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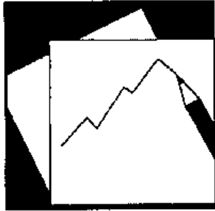

IMF Working Paper

Macroeconomic Management and the Devolution of Fiscal Powers

Paulo Drummond and Ali Mansoor

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Macroeconomic Management and the Devolution of Fiscal Powers

Prepared by Paulo Drummond and Ali Mansoor[1]

Authorized for distribution by Robert A. Feldman and Sanjeev Gupta

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Abstract

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Several of the transition economies are devolving fiscal authority to subnational governments at a time when it is also important to consolidate fiscal policy. This can be problematic because, without appropriate care, the central government's ability to determine the level and structure of revenues, public spending, and borrowing may well diminish as fiscal policy is devolved. This paper focuses on how the center can maintain its ability to conduct fiscal policy while devolving revenue, spending, and borrowing powers to lower levels of government. Empirical evidence shows that countries with good governance have maintained fiscal control despite a high degree of fiscal devolution. And decentralization is associated with better fiscal outcomes for middle-income countries with strong governance. Fiscal management issues are explored in four key areas: budget coordination mechanisms at the macro level; tax-effort incentives and revenue-sharing mechanisms; expenditure control and hard-budget constraints; and criteria and rules for borrowing.

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Authors' E-Mail addresses: pdrummond@imf.org; amansoor@imf.org

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I. Introduction

Sometimes transition economies need to consolidate overall fiscal policy while they are devolving fiscal authority to subnational governments.[2] Without appropriate care, the central government's ability to determine the level and structure of revenues, public spending, and borrowing may well diminish as fiscal authority is devolved. A key challenge for the central government, or "center" of power, is to devolve fiscal powers without endangering the sound management of macroeconomic policy, particularly the achievement of fiscal targets for the government as a whole.[3]

This paper focuses on how the central government can maintain its ability to manage fiscal policy while devolving revenue, spending, and borrowing powers to lower levels of government. The paper finds that with good governance (see Box 1), high- and middle-income countries have successfully maintained fiscal control despite a high degree of fiscal devolution, using various incentives, rules, and coordination mechanisms among levels of government, while ensuring appropriate planning and monitoring of the local governments' financial situation. To illustrate this finding, the paper reviews international experience and considers detailed lessons from several advanced economies in Europe. The discussion focuses on how countries have dealt effectively with fiscal management in decentralized settings.[4] Fiscal management issues fall into four key areas: macroeconomic budget coordination mechanisms; tax-effort incentives and revenue-sharing mechanisms; expenditure control and hard-budget constraints; and criteria and rules for borrowing.

The paper is organized as follows. Section II provides background on the benefits and challenges generally associated with greater fiscal decentralization and autonomy of lower levels of government. Section III considers evidence on the link between fiscal consolidation and decentralization. In addition to considering findings in the literature, it presents the results of cluster analysis applied to a large sample of developing, transition, and industrialized countries. Section IV reviews the degree of fiscal devolution in 17 member countries of the Organization for Economic Cooperation and Development (OECD) and provides some additional empirical evidence on the relation between fiscal devolution and fiscal performance. Section V discusses key fiscal policy management issues in decentralized settings based on the experiences of selected advanced and transition economies in Europe. Section VI provides concluding remarks. Appendices I and II present the detailed cluster analysis and regression results. A summary of country experiences and issues is provided in Appendix III.

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[2] Fiscal authority refers to revenue raising, spending, and borrowing authority. The terms subnational government and local government are used interchangeably in this paper.

[3] Ter-Minassian (1997).

[4] The group is composed of 17 OECD countries (16 European countries and New Zealand).

Box 1. Governance Indicators

We can define governance according to the indicators developed by Kaufmann, Kraay, and Zoido-Lobatón (1999 and 2000). They have constructed an index to rank 178 countries and territories according to the criteria in Table 1. In this paper we use a composite governance index that gives equal weight to each of the following governance indicators.

Indicator	Determinants
VA (Voice and Accountability)	Responsiveness of government Decision making to civil society.
PIV (Political Instability and Violence)	Use of violence to resolve civil and social conflicts; extent of civil and social conflict.
RB (Regulatory Burden)	Extent of regulations affecting the cost of starting, carrying out, and closing down business activity.
RL (Rule of Law)	Crime, enforceability of contracts, and effectiveness of laws.
GR (Graft)	Extent and perception of corruption in influencing government decisions.
GE (Government Effectiveness)	Delays in responding to requests, institutional failure, red tape, and quality of public administration.

Box 2 explains some terms used in the paper.

Box 2. Terminology

- *Decentralization*: the transfer of revenues and expenditures from the center to lower levels of government;
- *Devolution:* the transfer of revenues and expenditures; the authority over the level of public services, and the authority to set tax rates to collect the revenue required to finance the desired level of service;
- *Autonomy*: authority of local governments over tax bases and spending decisions;
- *Resources of a local government*: the sum of all the revenue (its own revenue and transfers from other levels of government) and other sources of financing available to pay for public spending.
- *A local government's own resources*: revenue accruing to a local government from tax bases and/or transfers allocated to it by law and fees and other charges it levies.
- *Fiscal consolidation*: fiscal policy management by the central government that reduces the fiscal deficit.

II. Benefits and Challenges of Fiscal Devolution

The main benefits of greater fiscal devolution are the increased efficiency and responsiveness of government (see Box 3).[5] As long as local governments are knowledgeable and responsive to local conditions, devolving resource allocation to local governments should, in principle, help public spending better match the preferences of the local population.[6] However, efficiency gains largely depend on the responsiveness of local government spending to the preferences of citizens in different localities.[7] Local governments tend to be more responsive if they are more accountable for their performance. Greater taxing powers at the local level generally help increase local governments' accountability by establishing a closer link between the cost of providing public services and the payment for them.

