The economic (in)efficiency of devolution

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Abstract: The recent devolutionary trend across the world has been in part fuelled by claims of a supposed 'economic dividend' associated with the decentralization of authority and resources. The capacity of devolved administrations with greater autonomous powers to tailor policies to local preferences, to generate innovation in the provision of policies and public services, and to encourage greater participation and be more accountable is supposed to deliver greater economic efficiency. There is however little empirical evidence to substantiate these claims. In this paper we assess the horizontal link between devolution and regional economic growth in six national contexts (Germany, India, Italy, Mexico, Spain, and the US). We use regression models in order to test whether changes in cross-regional differences in growth patterns within each country can be attributed to changes in levels of regional autonomy. The results suggest that, contrary to the expectations of devolutionists, the degree of devolution is in most cases irrelevant for economic growth and, when it matters – as in the cases of Mexico and the US –, it is linked to lower rather than greater economic efficiency.

Keywords: Devolution, economic growth, efficiency, Germany, India, Italy, Mexico, Spain, the US

1. Introduction

The recent wave of devolutionary initiatives across the world has been in part fuelled by an important change in the devolutionist discourse. Whilst the traditional discourse heavily relied on issues of national or regional identity, such as ethnicity, language, religion, culture, or history, the 'new regionalism' is increasingly based on functional demands (Keating 1998). Economic arguments rank high among these (Bolton and Roland 1997; Allmendinger and Tewdwr-Jones 2000; Tomaney 2002). Devolution is more than ever regarded as a means of achieving greater efficiency in a globalized environment. The leading tenet is that individual regions have to adopt an 'active policy stance'[1] (Keating 1998, 80) if they are to be successful in a globalized world. From this perspective, the greater the degree of autonomy, the stronger the scope for enhanced efficiency and for efficiency in public spending to be growth enhancing. Modern regionalism consequently regards devolution and the decentralization of powers not just as a way to preserve and promote regional identity and culture, but also as a step towards achieving economic change, contributing to the growing perception that devolution brings about an 'economic dividend' (see Morgan 2002, 801).

This 'efficiency through devolution' argument is at the heart of recent devolutionist and 'new regionalist' discourses. The argument has been used in many different contexts. Ronald Reagan resorted to it in his 'new federalism' initiative as a way to justify transfers of powers to the states (Donahue 1997). The Northern Italian Leagues have founded their devolutionary discourse on the inefficiency of the Italian central government (Diamanti 1993; Giordano 2000), as is increasingly the case with nationalist and regionalist parties in Spain (Keating 2001) or even, to a lesser extent, with the Zapatista movement in Mexico (Morton 2002). The UK government is making use of the supposed greater economic efficiency of devolution as the main justification of a possible devolution to the English regions (Tomaney and Ward 2000; Morgan 2002; Tomaney 2002).

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[1] This perspective stipulates an active bottom-up approach to economic development driven and emanating from the regional/local level.

Yet, despite the increasing association between decentralization and efficiency in the devolutionist discourse, there is little empirical evidence of a link between the two[2]. There are surprisingly few studies that have addressed this issue and those that have reach contradictory results.

In this paper we intend to address the gap in the literature by focusing on the economic impact of decentralization trends in three federal and three recently devolved countries - Germany, India, and the US in the former case, and Italy, Mexico, and Spain in the latter. Our aim is to test empirically if there is a link between devolution, defined as the transfer or decentralization of authority and resources from federal or central to regional or state governments, and economic efficiency, revealed by changes in regional growth patterns during periods of decentralization. In order to achieve this goal, the paper is divided into four further sections. In the following section we review the main theoretical arguments linking devolution to economic efficiency and growth, as well as those opposed to this view. Section three briefly presents recent devolution trends in our case countries, before using a simple national multiple regression analysis in section four to measure whether higher levels of autonomy are associated with higher levels of economic growth. Finally, section five concludes that, contrary to the expectations of devolutionist discourses, there is little evidence to support the existence of an 'economic dividend' associated with the transfer of powers to regional tiers of government. A greater degree of autonomy seems to be at best irrelevant in determining a region's economic performance and, at worst, it is in some national contexts associated with lower levels of growth than under more centralized periods of government.

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[2] Measuring decentralization and efficiency is problematic. In this paper we assume that if decentralization enhances the efficiency of policies and public service provision, the higher quantity and quality of local policies and services would eventually result in measured growth (Martínez-Vázquez and McNab 2001: 18). See Martínez-Vázquez and McNab (2001) for a critical discussion of the direct and indirect effects of economic efficiency on economic growth.

2. On the economic efficiency of devolution

2.1. Devolution as a means of achieving greater production efficiency

Advocates of decentralization from economic and political schools of thought attribute their support for a greater transfer of authority towards subnational tiers of government to their negative perception of the capacity of central governments to deliver public services efficiently (Klugman 1994). The economic tradition in favour of devolution – articulated around the works of Tiebout, Musgrave, and Oates, among others– maintains that decentralized systems of government have a greater capacity to match service provision to the preferences of citizens and are, thus, more efficient. From a political perspective, scholars such as Putnam (1993), argue that decentralized systems are preferable because they tend to be more accountable and transparent and increase political participation – factors which, in turn, have an indirect positive effect on efficiency. The following section shall review the economic arguments in favour of devolution before an examination of the main political postulates.

Economic 'efficiency through devolution' arguments are founded on Musgrave's (1959) contention that lower levels of government have a greater capacity to tailor policies and the provision of services to the preferences of the population, thereby maximizing individual and collective welfare and making the supply of public goods and services more efficient. This tenet is, in turn, based on Tiebout's (1956) assumptions that individual preferences for public goods differ, and that individuals chose to live in a place that best corresponds with their preferences (Ebel and Yilmaz 2002, 11). In Tiebout's (1956, 449) classic decentralization model mobile taxpayers shop around for the region or locality that best satisfies their preferences at a given price (tax rate). Citizen (or taxpayer) mobility eventually ensures a perfect match between taxpayers' demands and localities' supply, guaranteeing an efficient delivery of public services (Tiebout 1956; Oates 1994; Azfar *et al.* 1999; Thissen 2001).

Another factor contributing to greater local efficiency in Tiebout's model is inter-territorial competition. Competition at the local and regional level forces governments to concentrate on the efficient production of public goods and services. Horizontal and

vertical competition limits the capacity of bureaucrats to act as revenue maximizers that extract rents at the expense of taxpayers (Brennan and Buchanan 1980; Breton 1983; Thissen 2001). Such competition also induces governments to experiment and actively encourages administrative innovation (Breton 1983; Tanzi 1995; Donahue 1997; Thissen 2001). Innovation processes are generally characterized by high degrees of uncertainty and it is argued that operating at smaller scales, in this case at the subnational level, will diminish risk and improve flexibility. Moreover a devolved system should provide subnational governments with the freedom to experiment with innovations that best address problems within their own jurisdictions.

The reliance of Tiebout's (1956) model on the mobility of citizens (taxpayers) who 'vote with their feet' was later addressed by Oates (1994,14), who argued that, even in the absence of mobility, greater decentralization leads to more efficient outcomes. Oates' (1972, 35) decentralization theorem maintains that uniform levels of public goods and services across jurisdictions will generally be inefficient. Smaller jurisdictions are more able to tailor their policies to the specific preferences of their populations and the larger the variance in taste, the larger are the potential benefits of decentralization (Thissen 2001).

From a political perspective, arguments in favour of devolution stress the importance of participation in the policy-making process and of increased accountability. As from the economic viewpoint, regional and local governments' greater proximity to the 'people' allows them greater flexibility to respond to local needs and preferences and to efficiently match the supply of public services to local demand. Proximity is the key word in this position, since, as it is assumed that information diffusion exhibits diseconomies of scale (Klugman 1994) and is not transmitted costlessly in space, regional and local governments have a comparative advantage with respect to central governments in obtaining and processing information. As a consequence, the unit costs of service provision may be lower at the regional and local than at the central government level.

The proximity between government and citizens not only encourages political participation and induces a greater sense of local relevance to political processes, but also widens the scope for greater transparency of these processes and greater

accountability of those who direct them (Putnam 1993; Azfar *et. al.*, 1999; Ebel and Yilmaz 2002). Greater political transparency, it is argued, reduces bureaucratic complexity and increases citizens' monitoring capacity, stimulating further efficiency gains as elected representatives are forced to be more responsive to voters' preferences.

