, the relationship between decentralization arrangements and economic performance may itself be specific. It could happen that there is a strong relation in each country and no observed relation at all across countries. More plausibly, in each country conceivable decentralization arrangements could be very detrimental to economic performance. That proposition also has policy implications. Decisions-makers should not be told by experts that they can do as they please with regard to decentralization without having to fear any ill-effect on economic performance.

These considerations imply that it would be nice indeed to know whether there is a relation, at the country level, between existing and potential decentralization arrangements and growth. Unfortunately, there is little way to know, except by experimenting, and experimenting in these matters should be left to politicians (or peoples). We have proposed a second-best solution, authorizing, in some circumstances, the assertion that there is a relation. From a policy perspective, knowing that there is a relation but not precisely what it consists of might be considered a modest achievement. At least, it should inspire caution.

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		Views on the state	
		<u>Leviathan</u>	<u>Instrumental</u>
Views on market competition	<u>Neo-classical</u>	1.1 Contradiction	1.2 Political centralization
	<u>Dynamic</u>	2.1 Political decentralization	2.2 Indeterminate

**Table 1: Crossing views on the state and views on markets: consequences on recommended decentralization arrangements**

Country (1)	References (2)	Date(s) of reform (3)	Follows underperformance? (4)	Object of reform (5)	Changes in decentralization arrangements ? (6)	Performance improved ? (7)	Does case fit ? (8)
Australia	Madden (2006)	Starts in 1983	YES “3 decades”	Liberalization and growth	More centralized (intergovernmental committees, ‘collaborative federalism’)	YES	YES
China (1)	Montinola <i>et al.</i> (1996), Weingast (2009). Xu (2011)	1978	YES (relatively, growth equal to 1.7 per cent)	Liberalization and growth	More decentralized and including ‘financial incentives’	YES	Debatable
China (2)	Ahmad <i>et al.</i> (2002), Xu (2011)	1994	NO	Political stability	More centralized	YES	NO
European Union	Pelkmans (2006)	1986-87, Single Act	YES Euroclerosis, Europessimism	Internal market and growth	More centralized	Unclear	Debatable
India	Singh and Srinivasan (2006)	Start in the 1980s, then early 1990s	YES, “in comparison to East Asian economies”	Liberalization and growth	Decentralization “opens space for action by state governments”	YES	YES
Mexico	Diaz-Cayeros <i>et al.</i> (2006)	Starts in 1988	YES (1981-1995)	Liberalization and growth	More decentralized	YES	YES
Russia	Zhuravskaia (2010)	Putin, Early 2000s	YES, stagnation in the 1990s	Order and growth	Political recentralization + decentralized financial incentives	YES	YES
United Kingdom	Riddell (1989)	Mid-1980s, Thatcher	YES	Liberalization and growth	More centralized	YES	YES

**Table 2: Idiosyncratic relations suggested by growth accelerations**