In practice, however, countries have not always found it straightforward to realize these benefits. First, decentralization programs promote institutional clarity and transparency in budgeting only if spending matches resources at the subnational level and subnational governments are committed to fiscal discipline. Second, a successful decentralization program also depends largely on the subnational availability of expertise, without which those governments cannot handle increased resources and ensure effective expenditure management.[8] Third, although there is evidence that locally provided services are likely to cost less than centrally provided services, effective decentralization requires significant local administrative capacity and locally responsive and responsible officials with substantial discretionary financial control to deliver services.[9] Fourth, the potential for improving the institutional framework for macroeconomic policy can only be realized provided that careful attention is paid to the design of institutions.[10]

"Weak institutions can throw the theoretical efficiency gains from decentralization out the window in practice."[11] This may explain why some challenge the benefit of decentralization. Hommes (1995) warns that decentralization may just shift problems from the central government budget without resolving underlying conflicts. As a result, the central government tries to "buy" the loyalty of local governments and local politicians with the rest of the budget. Similarly, Sanchez de Losada (1998) points out that a federal system can be inefficient and expensive when local urban elites are powerful. Where governance is weak, decentralization is likely to see a shift in corruption from the central government to the local

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[5] Oates (1972).

[6] Ostrom, Schroeder, and Wynne (1993).

[7] See Ahmad, Hewitt, and Ruggiero (1997).

[8] Fukasaku and Luiz de Mello (1999).

[9] Kitunzi (n.d.).

[10] Shah (1999).

[11] Ter-Minassian, 1995.

Box 3. Principles of Fiscal Devolution

The following four key principles of fiscal devolution—drawn from the early literature on fiscal decentralization[1]— are useful for understanding the general movement toward more decentralized fiscal settings. While these principles do not lay out a paradigm toward which to strive, they explain some of the thorny tradeoffs countries face when devolving fiscal powers, namely, the most efficient and transparent arrangements to secure public services while minimizing distortions from raising revenue. Moreover, the degree of autonomy and extent of decentralization and/or devolution should aim at making it easy for voters to understand the tradeoffs between higher levels of public service and the taxes they will need to pay.

- *Financial Responsibility or Fiscal Equivalence.* Decisions on expenditures should be made by the same level of government responsible for financing these expenditures. Under this principle, lower levels of government should be held accountable for all funds—including intergovernmental transfers—required to finance their expenditure through taxes, nontax revenue, and/or borrowing.

- *Subsidiarity.* A higher level of government should take up a government function only if a lower level of government cannot fulfill the function efficiently. The principle of subsidiarity helps preserve smaller social groups from the more encompassing institutions of government, while dealing effectively with regional differences.

- *Equality.* Fiscal policy should aim to help address the regional disparity in many countries where regions with high tax bases and low expenditure needs coexist with regions having low tax bases and high expenditure needs. The degree of equalization, should, however, maintain appropriate fiscal incentives for regions to promote their own economic development. Under the principle of equality, lower levels of government with lower capacity to raise taxes may be entitled to equalization funds. However, the equalization should not contradict either subsidiarity or financial responsibility. This means that grants should only equalize income for functions that are more efficiently undertaken by local government. Moreover, these grants should provide incentives for the local government to raise revenue to pay for some portion of services commensurate with its ability to pay (e.g., through matching grants).

- *Fiscal Autonomy.* Lower levels of government should be autonomous in their decision-making and executive powers within a framework that respects the above three rules. When raising taxes, the highest autonomy corresponds to full decision-making power on the tax base and the tax rate. The lowest autonomy corresponds to conditional grants, where the center keeps control not only of the amount of revenue but also of the use of resources. For example, tax sharing implies a greater degree of fiscal autonomy than grants and provides a positive incentive to local governments to protect the tax base. Under tax sharing, however, local governments generally cannot set tax rates, and are left with little revenue-raising power. Even when there is a high degree of autonomy, however, and especially where financial markets are not fully developed, central government may need to coordinate the fiscal stance of local governments to secure macroeconomic stability.

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[1] Tiebout (1956), Musgrave and Musgrave (1984), and Oates (1972).

level. Our own analysis in the next section confirms the views that institutional arrangements are crucial in determining the benefits and minimizing the costs from decentralization. This is also consistent with the findings of Fukasaku and de Mello (1999) that OECD member countries have generally had more success in implementing fiscal decentralization programs than most of the emerging economies.

The preceding review suggests that in addition to ensuring that devolution does not pose undue risks to meeting fiscal targets, there are several other challenges associated with fiscal devolution. The first is to ensure that devolving large taxing powers to lower levels of government will improve public spending. The administrative capacity of local government is key to ensuring quality service. The second is to avoid widening regional disparities in the provision of public services, particularly health and education. Distributional considerations should be taken into account in devolving taxing powers to local governments and could require policy intervention, for example, if there is a large variation in the tax capacity of different regions that might introduce such disparities. The third challenge is to ensure that appropriate institutional arrangements and safeguards are in place. Finally, governance must be adequate to enforce rules and to ensure that local elites do not capture the benefits of decentralization. While the remainder of this paper does not attempt to address the broader questions of how fiscal powers should be devolved, or how to cope with all the challenges that fiscal devolution inevitably poses, it explores the relationship between fiscal devolution and control, and the array of mechanisms that seems to help deliver greater fiscal control in more decentralized settings.[12]

III. Empirical Evidence

A. Methodology

We use cluster analysis to explore the suggestions in the previous section that the relationship between fiscal consolidation and decentralization depends on institutional

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[12] Determining the extent to which decentralization should be pursued is outside the scope of this paper. Such a determination would require that the following four additional questions are answered: First, which services can be more efficiently provided at the local level? These functions should be devolved regardless of the source of finance. Second, to what degree should local groups be allowed to choose different sets of services and how they want to finance them? To the extent that Virginians can choose more police and fewer parks than Marylanders, for example, it makes sense to devolve revenue-raising powers and to ensure that all intergovernmental transfers are intramarginal—that is, any grants targeted at a particular function (police or parks) should amount to less than the locality would spend on that function in the absence of the targeting, and the sum of grants should be less than the total spending. The opposite should only apply if local spending were less than a nationally imposed norm in the absence of the targeting. Third, what are the "natural" limits on local government behavior? To what extent should a local community (through the median voter or whatever other mechanism it adopts) be allowed to determine what government services are provided and at what cost? Finally, how can we internalize the benefits (costs) of fiscal responsibility (irresponsibility) on subnational governments? Should local governments simply be forced to pay the price for inappropriate actions, or should they be forced to follow a set of rules that attempts to preclude inappropriate behavior (on the theory that the central government will engender moral hazard).