Finally, the combination of greater political participation, transparency, and political accountability is likely to favour the genesis of economically advantageous institutions, such as trust (Putnam 1993) or a 'congenial organizational ecology' (Streeck 1992), among social and economic actors. The genesis of trust has a positive influence on the delivery of public policies by decreasing the costs of collective action and increasing the benefits of cooperation. Horizontal relations of reciprocity, cooperation, and mutual awareness increase the acceptance and adherence to the 'rules of society' and function as an informal monitoring mechanism, hence counteracting corruption and revenue maximizing behaviour within political institutions (Putnam 1993; Donahue 1997; Keefer and Knack 1997; Afzar *et al.* 1999).

2.2. The limits to the economic benefits of devolution.

Not all scholarly literature agrees, however, with the idea that devolution is associated with higher economic efficiency. There is a growing body of literature, originating from the field of fiscal decentralization, that challenges the 'efficiency through devolution' argument and points towards the dangers of transfers of powers to lower tiers of government. This literature suggests that a national provision of public goods and services may, under certain circumstances, be more efficient than their provision at the regional and local level. Such circumstances include where economies of scale and scope exist, where there is difficulty in assigning powers in a non-overlapping way, where there are greater opportunities for corruption at the regional and local level, and where regional governments operate in conditions of 'soft budget constraints'.

First, the central provision of public goods and services may be more efficient if economies of scale and/or economies of scope exist. Critics of devolution such as

Prud'homme (1994, 9) contend that there appears to be a critical mass of income, population, and activities that are necessary before the benefits of decentralization can be realised. Since this mass is more easily achievable at the national than at the subnational level, central government may be the most cost-efficient provider of some public goods and services. In particular, if the administrative units in a decentralized system are too small, they will incur diseconomies of scale and thereby larger per unit costs.

Another fundamental problem confronting devolved systems is related to the difficulty of assigning powers and functions in a non-overlapping way (Breton 1983, 253). If, as is often the case, ambiguity exists regarding the responsibilities and functions of different tiers of government, complexity increases and the possible benefits of greater transparency and accountability disappear. Under such circumstances, citizens are unable to distinguish between responsibilities of each level of government and are thus less likely to exert pressures for a more efficient delivery of services. Consequently a devolved system would imply greater costs of coordination among government tiers to avoid duplication or undersupply of public goods and services, and may also imply greater incentives for revenue maximization at all levels of government.

A third point is that devolution entails a transfer of powers from national to local elites, raising the possibility of exacerbating corruption through the enhancement of relations based on proximity between officials and private individuals or local interest groups (Tanzi 1995; Bardhan and Mookherjee 1998; Blanchard and Shleifer 2000; de Mello and Barenstein 2001). In cases of limited local accountability or weak civil society, local officials who have greater discretion and opportunity in a devolved system may be subservient to the needs of local elites particularly when under direct pressure. Several authors (e.g. Prud'homme 1994; Bennett 1997; Afzar *et al* 1999; Thissen 2001) have noted that since central governments generally offer higher salaries and promotion opportunities, they are better at attracting skilled personnel. Hence their capacity to monitor corruption as a means to reduce malfeasance is generally greater than at the regional or local government level. Moreover central government officers more often lack the relations of proximity with those governed

and thus may, in theory, be less prone to corruption than local or regional government officials.

Finally, as Rodden (2002; 2003) indicates, the tendency of devolved systems to operate under 'soft budget constraints' – i.e. the tendency of subnational governments to run large fiscal deficits with little fear of sanction (Maskin 1996, 125) – leads to medium and long-term economic inefficiency. The frequent perception by lower tiers of government that central government will provide a bailout in the case of excessive spending or debt encourages 'reckless' expenditure and, in many cases, an inefficient (over)supply of goods and services. Rodden's (2003) arguments suggest that soft budget constraints nullify the Tiebout-style competition constraint placed upon local governments, since they relieve local and regional governments of the pressures to produce efficient levels of public goods and services.

In brief, there is no theoretical consensus on the economic efficiency implications of devolution. Hence, the question of the relative efficiency of a devolved system vs. a centralized one needs to be addressed from an empirical perspective, bearing in mind the assumption that there is nothing pre-ordained that would guarantee a benign economic outcome of the transfer of powers to subnational tiers of government (Morgan 2002, 803-4). There are, however, surprisingly few empirical studies which support or refute these rival theoretical claims, and their results are often contradictory. Davoodi and Zou (1998), Zhang and Zou (1998), and Xie and Zou, and Davoodi (1999), after performing a cross-country analysis and studying the cases of China and the US, argue that devolution is harmful for growth. Akai and Sakata (2002), in contrast, report a positive association between fiscal decentralization and economic performance in the US, as do Zhang and Zou (2001) for the case of India. Others find only weak or no systematic relationships (Rodríguez-Pose 1996; Woller and Phillips 1998). In general, empirical analyses of the link between devolution and economic efficiency emphasise that it varies from country to country, and is contingent upon underlying national characteristics such as income levels (Bahl and Linn 1992), the quality of institutions and the institutional structure (Keefer and Knack 1995 and 1997; Rodden 2002), and country size (Thissen 2001).

3. Devolutionary trends across the world

Even though the theoretical discourses presented above indicate that the efficiency implications of devolved regimes are debateable, the last few decades of the 20th and the beginning of the 21st century have been characterized by a growing global demand for transfers of authority and resources to subnational tiers of government (Loughlin 2001), increasingly justified on efficiency grounds (see Keating 1998; Morgan 2002). The objective of the following section is to briefly depict the multidimensionality of the devolutionary trends in our six case studies and to highlight changes in the powers of subnational governments and in their capacity to implement independent policies to achieve any potential efficiency gains from devolution. The first part of this section presents the historical trajectories of the case studies' intergovernmental relations assuming that history matters and may explain devolutionary patterns. The second part deals with the internal differences in transfers of resources across regions within individual countries.

3.1. The drive towards devolution

As recently as three decades ago centralized systems of government were the norm. Most regions were often mere administrative units with little political power and many so-called federations – as was the case throughout most of Latin America – existed just 'on paper' (Rodríguez-Pose and Gill 2003). True federations tended to be the exception to the rule and, in many cases, had endured processes of centralization in the post-WWII era. Of the six cases covered in this study, two had strongly centralized systems (Mexico and Spain), one was partially devolved (Italy), and three were federal states (Germany, India, and the US) in 1970 (See Table 3.1).

As a consequence of forty years of Francoist dictatorship, Spain had the most centralized regime among our case studies. Mexico and Italy endured centralist cultures despite having adopted a federalist and a regionalist Constitution in 1910 and 1948 respectively (Table 3.1).

Table 3.1. The Historical Trajectory of Devolution

CENTRALIZED STATES	HISTORICAL BACKGROUND	INSTITUTIONAL TRANSFORMATION	CONSOLIDATING AUTONOMY
SPAIN	**1938-1975:** Francoist dictatorship: nationalist and regionalist movements are repressed and powers are concentrated in Madrid (Aja 2001).	**1975:** Franco's death **1978:** New democratic Constitution approved, establishing a regional tier of government (Aja 2001).	**1979-1984:** 17 Autonomous Communities are established **1992:** Autonomy Pact extending the powers of the Article 143 regions
MEXICO	**1910:** Mexico adopts a federal Constitution assigning residual powers to the regions. **1910-1980:** Centralist culture endures under a *de facto* one party system. The executive branch of government dominates over the judicial and legislative branch (Rodriguez 1997, 235-6)	**1980s and 1990s:** A credible opposition emerges at both federal and state level, leading to political pluralism alongside economic reform and decentralization.	**1993:** The first services- primary and secondary education- are transferred to the states
ITALY	**1924-1945:** Mussolini's fascist dictatorship. **1948:** A regionalist republican Constitution goes into effect. However with the exception of the 'special status' regions no real decentralization takes place.	**1970:** Regional Councils are finally introduced. **1976:** First significant power transfer to the 'ordinary regions' (Keating 1993).	**1980s and 1990s:** Regionalist actors like the Northern Leagues appear on the political stage placing demands for greater decentralization and the federalization of the country **1997:** 'Bassanini Law' accelerates the transfer of powers to the regions

FEDERAL STATES	HISTORICAL BACKGROUND	PERIODS OF CENTRALIZATION	CONSOLIDATING AUTONOMY
USA	**1770-1780s:** The Declaration of Independence and the US Constitution firmly plant the ideals of popular sovereignty, limited government powers, as well as establishing a dual federal system with clear divisions between the spheres of activity of state and national governments.	**1860s:** Intermittent tensions between states after the Civil War led to the expansion of the powers of the federal government **1930s:** In response to the national economic crisis Franklin Roosevelt's New Deal reforms renewed the process of federal government empowerment (Donahue 1997). **1970s:** Under the banner of 'New Federalism' Richard Nixon's administration commences the task of reversing the enduring period of federal government expansion.	**1980s–1990s:** Ronald Reagan and Bill Clinton expand the 'New Federalist' agenda proclaiming that the "era of big government is over"(Clinton, 1996 election). **1995:** The Unfunded Mandates Reform Act allows States to veto mandates that impose excessive costs on them if they are unsupported by federal financing. **1996:** Under the Personal Responsibility and Work Opportunity Act block grants are implemented to replace matching grants for welfare programmes
GERMANY	**1949:** The German Constitution, the *Grundgesetz*, is written under the close supervision of the Allied powers. Primary powers are bestowed to the states (*Länder*) under the proviso that all state authority emanates from the people (Bullman 2001, 84; Spahn 2001).	**1950s-90s:** *Länder* experience little room for fiscal manoeuvre since the vertical distribution of revenues is laid out in the Constitution, following a principle of equalisation **1990s:** Reunification Germany creates pressures leading to a reinforcement of federal finances (Rodden 2003).	Federal law generally overrides state law. However the *Länder* are represented in the federal upper house of parliament – the *Bundesrat* – giving them significant power on issues affecting the relationship between the federal and the regional governments
INDIA	**1947**: India gains independence **1950:** A federal system is endorsed. The constitution assigns residual powers to central government.	**1950s-1980s:** Central planning coupled with the dependency of states on federal transfers enables the federal government to exert a considerable grip over state finances (Sury 1998; McCarten 2003). Central government uses its residual powers to intervene in state affairs and to preserve its legitimacy (Buiter and Patel 1997; McCarten 2003, 2)	**1980s:** Economic liberalization in India leads to an erosion of central planning, with the private sector increasingly becoming the main engine of growth. Federal government assumes more of a role as enabler and regulator rather than investor (McCarten 2003, 6).

Among the three federations, the US had enjoyed the longest federal tradition, with its roots dating back to the 1776 Declaration of Independence. Yet, despite its well-established federalism, the US had experienced periods of centralization of powers, particularly following the Civil War of the 1860s and the depression of the 1930s. Some authors argue that even to this date decentralization in the US may be more apparent than real (Fox 2001). In Germany the strong devolution established in the 1949 German Constitution, the *Grundgesetz*, was designed to prevent the re-emergence of Germany as a strong military power (Keating 1993). Nevertheless as in the US case, centralizing tendencies have slowly made inroads, leading to a reinforcement of the power of the federal government (Spahn 2001, 118). India endorsed a federal system after independence in 1947, as a reflection of the huge historical and cultural differences within the country. The Indian Constitution, contrary to that of the US and Germany, assigns extensive powers to central government, and the states' dependency on federal transfers contributed to limit their resources and powers and created a culture of dependence at state level (Sury 1998; McCarten 2003).

The last few decades of the 20th century witnessed a tide of institutional change, marked by the return to the region (Storper 1997). Devolution became common place in many countries across the world, regardless of their initial level of decentralization. The drive towards devolution experienced in our case countries – with the sole exception of Germany – has meant that regional powers and resources have tended to increase everywhere and most conspicuously in the previously centralized countries.

The degree of institutional transformation is perhaps nowhere greater than in Spain where a new regional tier composed of 17 Autonomous Communities was established by the 1978 Constitution. Initially only the 'historical nationalities' of Catalonia, the Basque Country, and Galicia were expected to enjoy the highest degree of self-rule. However the remaining regions have been closing the autonomy gap ever since (Solé-Vilanova 1990, 332). Transfers of authority and competences to the regions have been followed by transfers of resources, resulting in a rise in regional government expenditure from a mere 5% of GDP right after the first stages of devolution in the early 1980s to more than 15% percent in 2001 (Figure 3.1).

Mexico represents a similar case of political reform and relatively rapid decentralization. The late 1980s and early 1990s marked a period of radical economic and political change and, as in Spain, democratization and devolution came hand in hand. The transfers of powers from the central to the state level were paralleled – and, to a certain extent, triggered – by the success of opposition politicians in regional elections. In Mexico transfers of powers to the states for primary and secondary education and some health services have contributed to a rise in state expenditures from 7% of GDP to 9% between 1995 and 2000 (Figure 3.1). Nevertheless Mexican states and Spanish regions[3], despite recent changes, remain largely dependent on grants, giving central government important leverage over regional autonomy (Castells 2001; Mayroga 2002).

In Italy a new regional system was created in the 1970s in accordance with the 1948 Constitution. Prior to that date only five 'special' status regions enjoyed some form of devolution. Regional autonomy has increased since. A new law provided the so-called 'ordinary' status regions with wide ranging powers in 1975 (Bull 1999) and the approval of the 'Bassanini Law' in 1997 has further consolidated devolution and contributed towards paving the way for federalism. The evolution of the expenditure capacity of local and regional governments has, by contrast, not matched the increase in powers, only growing from levels of around 16% of GDP in 1980 to slightly more than 17% in 2000 (Figure 3.1).

Two of our federal countries have also undergone important processes of further devolution in recent years. In the US, the wave of devolution starting in the 1970s stemmed from above and led to the transfer of responsibilities over a series of health, welfare, and social services programmes to the states, also giving states a freer rein over their own finances (Donahue 1997). States have seen an increase in their share of expenditure from about 8% of GDP in 1980 to approximately 10% of GDP in 2000 (Figure 3.1). However, much of the increase in state expenditure was, prior to 1996, consumed by the funding of matching grants for welfare programmes and for the

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[3] With the exception of the regions of Navarre and the Basque Country, that have complete control over the tax system in their territories.

Medicaid programme. Since 1996 the system was replaced by block grants, which are not accompanied with stringent guidelines for use, hence allowing states greater flexibility and freedom to innovate, but also shifting much of the risk from the federal to state governments (Powers 1999).
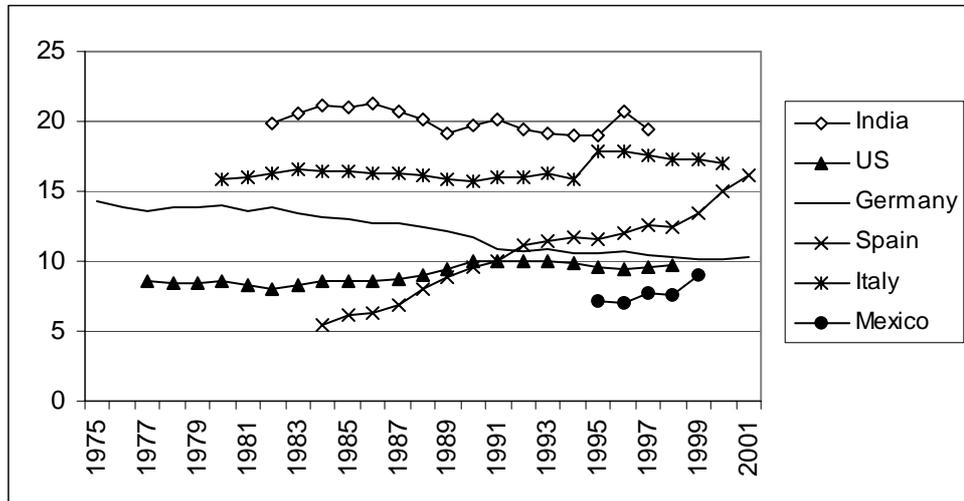
Figure 3.1. Regional Expenditure as a Percentage of GDP

The pace of devolution in India has been more moderate than in the US. The erosion of central planning since the late 1980s and, above all, the economic liberalization of 1991 and the interstate competition for private investment that ensued have created pressures for greater decentralization, resulting in transfers of authority from the centre. Increasing state responsibilities have, nevertheless, not been matched by a similar growth in resources. Figure 3.1 shows that regional expenditure has remained relatively stable, at levels of around 20% of GDP. However Rao (1997, 242) suggests that the stability of state expenditures does not imply that states' control over expenditure decisions has remained unaltered, rather state dependency on central transfers and hence central control over state expenditures has increased steadily. As McCarten (2003, 5-9) indicates "state governments account for almost 57 percent of general government expenditure but only 35 percent of revenues", suggesting that Indian states "are revenue poor but rich in expenditure mandates".

Finally, Germany represents a control case in our study as the structure of its federal system has remained largely unchanged while regional expenditures have gradually declined. Figure 3.1 shows a relative contraction in the expenditure capacity of the

Länder since the early 1980s, with the biggest decrease in the years following German Reunification. Since the mid-1990s the share of regional expenditures has stabilized at around 10% of GDP. The stability of German federalism has been based on a complex system of interdependence, collaboration and shared responsibility with both the *Länder* and federal government possessing a strong voice in regional affairs. Hence the German system is often characterized as a 'horizontal' approach to federalism, in contrast to the 'vertical' Anglo-Saxon or to the 'centripetal' Indian approach (Spahn 2001).