We use cluster analysis to explore the suggestions in the previous section that the relationship between fiscal consolidation and decentralization depends on institutional arrangements, as proxied by governance indicators. In the absence of a theoretical model that would explain the links among governance indicators, degree of decentralization, and fiscal performance, we cannot specify an appropriate structural equation that could be tested using the data. We tried, nevertheless, to run some simple regressions to test the dependence of fiscal consolidation on the degree of decentralization, per capita income, and governance. The results (reported in Appendix 1) suggest very low explanatory power with corrected R squared of less than 0.16.[13] In the absence of a good model, it is not possible to draw strong inferences, especially on causality. However, we can use cluster analysis to determine associations without having to specify particular structural relationships. This is the approach we adopt here, allowing the data to partition itself into groups having similar characteristics and comparing the resulting clusters.[14] Such cluster analysis offers a useful way of identifying similarities and differences among groups of countries.[15] Appendix II provides a discussion of data and methodology. Under this methodology, we need to specify the number of clusters and the method of computing differences.[16]

We divided the data into three income groups (low-income, middle-income, and high-income). For each income group we divided the data into two clusters in the hope that the sample would separate into centralized and decentralized economies for each of the three income groups.[17] This was the case, however, for only one of the groups. The data divided itself into statistically significant decentralized or centralized groups for middle-income countries, but not for high- and low-income countries (Table 1).

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[13] It is, nevertheless, comforting that the regression results are consistent with the findings of the cluster analysis. Thus, decentralization and good governance both have a positive impact on fiscal consolidation. However, while governance is statistically significant at the 2 percent level, the decentralization variable is only significant at the 11 percent level.

[14] Countries are in different stages of economic development and some are in transition from more centralized economies; this range clearly affects the analysis of devolution. In addition, the cluster analysis includes very diverse countries in per capita income, size and governmental structure. While these and other factors may be related to the degree of fiscal decentralization, for the sake of simplicity, the analysis controls for per capita income only. A further, natural extension of this analysis would attempt to control for other factors as well.

[15] Data is not available for all categories for all 174 countries. The dataset uses information from the IMF and World Bank databases. For a discussion of data availability see Appendix I.

[16] As explained in Appendix II we use a Euclidean measure of distance, i.e, the square root of the squared difference.

[17] The cluster analysis aims to provide evidence on the relationships between the degree of decentralization and fiscal performance. While simple covariance estimates or regression analysis would also provide useful information in this regard, the cluster analysis has the merit of allowing the data to organize itself in groups such that the difference within groups is minimized relative to the difference across groups. Thus, the absence of a model "explaining" the data is not a handicap and specification errors are not an issue.

Table 1: Decentralization and Fiscal Performance — Cluster Analysis

(Sample of 76 countries: Mean by income group and by cluster with 95% significance test that means between clusters are the same 1/)

	General Government Balance - average 1996-2000 minus average 1990-1995	Government Balance-Standard Deviation (1990-2000)	Normalized Governance 2/	Normalized Decentralization Index 2/ 3/	1998 GNP per capita
	In percent of GDP		deviation from mean (measured in standard deviations)		US$
Overall sample of 76 countries	0.8	2.7	0.0	0.0	9,099
15 **Low-income countries** (GNP per capita less than $1,350)	0.8	2.6	0.0	-0.5	603
Cluster 1: Centralized, with better governance: government balance improves and is less variable.	0.8	1.8	0.5	-0.6	628
Cluster 2: Centralized, with worse governance: government balance improves and is more variable.	0.9	4.3	-1.0	-0.4	554
2-Tail Significance test: whether mean clusters 1 and 2 are the same	0.93	0.04 **	0.00 **	0.82	
Same or different	Same	Different	Different	Same	
38 **Middle-income countries** (GNP per capita between $1,350 and $10,000)	-0.9	2.7	0.0	-0.2	3,770
Cluster 3: Centralized, with worse governance: Government balance deteriorates and is more variable.	-4.8	3.8	-0.6	-0.6	3,264
Cluster 4: Less centralized, with better governance: Government balance improves and is less variable.	0.2	2.4	0.2	-0.1	3,904
2-Tail Significance test: whether mean clusters 3 and 4 are the same	0.00 **	0.02 **	0.04 **	0.07 *	
Same or different	Different	Different	Different	Different	
23 **High-income countries** (GNP per capita above $10,000)	3.4	2.8	0.0	0.6	23,444
Cluster 5: Decentralized, with good governance: Government balance improves and is more variable.	6.5	4.6	0.1	0.9	22,461
Cluster 6: decentralized, with good governance: Government balance improves and is less variable.	2.1	2.1	-0.1	0.5	23,874
2-Tail Significance test: whether mean clusters 5 and 6 are the same	0.00 **	0.00 **	0.73	0.37	
Same or different	Different	Different	Same	Same	

Sources: IMF and World Bank database; and staff estimates

1/ Statistically different at the 95 percent level indicated by "**"; Statistically different at the 92.5% significance level indicated by "*".

2/The data was normalized by computing for each data point the deviation from the mean for the whole sample, and dividing this by the standard deviation.

3/ The degree of decentralization is measured by average of the share of subnational expenditure and taxation in general government expenditure and taxes, respectively.

B. Results

The cluster analysis does not support the null hypothesis that decentralization hinders fiscal consolidation, especially for middle-income countries with good governance. The following associations can be made:

- For low-income countries, the association between decentralization and degree of fiscal consolidation is not statistically significant. However, countries with better governance are associated with lower variability in the government balance.
- For middle-income countries, the more decentralized cluster is associated with better governance, less variability in government balance and better fiscal consolidation (small improvement in government balance compared with a deterioration for the more centralized cluster with worse governance).
- For high-income countries, there is no evidence that decentralization is associated with weaker fiscal performance.