3.2. Intra-national differences in devolution

The process of devolution has nevertheless been far from homogenous across regions and states within a given country. Significant differences in the level of decentralization of power and resources are evident within most of the countries included in our sample. Such differences are easily understandable in countries such as Spain and Italy, which have implemented asymmetrical systems of devolution, but less so in countries where no such system exists.

Divergent regional powers and resources are also intuitively comprehensible where national boundaries subsume historical, cultural, and economically divided states or nations with ethnically, culturally, and/or linguistically diverse populations. Such differences are often the reason why federations are founded in the first instance (Nathan *et al* 1990, 71). Internal ethnic, cultural, and linguistic differences set our sample countries apart into two groups: those where intra-national differences are manifest and those where such differences are less conspicuous. This division has little to do with the level of devolution or with whether the country is a federation or not.

Among the countries in our sample where internal regional differences in authority and resources are greater, we find India, Mexico, Spain, and Italy (Table 3.2). India's ethnic, linguistic, and regional complexity sets it apart in many ways from the other nations. Of the close to 190 languages and dialects in the country, the Constitution recognizes 18 scheduled languages. In order to favour nation building in this vast and diverse country that had historically been split into a number of princely states, the

Table 3.2. Heterogeneous Devolution Processes

	Heterogeneity of Devolution	Autonomy	State/ Regional Responsibilities	Financial Aspects of Devolution
INDIA	Richer states have managed to flex their political muscle in order to obtain greater resources from the central government, often at the expense of poorer ones (Rao and Singh 2003).	States have high expenditure mandates, but low revenue capacity.	States are responsible for matters relating to: • land rights • public health and sanitation • agriculture, agricultural education • irrigation and water use • roads, and local government (McCarten 2003, 2)	States are reliant on central government financing for over half their expenditures thus they face vertical fiscal imbalance and transfer dependence. The trend has been towards greater regional divergence in expenditure capacities, especially from the early 1990s.
MEXICO	Poor states have seen greatest growth in expenditures between 1995-2000 due to central governments commitment to reducing regional inequalities through equalisation transfers.	States have low level of autonomy in general.	Primary responsibilities include • primary and secondary education • health services	An average of 80-90% of the states' total revenue is received from federal government under the tax-sharing scheme (*participaciones*) or through service specific transfers (*aportaciones*), with the remainder being made up of other minor local taxes and user fees and charges (Mayroga 2002, 2). Central government has increased the earmarked *aportaciones* funds thus exercizing greater control over expenditures and constraining state autonomy.
SPAIN	According to the Spanish Constitution 'historic nationalities' or regions with strong identity could access regional autonomy via Article 151 of the Constitution. All other regions abide by Article 143 of the Constitution.	**Charter regions:** complete fiscal autonomy (Basque Country and Navarre). **Article 151 regions:** rapid access to a high level of autonomy (Catalonia, Galicia, Andalusia, the Canary islands, and Valencia) **Article 143 regions**: long and complex access to full autonomy:	Transfers of health and education to all regions completed. Special Powers apply particularly for Article 151 regions: • second official language accepted by the Constitution: The Basque Country, Catalonia, Galicia, Valencia, and the Balearic Islands • special economic and tax arrangements: the Canary Islands • own police forces: the Basque Country, Galicia, Navarre, and Catalonia • own financial and tax systems Basque Country and Navarre (Aja 2001)	Article 143 regions have gained greater powers hence there has been convergence in regional expenditure capacity. Regions remain largely dependent on grants from the central government, as their tax setting powers are limited, giving central government an important leverage over regional autonomy (Castells 2001)
ITALY	Four regions (Sicily, Sardinia Valle D'Aosta, Trentino-Alto-Adige, later joined by Friuli-Venezia Giulia) were appointed 'special' status in the 1948 Constitution, in order to reduce the risk of separatist movement and ethnic tension.	**'Special' status regions:** High level of autonomy **'Ordinary' status regions:** Low level of autonomy, but autonomy growing	'Ordinary' status regions responsibilities include: • economic development • planning • environment • tourism 'Special' status regions have, in addition, competences in areas such as: • agriculture, hunting and fishing • industry and trade, craftsmanship • public utilities, regional transport and infrastructure • urbanism, culture • university education (Rodríguez-Pose 2002, 175)	The passing of the Bassanini law in 1997, which encouraged the transfer of powers to regions and local authorities, and recent steps towards a possible federalization of the country have reduced the authority, but not the resource gap between both types of regions

Constitution granted strong powers to the central government (Rao 1997, 239), but over the last two decades these powers have been progressively eroded (Rodríguez-Pose and Gill 2003). Spain was originally formed through the merger of four Medieval Kingdoms in 1492 and attempts to build a spirit of nationhood ever since have failed, creating historical tensions between the centre and the periphery (Rodríguez-Pose 1996; Aja 2001). It has thus been argued that democracy in Spain could not be consolidated unless accompanied by some form of substantial autonomy, particularly for the historical nationalities of the Basque Country and Catalonia (Aja 2001, 231). Territorial differences in Mexico are also evident between a relatively rich and culturally homogenous North and an impoverished South with a large indigenous population (Andalón-López and López-Calva 2002). And at the time of the Italian Unification in 1861 only 2.5% of the population spoke the Tuscan dialect upon which contemporary Italian is based (Bull 1999). Almost a century and a half of nation-building has led to a relatively high degree of cultural homogeneity. However the persistence of strong internal economic disparities, alongside the deterioration of political institutions, the recurring spectre of corruption, and the presence of linguistic minorities in its northern border (French-speaking in Valle d'Aosta and German-speaking in Alto Adige) fuels some disintegrating tendencies (Schmidtke 1996).

Table 3.3. Homogenous Devolution Processes

		Autonomy	Decentralized Activities	Financial Aspects of Devolution
USA		States have: • a high degree of spending power • control of a larger share of total revenues than of total expenditure	Two key areas decentralized under 'New Federalism': • Medicaid • welfare States are responsible for functions such as • health and hospitals • infrastructure and transport • corrections • education	As a result of a shift from matching to non-matching grants, states have seen an increase in authority and flexibility. States have considerable taxation powers, however due to Tiebout-style interstate competition and the mobility of firms and people, tax rates remain relatively homogeneous.
GERMANY		*Länder* enjoy a relatively wide spending autonomy. They rely on a shared revenue base with federal government as part of the federations meticulous equalisation system (Rodden 2003, 7-8).	*Länder* responsible for areas such as • culture • education • law and order • health • environmental protection • regional economic policy It is difficult to find a policy area where only one level of government is involved.	Lower levels of government often execute policies assigned by higher levels of government. *Länder* are able to vary the support they give to programs required by law since most revenues transferred from central government are general purpose (Rodden, 2003, 8-9).

In comparison to the four countries mentioned above, Germany and the US contain more culturally and linguistically homogeneous populations and states. Nevertheless some internal differences persist in both countries (Table 3.3).

Intra-national differences frequently transpire in different powers and budgetary capacity across regions. Internal heterogeneity has traditionally been greatest in the Spanish case where subnational governance is marked by high complexity reflected both in the powers accorded to different regions and in their budgetary capacity to implement autonomous policies. These differences in the level of regional expenditure per capita between high autonomy (Charter and Article 151), on the one hand, and low autonomy (Article 143) regions, on the other, are significant. Table 3.4 illustrates the disparities in per capita expenditure among Spanish regions. Expenditure in the top region, Navarre, is more than four times that of the Balearic Islands. Despite these differences, there has been considerable convergence in expenditure capacities across regions, as Article 143 regions have gained greater powers: regional government expenditure growth per capita in Extremadura, Madrid, Castile-La Mancha, Aragon, and Castile-Leon has increased by an average of around 14% per annum in real terms between 1984 and 2001, while that of Catalonia, Andalusia, the Basque Country, and Navarre has 'only' increased at rates of 7% (Figure 3.2).

Table 3.4. Average Expenditures

Average Expenditure Per Capita (Standardized)					
Germany (1998-2000)[a]		US (1998-2000)[b]		India (1997-1999)[c]	
Saarland	110.49	Delaware	144.74	Punjab	175.84
Hesse	106.99	Wyoming	133.86	Haryana	150.52
Baden-Württemberg	103.05	Vermont	132.55	Gujarat	136.85
••••		••••		••••	
Bavaria	96.46	Oklahoma	82.85	Madhya Pradesh	73.46
Lower Saxony	95.37	Florida	78.43	Uttar Pradesh	67.46
North Rhine-Westphalia	93.38	Texas	76.76	Bihar	49.88
Spain (1999-2001)		Mexico (1995-1999)		Italy (1998-2000)	
Navarre	219.18	Oaxaca	207.10	Valle D'Aosta	186.04
Basqe Country	130.29	Campeche	187.79	Trentino-Alto Adige	142.10
Andalucia	123.08	Baja California	177.91	Sardinia	115.04
••••		••••		••••	
Asturias	64.57	Puebla	70.07	Lombardy	91.69
Madrid	58.88	Guanajuato	64.79	Piemonte	91.46
Baleric Islands	51.41	Yucatan	47.73	Puglia	89.06

National average = 100
[a] Without Eastern *Länder* and city-states
[b] Excluding Alaska and Hawaii
[c] Excluding Goa, Dehli and special category states.

The panorama in Mexico is typified, as in the case of Spain, by important cross-state differences in expenditure capacities and by progressive processes aimed at reducing these disparities. Inter-state disparities in expenditure capacity are similar to those found in Spain, with states average standardized per capita expenditure ranging from 48 in Yucatan to 207 in Oaxaca where the national average is 100 (Table 3.4). The states' administrative and fiscal capacities vary significantly, often reflecting differences in capacity prior to the national devolution processes of the late 1990s (Giugale *et al* 2000, 10). Governments of poorer states in the South of the country, which traditionally controlled less financial resources, have experienced a higher growth in their expenditure powers relative to the richer states, leading, as in the Spanish case, to a convergence in regional government resources. The evolution of regional expenditure in the years for which data are available has ranged from an average annual real growth per head rate of 28% in Guerrero to an annual 3% decline in Jalisco (Figure 3.2).

In Italy, the main difference in regional powers and expenditure capacity lies between the 'special' status and the 'ordinary' status regions (Table 3.4). These differences have been growing, with 'special' status regions securing an even greater share of regional funding over the last two decades (Figure 3.2). A more subtle difference in expenditure is that between regional and local expenditure in northern and southern regions. Public administrations in the less developed regions of the South of the country have managed over the years to secure a greater level of public revenues than their northern counterparts, primarily due to the central government's concerns with equity rather than efficiency (Brosio 1997, 230). The gap in regional and local expenditure exceeds in some cases 10% of GDP, stretching from ca 13% in Piedmont, Veneto, Lombardy, and Emilia-Romangna to 29% in Sicily, 27% in Calabria, and 25% in Sardinia and Campania (Figure 3.2).

Disparities in expenditure capacity are also manifest across Indian states. The governments of some of the richest states, such as Haryana, Punjab, and Maharashtra, had expenditure levels well above the national average in the period 1984 to 1999 (Table 3.4). Poor and traditionally corrupt states, such as Bihar, had much lower levels of expenditure. The state expenditure gap remained relatively stable over the last two decades of the 20th century (Figure 3.2), with growth in expenditure per

capita varying from an annual rate of 4.6% in Gujarat to 2.3% in Karnataka. In spite of this relative stability, Rao (1997, 244-246) argues that states with lower per capita incomes have a higher and increasing fiscal dependence. However due to the equalizing effect of federal transfers, per capita expenditure inequalities do not appear as sharp.
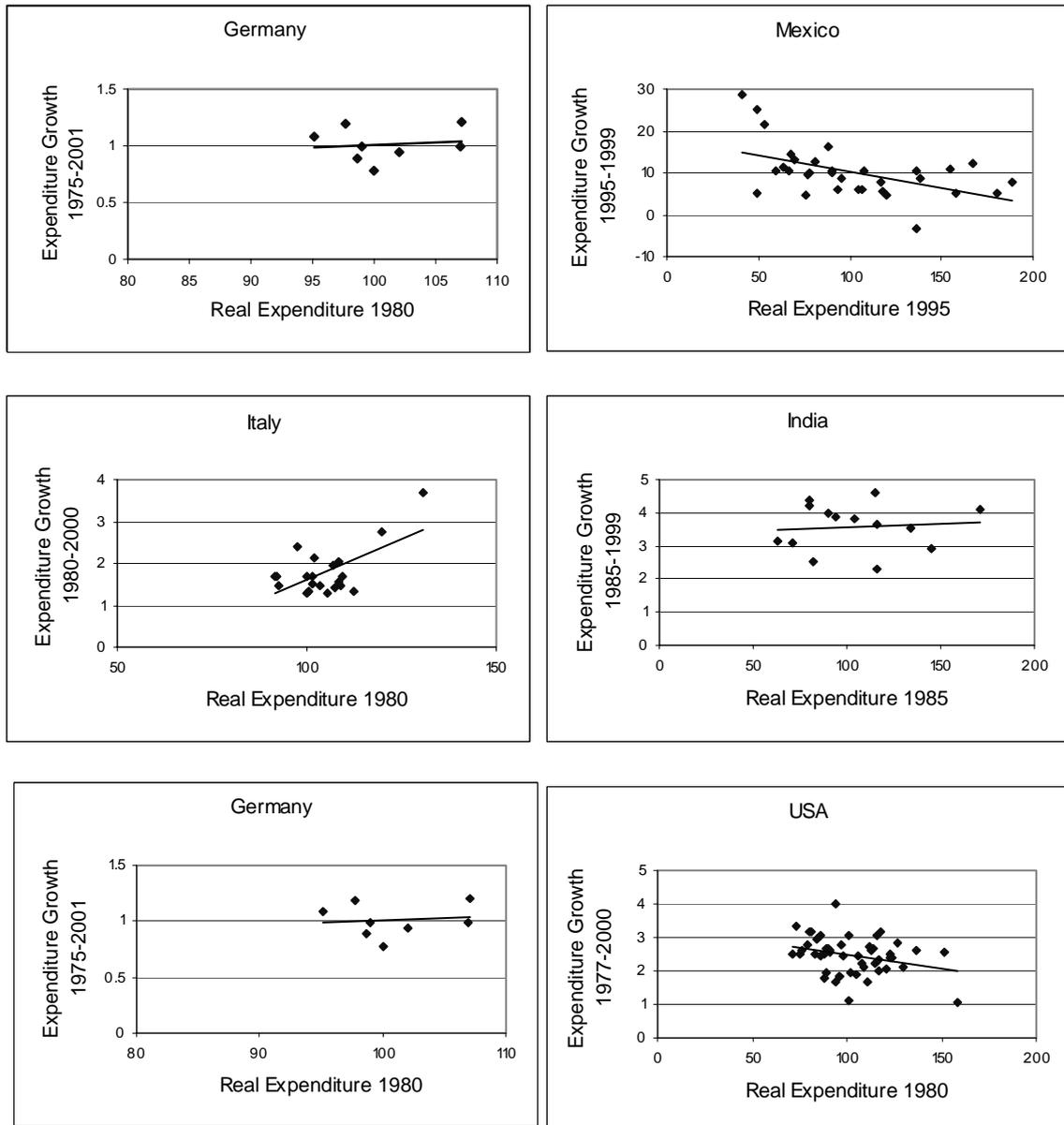
Figure 3.2. Expenditure Growth Relative to Initial Expenditure per Capita

Differences in regional expenditure among German *Länder* and US states are lower than in the previous four cases (Table 3.4). In the German system all major taxes

20

accrue to federal and state governments jointly, and legislation on taxes is uniform and centralized (Spahn 2001, 118). Transfers from the federal government to the *Länder* are a stabilizing influence, so the *Länder* with the lowest fiscal income capacity – Rhineland-Palatinate, Saarland, and the five former East German *Länder* – end up with the highest fiscal capacity per capita (Rodden 2003, 10). This stability is also reflected in the change in expenditure capacity of the states, relative to the Spanish, Mexican, or Indian cases. If the new eastern *Länder* and the three city states are excluded, real regional expenditure per capita for the period of 1975 to 2001 grew at levels of 1% per annum, with little variance among regions (Figure 3.2). Annual growth levels of *Länder* expenditure ranged from 1.16% in Baden-Württemberg to 0.86% in Rhineland-Palatinate.

In the US state variation in expenditure capacity ranges from a standardized average per capita expenditure of 77 in Texas to 145 in Delaware (Table 3.4). The growth in expenditure by state governments, albeit higher than in the case of the German *Länder*, has been moderate with slight convergence in expenditure capacities across states (Figure 3.2). In the period 1977-2000 state expenditure per capita grew at an annual average rate of 2.4%, with rates varying from 4% in Connecticut to 1% in Hawaii.