The cluster analysis thus supports the contention that for high- and middle-income countries with good governance there is no statistical evidence linking decentralization with weaker fiscal consolidation. For low-income countries, perhaps because we have a smaller sample, no statistically significant conclusions can be drawn.

IV. Devolution and Fiscal Performance in Selected OECD Countries

The degree of fiscal devolution varies greatly across OECD countries in this study (Figure 1).[18,19] The varying degrees and modalities of devolution are partly due to different historical and institutional factors. Of the 17 OECD economies surveyed, the degree of fiscal devolution is relatively weak and central control is relatively strong in the transition economies (Hungary, the Czech Republic, and Poland). In contrast, lower levels of government are the most autonomous in the Nordic countries (Sweden, Finland, and Denmark). Between these ends of the spectrum are the other economies, with varying degrees of fiscal devolution.

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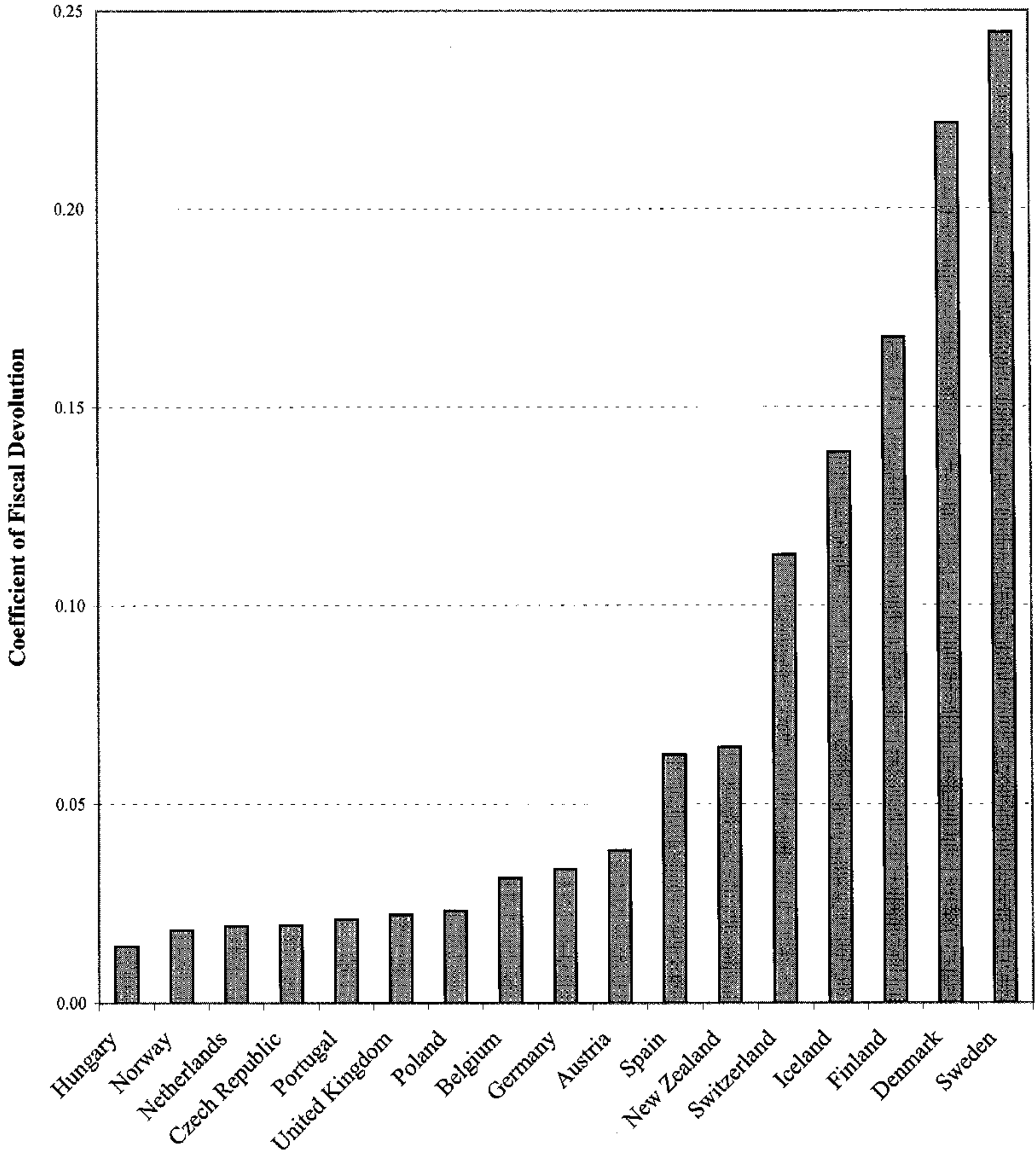
[18] The measure of fiscal devolution used here takes into account the decision-making autonomy of lower levels of government, particularly the autonomy in taxation.

[19] This section makes extensive use of local government data compiled by a recent OECD study on local government finances (OECD, 1999a). The country-specific information used in the paper reflects the institutional regime prevailing at the end of 2000 and may not reflect more recent changes affecting local and regional governments.

Figure 1. Fiscal Devolution In Europe 1/



1/ And New Zealand.

Figure 2 provides a breakdown of the fiscal devolution coefficient into its component measures of decentralization and fiscal autonomy (Box 4 discusses these concepts) and reveals two main patterns.

The degree of decentralization, measured by local government tax revenue as a share of general government tax revenue, helps explain the disparities in the degree of fiscal devolution across countries. In the 17 countries examined, the degree of fiscal decentralization was, on average, 17 percent; for six countries, the share of local governments' tax revenue exceeded 20 percent (the Nordic countries, plus Switzerland and Iceland), while for seven other countries (including Hungary and Poland), the share was below ten percent.