4. Devolution and economic growth.

The above discussion suggests that devolution processes among and within countries are far from homogeneous. Regions and states in our six case studies have not only a certain leeway for choosing what sort of policies they want to pursue, but also different capacities to implement these policies and public services. The question that emerges at this point is whether the regions with greater authority and resources to implement autonomous policies and deliver public services experience an improvement in their economic performance relative to periods when they had less autonomy, controlling for structural changes. Furthermore do states and regions which have recently gained greater transfers of powers and greater economic resources perform better than states and regions with a lower degree of autonomy? Proponents of devolution would respond affirmatively to these questions based on the arguments

of the capacity of devolved administrations with greater autonomous powers to tailor policies to local preferences, to generate innovation in the provision of policies and public services through inter-territorial competition, and to encourage greater participation and be more accountable.

4.1. The model

In this paper, we propose to test these questions empirically by applying the method presented in Rodríguez-Pose (1996) to each case study. This method consists first of identifying different periods in the country's economic cycle when the national growth rate is similar (see Figure 4.1), but the growth rates of individual regions/ states vary widely. The objective is to assess, using linear regression models, whether cross-regional differences in growth patterns in these periods can be attributed to changes in levels of autonomy, measured by the expenditure capacity of regional administrations in these periods. Other factors which may have an influence on regional growth levels within each case country are introduced in the model as control variables. The model adopts the following form:

$$\Delta(y_{it} - y_{i0}) = \alpha + \beta_1(r_{it} - r_{i0}) + \beta_2 \ln GDP_i + \beta_3 S_i + \varepsilon \qquad (1)$$

when

$$\Delta(y_{nt} - y_{n0}) \cong 0 \qquad (2)$$

where

y is the growth of GDP per capita in the periods under analysis;

r represents the mean annual level of expenditure of regional or state governments in per capita terms;

GDP denotes the median gross domestic product per capita during the period of analysis;

S represents a series of structural variables – varying from one country to another – deemed to have an influence on regional growth performance within that country;

i and n represent the region and the country aggregate respectively;

t and 0 the periods of time being compared;

and α and β are the regression coefficients and ε the error term.
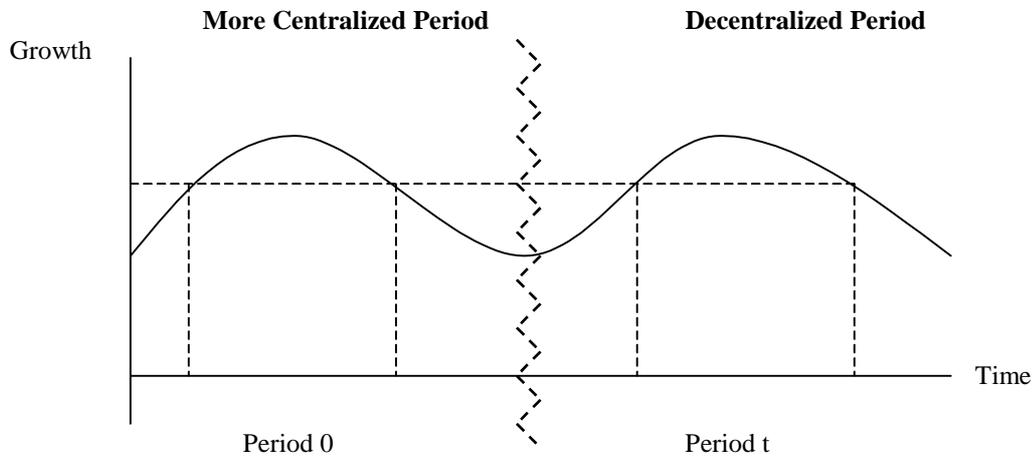
Figure 4.1. Identification of Growth Periods

In an 'efficiency through devolution' scenario any relative increase in regional or state expenditure capacity between period t and period 0 will be associated with greater efficiency in the delivery of public policies and services and with higher economic growth during the period of restructuring. The regression coefficient β_1 will be positive. Conversely, in a 'limits of devolution' scenario the coefficient will be zero or negative, since the implementation of policies and the delivery of services at a regional level would not imply any greater efficiency.

4.2. Identification of economic growth periods

Two high growth and two low growth periods were identified for each country, with the sole exception of Spain, for which three high growth periods were found[4]. These periods are reproduced in Table 4.1. High growth and low growth periods vary depending on the evolution of each country's economic cycle. If we take the high growth periods, the earliest period – or the second period in the case of Spain – tends to be located in the expansion years of the 1980s in four of the six countries in the

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[4] The reason for identifying three high growth periods in the Spanish case relates to the fact that the longest time series of real economic growth and regional expenditure data could be calculated for Spain using data from the BBVA and from the Ministry of Public Administrations.

sample (Table 4.1). These high growth periods coincide with what is known as the 'seven fat years' in the US, when the economy was bolstered by Reagan's supply-side policies and tax cuts; with the culmination of the period of high government spending and the beginning of liberalization in India; and with the European integration-driven recovery in Italy and Spain. In the cases of Germany and Mexico the first high growth periods are placed in the late 1970s, and correspond to the post-first oil shock recovery in Germany and with the boom years after the discovery of oil off the shores of the Yucatan peninsula in Mexico.

The second high growth period included in the analysis takes place during the economic boom of the second half of the 1990s. These are the years of Bill Clinton's deficit-reduction policies and limited tax increases in the US, of macroeconomic stability and integration in NAFTA in Mexico, of greater liberalization with the private sector taking over as the main engine of economic growth in India, and of flexibilization and labour market reform in Spain. Poor economic performance in Germany and Italy during the second half of the 1990s means that the second high growth period refers to the economic expansion years of the late 1980s.

Finally, the first of the three high growth periods identified in the Spanish case corresponds to the boom years of the 1960s that followed the opening of the country and the stabilization plan.

Table 4.1. High and Low Growth Periods

National GDP per Capita Growth	High Growth			Low Growth	
	Period 1		Period 2	Period 3	Period 4
USA	1983-1989		1995-2000	1979-1984	1989-1994
Growth Rate	3.411		3.411	0.543	0.658
Germany	1975-1979		1987-1991	1981-1988	1994-1999
Growth Rate	4.145		4.272	1.387	1.384
India	1987-1991		1993-1998	1983-1988	1989-1994
Growth Rate	4.546		4.588	2.705	2.771
Mexico	1976-1980		1995-1999	1978-1983	1994-1999
Growth Rate	3.532		3.924	1.449	1.357
Italy	1982-1987		1987-1991	1981-1985	1996-2000
Growth Rate	2.473		2.474	1.854	1.907
Spain	1963-1969	1983-88	1995-2000	1973-1979	1990-1996
Growth Rate	3.718	3.760	3.831	1.344	1.319

The earlier low growth periods relate in all cases, bar India, to oil crises (Table 4.1). In Spain, this covers the years following the first oil crisis of 1973, while in Germany, Italy, and the US, the periods selected cover the aftermath of the second crisis of

1980. The Mexican case is slightly different, since, as an oil producing country, it basically benefited from the rise in the price of oil, but the decline in oil prices since 1980 contributed to generate a huge debt that ultimately led to the collapse of the system in 1982. In India the first low growth period takes place in the years of the downfall of the system of strong government intervention as the consequence of a serious fiscal imbalance (Buiter and Patel 1997).

The second period of low growth corresponds to the world economic downturn of the early 1990s in the cases of India, Spain, and the USA, with the Tequila effect crisis of 1994/5 and the early recovery years in Mexico, and with the stagnation of the second half of the 1990s in Germany and Italy (Table 4.1).

As could be expected, similar growth rates in the high and low growth periods at the national level hide significant intra-national variation. The growth performance of individual states varies widely relative to the national performance from one period to another. To highlight some examples, Indian states like West Bengal, Gujarat, and Karnataka, which endured lower growth than the national average during the earlier high growth period, perform above the national average in the second period. Conversely, Madhya Pradesh and Haryana fare worse in the second high growth period relative to the first. In Mexico the winners of the later periods tend to be located along the US border (Chihuahua, Cohauila, Nuevo León, and Sonora) and in Yucatan, whereas the relative losers include many of the southern states, such as Tabasco, Chiapas, Quintana Roo, Oaxaca, Campeche, and Zacatecas. In Germany, Saarland, Schleswig-Holstein, Rhineland-Palatine, and Lower Saxony, grew below the national average in both low growth periods, while Bavaria and Hesse have tended to perform consistently above the mean. In the US, during the high growth periods, the South Atlantic states fared better than the national average in the first, but worse in the later. The Mountain regions performed worse than average in the first, but above average in the later. States in New England performed well above the national average, while the East South Central states and West South Central states grew well below the national average in both. Economic growth in New England outpaced that of the whole nation in the early low growth period but the reverse was true for the later period.

4.3. The link between performance and devolution

Regional growth experiences vary widely, particularly in periods of low growth. The fundamental question is whether the differential regional growth trends correlate with the regional devolution patterns exposed earlier. In order to check this link we perform model (1) for each country using the difference in regional growth between each pair of high and low growth periods as the dependent variable. Different nation-specific structural variables – the number varies according to the degrees of freedom in each national model – are inserted in the model in order to capture other factors that may have an influence on economic performance and to assess whether the coefficients of regional government expenditure change are sensitive to the inclusion of other variables. These include average infant mortality and female participation rates in the case of India; the percentage of the population above the age of 16 of each state having completed basic education and maquiladora employment as a percentage of employment in total manufacturing in the case of Mexico; the percentage of the population above the age of 25 having completed a bachelors degree and the percentage of ethnic minorities (Black and Hispanic) in the case of the US; R&D investment as a percentage of GDP for Spain; the regional unemployment rate for Germany; and share of the population with university education, the unemployment rate, and the proportion of employed in the industrial sector for Italy. Three different models are reported in Table 4.2 for high growth and low growth pairs of periods analysed, including different subsets of independent variables: model 1 contains just the level of regional government expenditure change, measured in real terms, between period *t* and period *0*; in model 2 the natural logarithm of the median regional GDP between both periods of analysis is added to the independent variables; and model 3 inserts the country-specific structural variables.

The results of the multiple regression analyses lead us to reject the hypothesis of a positive link between devolution and greater economic performance in all cases. Whether it is countries with well-established federal systems or recently devolved ones, countries with significant internal regional differences in regional devolution or countries where such differences are less evident, developed or developing countries, greater devolution does not seem to be associated with greater economic outcomes. In none of the six cases included in the analysis is a positive and significant link between

an increase in the financial capacity of a region/state to implement its own policies and higher economic performance detected (Table 4.2). In fact, some of the results point in the opposite direction. In Mexico, the US, and, to a much lesser extent, in India there is a negative association between increases in fiscal decentralization and differences in economic growth during the same periods of the national economic cycle. For Spain, Italy, and Germany no statistically significant association is evident.

Table 4.2. Regression Results

Independent Variables	High Growth Periods			Low Growth Periods		
	OLS1	OLS2	OLS3	OLS1	OLS2	OLS3
USA	(1983-89)(1995-00)			(1979-84)(1989-94)		
Constant	4.312**	45.212**	64.163**	3.989**	70.501**	34.998*
	(3.806)	(3.064)	(4.331)	(4.262)	(4.316)	(2.199)
Expenditure Decentralisation	-0.495**	-0.449**	-0.383**	-0.441**	-0.184	-0.221*
	(-3.903)	(-3.753)	(-3.852)	(-3.369)	(-1.417)	(-2.034)
LNGDP		-0.333**	-0.507**		-0.529**	-0.199
		(-2.779)	(-3.977)		(-4.077)	(-1.499)
Education			0.193			-0.500**
			(1.444)			(-3.918)
Hispanic			0.306**			0.100
			(2.983)			(1.025)
Black			-0.266**			-0.402**
			(-2.636)			(-4.098)
R-Square	0.245	0.353	0.603	0.194	0.408	0.634
Adjusted R-Square	0.229	0.325	0.557	0.177	0.383	0.592
F-Value	15.233	12.567	13.052	11.347	15.868	14.924
Number of Regions	49	49	49	49	49	49
GERMANY	(1975-79)(1987-91)			(1981-85)(1994-99)		
Constant	-0.439	53.826	30.356	0.659	36.628	78.551**
	(-0.269)	(1.306)	(0.492)	(1.042)	(1.502)	(6.310)
Expenditure Decentralisation	0.166	-0.029	-0.070	-0.389	-0.048	-0.278
	(0.413)	(-0.071)	(-0.158)	(-1.034)	(-0.115)	(-1.645)
LNGDP		-0.537	-0.311		-0.611	-1.273**
		(-1.318)	(-0.515)		(-1.475)	(-6.191)
Unemployment Rate			0.332			-1.085**
			(0.548)			(-5.305)
R-squared	0.028	0.278	0.329	0.151	0.409	0.926
Adjusted R-Squared	-0.134	-0.010	-0.175	0.010	0.172	0.871
F-Value	0.171	0.964	0.653	1.070	1.728	16.785
Number of Regions	8	8	8	8	8	8
INDIA	(1987-91)(1993-98)			(1983-88)(1989-94)		
Constant	0.531	-7.748	-6.423	0.398	-48.18*	-30.15*
	(0.495)	(-0.275)	(-0.206)	(0.269)	(-2.446)	(-2.197)
Expenditure Decentralisation	-0.246	-0.334	-0.415	0.017	-0.520	-0.405*
	(-0.879)	(-0.798)	(-0.924)	(0.058)	(-1.600)	(-1.950)
LNGDP		0.123	0.139		0.803*	0.529*
		(0.294)	(0.305)		(2.471)	(2.413)
Infant Mortality Rate			-0.095			-0.546**
			(-0.281)			(-3.222)
Female Participation Rates			-0.272			0.538**
			(-0.861)			(3.415)
R-squared	0.060	0.068	0.156	0.000	0.357	0.789
Adjusted R-Squared	-0.018	-0.102	-0.220	-0.083	0.240	0.695
F-Value	0.772	0.4	0.415	0.003	3.056	8.390
Number of Regions	14	14	14	14	14	14

Standardized coefficients reported
t-statistic in parentheses
** significant at the 1% level   * significant at the 5% level

Table 4.2. Cont'd

Independent Variables	High Growth Periods			Low Growth Periods		
	OLS1	OLS2	OLS3	OLS1	OLS2	OLS3
MEXICO	**(1976-80)(1995-99)**			**(1978-83)(1994-99)**		
Constant	2.277	-28.146**	-15.337	2.155	-21.675*	20.001
	(1.713)	(-2.703)	(-0.903)	(1.713)	(-2.102)	(1.395)
Expenditure Decentralization	-0.315	-0.546**	-0.516**	-0.419	-0.602**	-0.553**
	(-1.815)	(-3.145)	(-3.027)	(-2.528)	(-3.467)	(-3.803)
LNGDP		0.510**	0.279		0.404*	-0.364
		(2.941)	(0.927)		(2.326)	(-1.418)
Education			0.155			0.781**
			(0.547)			(3.232)
Maquila			0.275			0.268
			(1.714)			(1.961)
R-squared	0.099	0.306	0.382	0.176	0.305	0.551
Adjusted R-Squared	0.069	0.258	0.290	0.148	0.257	0.484
F-Value	3.295	6.393	4.168	6.390	6.371	8.282
No. of Regions	32	32	32	32	32	32
ITALY	**(1982-87)(1987-91)**			**(1981-85)(1996-00)**		
Constant	-0.056	4.382	11.130	0.717	5.336	59.268
	(-0.083)	(0.579)	(0.349)	(1.652)	(0.658)	(1.949)
Expenditure Decentralization	0.054	0.110	-0.047	-0.371	-0.335	0.048
	(0.229)	(0.427)	(-0.137)	(-1.692)	(-1.449)	(0.154)
LNGDP		-0.152	-0.288		-0.132	-1.737
		(-0.589)	(-0.261)		(-0.571)	(-1.93)
University Education			-0.009			0.178
			(-0.019)			(0.498)
Unemployment Rate			-0.633			-0.861
			(-0.631)			(-1.076)
Industrial Employment			-0.545			0.767
			(-0.986)			(1.457)
R-squared	0.003	0.023	0.1	0.137	0.153	0.431
Adjusted R-Squared	-0.052	-0.092	-0.222	0.089	0.054	0.227
F-Value	0.053	0.199	0.31	2.864	1.541	2.119
Number of Regions	20	20	20	20	20	20