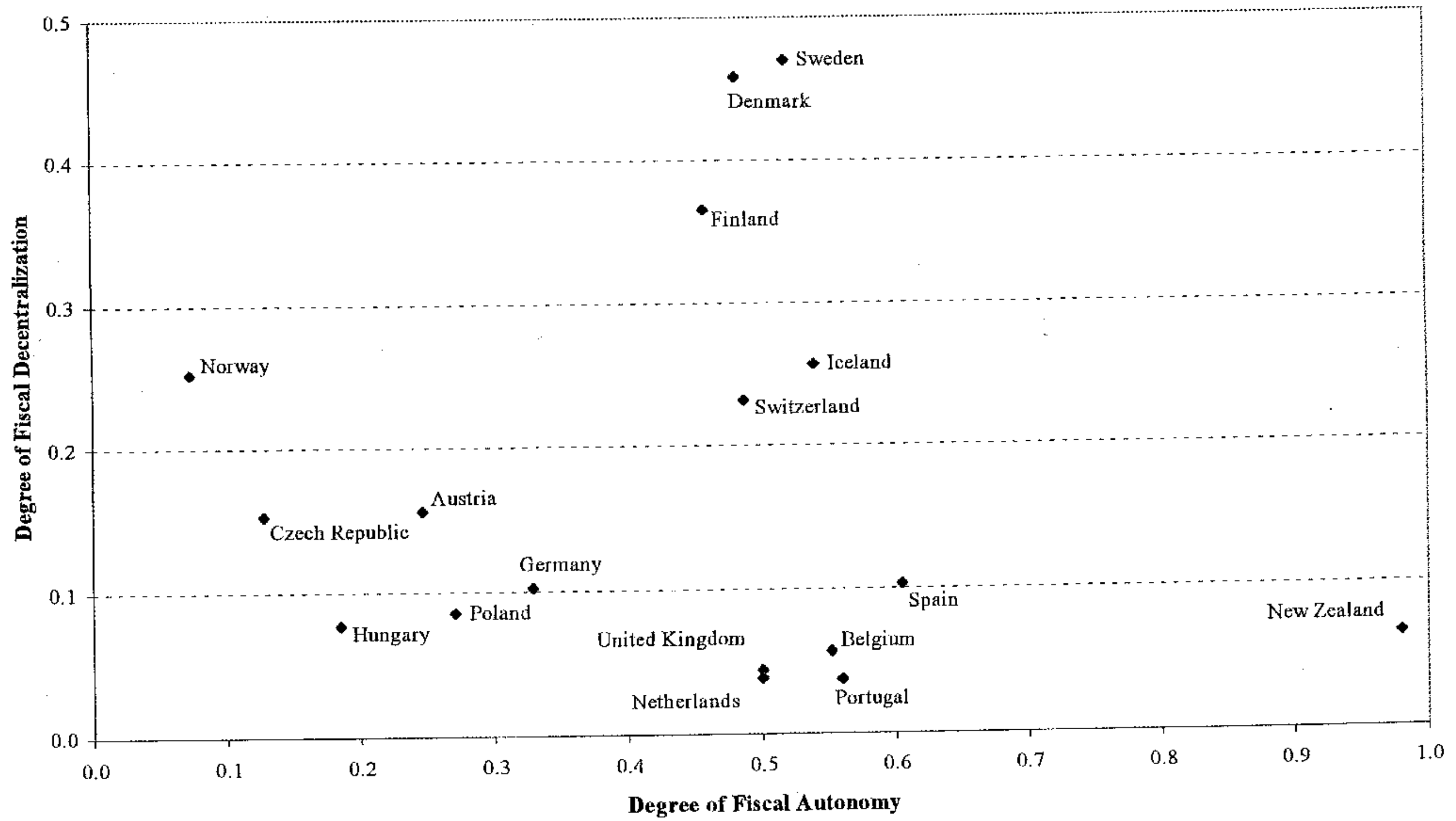
The degree of fiscal autonomy varies widely across countries and, as might be expected, showed only a moderate correlation with the degree of fiscal decentralization. Six countries—Hungary, the Czech Republic, and Poland, as well as Germany, Austria, and Norway—showed above average control at the center. Some economies, such as Norway, exhibited a relatively high degree of fiscal decentralization, but the power to levy taxes has been kept highly centralized. At the other end of the spectrum, New Zealand showed highly autonomous local governments but they accounted for a minor share of overall government revenue.

Figures 3–6 examine the relation between devolution and fiscal performance for the countries surveyed. Here, two main conclusions can be drawn:

Greater decentralization did not generally lead to increased macroeconomic risks in the form of recurring central government deficits, or to an inability to carry out fiscal consolidation programs. The correlation between the degree of fiscal devolution and fiscal performance is indeed weak (Figures 3 and 4).

Some of the economies in the sample provide evidence that a high devolution of fiscal powers need not impede strong fiscal consolidation, if appropriate conditions are in place. From 1995 to 1999 the economies with the highest degree of fiscal devolution (particularly the Nordic countries: Iceland, Sweden, Denmark, and Finland) managed to substantially improve their overall fiscal position—and their structural fiscal balances—despite their highly decentralized levels of revenues and expenditures (Figures 3 and 4). This lends support to the idea that fiscal devolution with commensurate spending and revenue-raising responsibilities need not be associated with negative consequences for fiscal control if appropriate conditions are in place (see the following discussion). Separate examinations of the component measures of fiscal devolution, namely fiscal decentralization and autonomy, do not appear to change this conclusion (Figures 5 and 6). In our examination, greater decentralization did not generally lead to increased macroeconomic risks in the form of recurring central government deficits, or to an inability to carry out fiscal consolidation programs.

Figure 2. Fiscal Decentralization and Fiscal Autonomy



Box 4. Measuring Fiscal Devolution

- For the 17 OECD economies, the degree of fiscal decentralization was measured by the share of tax resources handled by lower levels of government. A larger share is evidence of greater availability of resources but by itself is of limited value in determining the independence of lower levels of government to allocate these resources. The degree of decentralization has to be assessed together with the degree of fiscal autonomy to illustrate the local government's ability to decide and appropriate resources on its own.