Independent Variables	High Growth Periods						Low Growth Periods	
	OLS1	OLS3	OLS1	OLS3	OLS1	OLS3	OLS1	OLS3
SPAIN	**(1963-69)(1983-88)**		**(1963-69)(1995-00)**		**(1983-88)(1995-00)**		**(1973-79)(1990-1996)**	
Constant	-0.235	-9.536	-0.885	1.081	-0.228	12.479	-0.607	-12.664
	(-0.439)	(-0.905)	(-0.941)	(0.074)	(-0.324)	(0.910)	(-1.268)	(-1.278)
Expenditure Decentralization	0.200	0.079	0.194	0.164	0.019	0.016	0.244	0.164
	(0.790)	(0.412)	(0.765)	(0.845)	(0.074)	(0.060)	(0.976)	(0.821)
LNGDP		0.166		-0.050		-0.275		0.251
		(0.790)		(-0.233)		(-0.959)		(1.135)
R&D		0.634**		0.710**		0.376		0.511*
		(3.058)		(3.304)		(1.310)		(2.324)
R-squared	0.040	0.546	0.038	0.512	0.000	0.128	0.060	0.488
Adjusted R-Squared	-0.024	0.441	-0.027	0.4	-0.066	-0.073	-0.003	0.370
F-Value	0.624	5.211	0.585	4.548	0.005	0.638	0.953	4.137
No.of Regions	17	17	17	17	17	17	17	17

Standardized coefficients reported
t-statistic in parentheses
** significant at the 1% level   * significant at the 5% level

In the US the results of the analysis suggest that states that gained greater authority over financial resources in the late 1990s relative to the 1980s have tended to perform relatively worse – everything else being equal – than states where the growth of state

administration's expenditure has been lower. The same relationship can be observed in the periods of low economic growth of the early 1990s with respect to the early 1980s. In five of the six US regressions the relationship between gains in devolution and gains in economic growth is negative and significant (Table 4.2). The lower relative economic performance of the US states that have gained greater fiscal autonomy may be related to the characteristics of the US process of decentralization of authority. Devolution in the US has to a great extent meant the transfer of federal welfare programmes such as Social Security programmes or parts of Medicaid to the states (Donahue 1997). Hence states with greater levels of deprivation and greater Medicaid and welfare needs, despite gaining access to larger funds, may have had their hands tied in their capacity to implement growth enhancing policies, as the bulk of their financial gain would have been swallowed by welfare. This is likely to be the case in many of the states in the South Atlantic Region and the East South Central Region whose growth performances have deteriorated despite having benefited from the greatest increases in resources in recent years.

Increases in state administrations' expenditure are also negatively associated with regional performance in Mexico. Both for the high and the low growth periods analysed in Table 4.2, the coefficient for the fiscal decentralization variable is negative and significant in five out of six regressions. If the growth effects of state GDP per capita, the degree of education of the population, and the regional size of the maquila sector are controlled for, states that have witnessed a greater increase in their spending power in the 1990s have, on average, experienced a worse relative performance than during the period of strong central rule of the late 1970s and early 1980s. This result is explained by the fact that in Mexico the strongest regional governments are not just found in rich states such as Baja California, Distrito Federal, or Nuevo León. The poorest state in the country, Oaxaca, has the highest state government per capita expenditure, with other poor states, such as Tabasco, not far behind. Yet, despite the greater capacity of some of the poorer states to implement autonomous policies, it is highly debatable whether their regional administrations have the resources or even the capabilities and expertise to properly address the dimension of the development problems they have to face (Rodríguez 1997)

In the Indian case a similarly negative relationship between growth in the expenditure capacity of Indian states and economic performance emerges from the analysis. Changes in the degree of devolution, in any case, do not seem to have any significant impact on changes in growth rates. The coefficient of the variable denoting changes in state expenditure capacities is not significant in five of the six regressions and in model 6, which compares the low growth periods of the late 1980s and late 1990s, the connection between changes in state expenditure and changes in economic growth is weaker than that of the latter with GDP per capita, infant mortality, and female participation rates (Table 4.2).

For the three European countries included in the analysis, there seems to be no relationship between changes in the level of regional autonomy and changes in economic performance. The coefficients of the fiscal decentralization variable in all the Spanish, German, and Italian regressions are often close to zero and statistically insignificant (Table 4.2). Regions which have gained a greater capacity to implement their own autonomous policies have not performed better than under conditions of lower autonomy. The absence of such a link is evident in Spain. Charter regions and regions that gained autonomy via article 151 in the 1980s and thus enjoyed a much greater level of self-rule have, despite moderately positive coefficients in the first years of devolution, failed to achieve greater rates of growth in the mid 1980s relative to the highly centralized 1960s, or relative to their less autonomous Art. 143 counterparts. Good economic performances in comparison to the 1960s in some of the regions with a higher level of autonomy, such as the Canaries, Catalonia, and Navarre, were offset by relatively poor performances in other highly autonomous regions, such as Andalusia, the Basque Country, or Galicia. Neither has the greater relative growth in regional powers of some of the Art. 143 regions during the 1990s been translated into higher levels of growth. A strong performance in Madrid during the second half of the 1990s has been counterbalanced by poor rates of growth in regions like Asturias or Castile-León.

The absence of any link between changes in *Länder* expenditure capacity and changes in economic growth in Germany may be related to the massive transfer of funds to the former East German *Länder* – for which no full sets of data are available – and the impact these transfers have had on the federal equalization system. The relatively

homogenous downward trajectory in the expenditure capacity of German *Länder* has meant that the margin of manoeuvre of individual states to implement their own independent policies has narrowed.

Finally, in the case of Italy, the growth in the expenditure capacity of some of the 'special' status regions such as Valle d'Aosta, Sicily, or Sardinia, has not been associated with a higher economic performance. Of the five special status regions Trentino-Alto Adige is the only exception to this rule. Some regions characterized by moderate rates of increase in resources have, by contrast, experienced high rates of growth. This is the case of Veneto or Tuscany. And the relative advantage of most southern regions in expenditure has also not been translated into higher economic growth than in northern regions, the reverse being generally the case in the 1990s.

Conclusion

In this paper we have assessed the link between devolution and economic efficiency, especially in light of the increasing tendency by devolutionists and 'new regionalists' to associate the transfer of authority and resources to subnational tiers of government with enhanced economic performance. In a world which has experienced a significant drive towards devolution over the last decades, devolutionists suggest that this should have sufficed to trigger efficiency through improvements in the capacity of devolved administrations to better tailor the provision of public policies and goods to local needs and preferences; greater opportunities for policy innovation; a supposed superior accountability and transparency of administrations that are 'closer to the people'; and through gains from competition by a greater number of governments generating the best policies and providing the most cost-effective public goods.

Yet, as our results show, there is little trace of a connection between devolution and greater economic efficiency. In our six case studies, we found no evidence of a positive and robust correlation between the inception of regional autonomy or of increases in transfers of resources to regional and state governments and a better economic performance than under a more centralized regime. States and regions which have gained greater powers over the last decades do not seem to reap an

economic growth premium from the increased capacity of regional governments to set up their own independent policies. In our six cases, changes in the level of devolution are at best irrelevant in determining the economic performance of regions. The absence of this 'economic dividend' of devolution is apparent in very different contexts. It is conspicuous in countries which have witnessed a recent transition to regional autonomy and in countries with a long tradition of devolution; in federal and in non federal countries; in countries with significant internal heterogeneity in the power and resources of regional governments and in countries where those differences are uncommon; in countries where the expenditure capacity of regions has increased significantly over the last few decades and in countries where subnational expenditure relative to GDP has remained stable; and in developed and less developed countries. In the worst cases – Mexico and the US – devolution seems to operate in an opposite direction than that predicted by the 'efficiency through devolution' hypothesis. Even when structural factors that may have an impact on economic growth have been controlled for, the Mexican and US states that have gained greater powers to implement autonomous policies over the last few years display a worse relative economic trajectory than they did under a more centralized system of economic governance.

Claims of greater efficiency through devolution and the transfer of powers and authority to regional tiers of government should therefore be taken with great caution. Although devolution may indeed be associated with an increased degree of policy innovation, with a better capacity of governments to adapt policies to local needs – provided a developed civil society exists – and with a greater transparency and accountability, it is difficult to directly associate these factors with increased economic performance. New policies may be a success, but may also fail miserably; responding to public opinion may push governments to adopt policies which are popular in the short-term but have a negative impact in the medium and long-term; and territorial competition across jurisdictions may be growth enhancing, but also zero-sum. Many of the negative factors highlighted by much of the fiscal federalism literature such as the inability to exploit economies of scale and scope at lower levels of government, the problems of assigning powers in a non-overlapping way in devolved contexts or the tendency to operate in conditions of 'soft budget constraints' are also likely to play a role in the absence of a link between devolution and higher

economic growth. As a result, devolution is far from being the economic cure envisaged by many devolutionists. Although the transfer of authority and resources from the centre to the regions is likely to imply social, cultural, and even political benefits, caution is prescribed when trying to discern any economic effect of devolution, as devolution does not seem to be associated with greater growth.

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