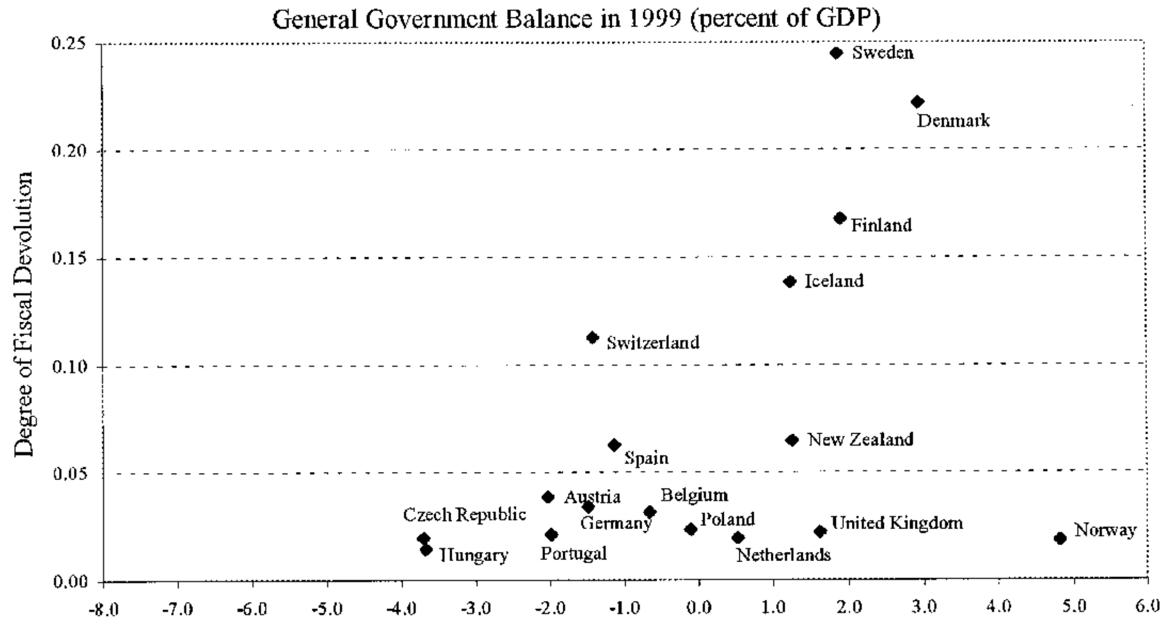
- To measure the degree of fiscal autonomy, a coefficient of fiscal autonomy was constructed, based on a recent OECD compilation of local government data that summarizes tax autonomy in 17 countries. [1] The degree of tax autonomy has traditionally been assessed through the tax revenue share as a percentage of total revenues of lower levels of government (taxes, nontax revenues, and grants). Such a measure, however, is unable to detect or differentiate the degree of control that local governments have over their tax bases and rates. The new OECD taxonomy provides data on the degree of fiscal independence from central governments on a tax-specific basis (OECD 1999a). This helps assess the degree of fiscal discretion because it provides evidence of the decision-making powers of lower governments. The range of fiscal discretion categories is wide: greater discretion is associated with local governments' ability to set the tax rate or base or both, while lower discretion is associated with different modalities of splitting revenue, and a greater central government decision-making role. The coefficient of fiscal autonomy used in this paper was constructed by using the shares of tax revenue that fall under various categories of fiscal discretion as classified by the OECD.

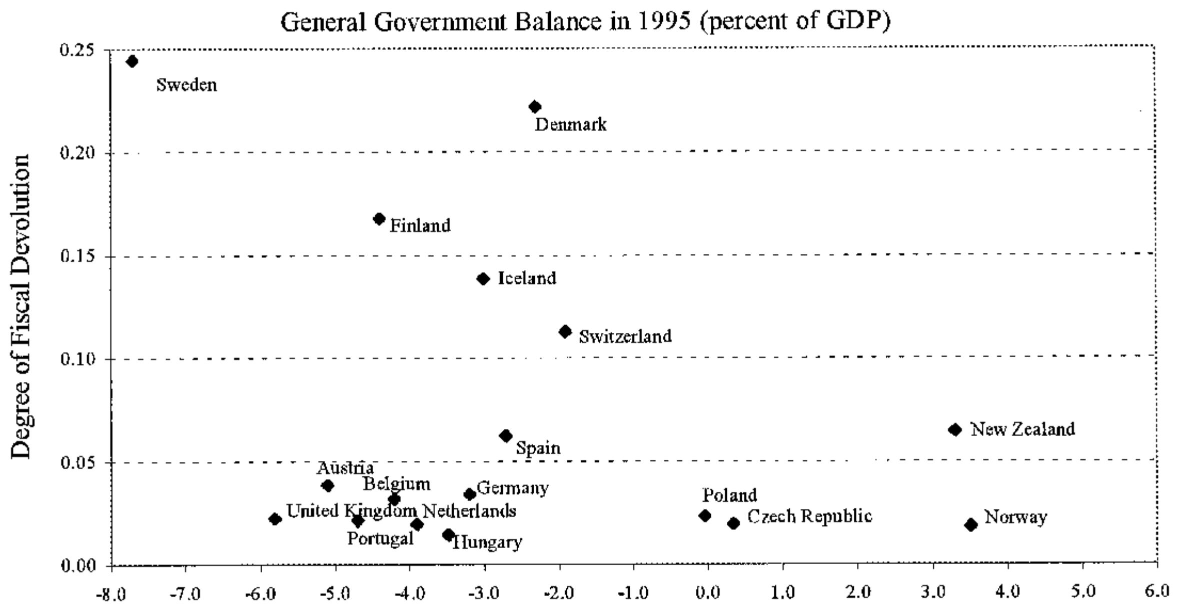
- A composite indicator ¾a fiscal devolution coefficient¾was used in this chapter to measure the overall degree of fiscal devolution to lower levels of government. The indicator combines the coefficient of fiscal autonomy, measured by the degree of control these governments exercise over their tax revenues, with the degree of decentralization, measured by the share of local governments on general government tax revenue.

- A high fiscal devolution coefficient is consistent with a high degree of fiscal decentralization and a high degree of fiscal autonomy. The composite coefficient serves as a proxy measure for the degree of control exercised by local governments on the overall level of resources appropriated by the government. By this measure, a coefficient of zero indicates lower levels of government have no autonomy in their decision making and/or have no control of resources appropriated from the private sector; a coefficient of one indicates that lower levels of government are autonomous in their decision making and control all resources appropriated from the private sector. While no single measure of decentralization or fiscal autonomy can illustrate the complexities of devolving taxing and spending powers to local governments, the fiscal devolution coefficient gives a categorization of countries that closely matches the more in-depth, country-by-country description found in the literature.

[1] See Shah (1994) for an alternative index of subnational autonomy that measures the degree of control exercised by the federal government over lower levels of government using the ratio of general purpose transfers, shared revenues, and borrowing over total expenditure.

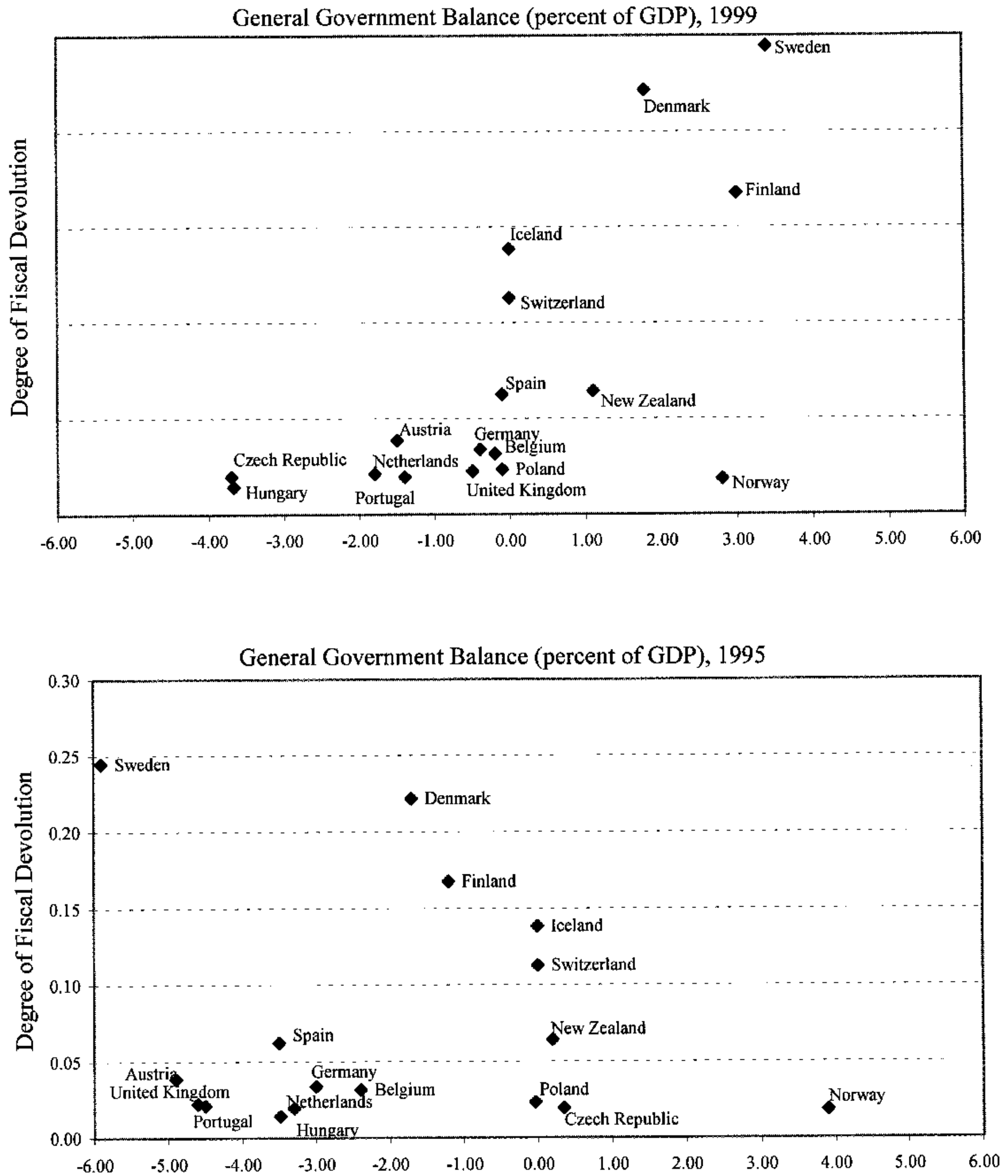
Figure 3. Devolution and Fiscal Balance





Sources: WEO, OECD, and IMF staff estimates.

Figure 4. Devolution and Structural Balance



Sources: WEO, OECD, and Fund staff estimates.

Figure 5. Fiscal Autonomy and Fiscal Balance
Structural Balance in 1999
(percent of GDP)

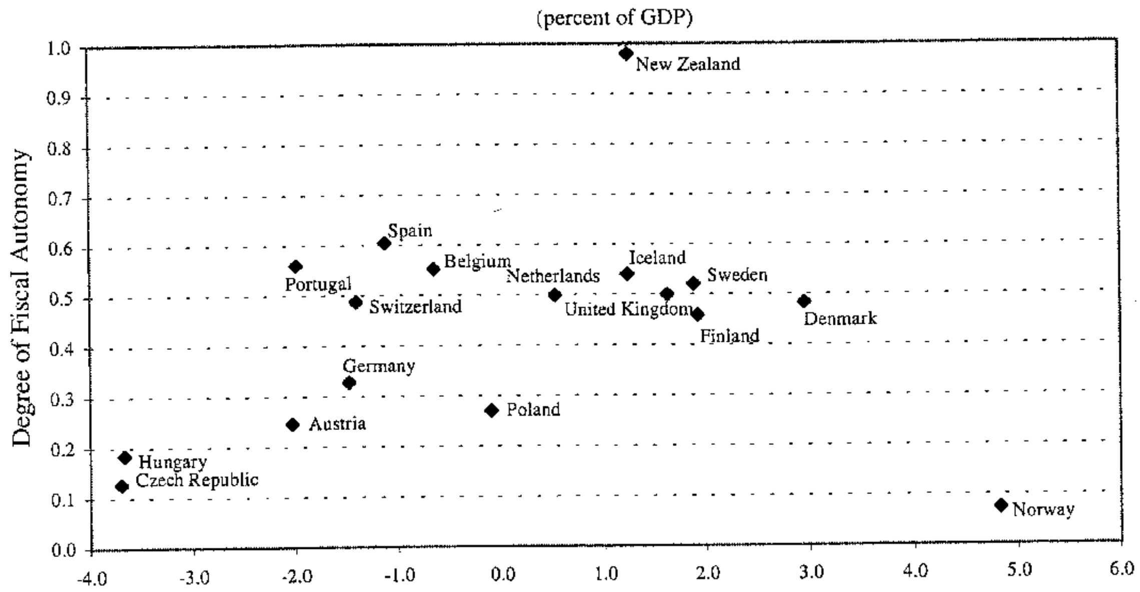
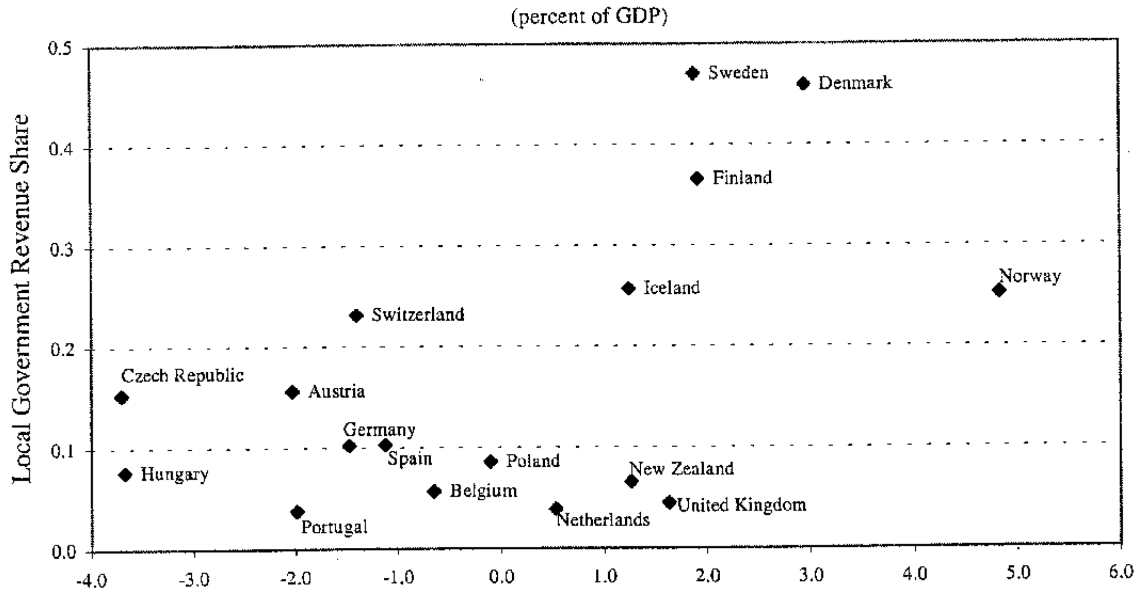


Figure 6. Fiscal Decentralization and Fiscal Balance:
Structural Balance in 1999
(percent of GDP)



Sources: WEO, OECD, and Fund staff estimates.

V. Fiscal Policy Management in Decentralized Settings

There is no one-size-fits-all solution on how to cope with more decentralized settings, although certain broad lessons have come to light through the disparate experiences of many countries. While fiscal decentralization has occurred in different countries at different times, under a broad range of circumstances, there is a consensus in the literature on four basic premises. First, fiscal decentralization invariably influences the central government's ability to manage fiscal policy. It is therefore important to discuss ways to maintain the center's ability to manage fiscal policy in tandem with the process of decentralization. Second, tax assignment between the center and lower levels of government should take into account efficiency in tax administration while matching revenues as closely as possible with expenditure needs. Assignment of public services to local or regional governments should reflect economies of scale, population size, and administrative capacity, among other factors. Third, fiscal consolidation and fiscal control in a highly decentralized setting can be achieved only if the allocation of resources and the revenue-raising ability of local governments are commensurate with their spending responsibilities and sound financing mechanisms. Fourth, overall fiscal control can be maintained from the rules associated with the previous three requirements only if there is good governance that ensures transparency over taxation and spending decisions and guarantees that local governments respect the rules

Beyond general prescriptions for fiscal policies to reduce the potentially destabilizing effects of more decentralized settings, policymakers often seek answers to practical questions such as the following: What kind of coordination mechanism between levels of government has been effective in maintaining the center's ability to manage fiscal policy?

What kind of borrowing arrangements can provide the best incentives and limit the indebtedness of local governments? How much tax autonomy is consistent with maintaining the central government's ability to adjust to macroeconomic shocks? The rest of this section reviews current policies in selected OECD economies—with varying degrees of fiscal decentralization[20] regarding fiscal management and intergovernmental finances. The aim is to complement, with analysis of actual practical experiences of fiscal management, prescriptions generally found in the literature on how to preserve the central government's ability to manage fiscal policy in decentralized settings. Particular country experiences are used selectively to illustrate policy options in four areas: macroeconomic budget coordination mechanisms; tax effort incentives and revenue-sharing mechanisms; expenditure control and hard-budget constraints; and criteria and rules for borrowing.

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[20] The section uses selectively the experiences of three highly decentralized economies (Finland, Denmark, and Sweden, representatives of the Nordic model); three economies with more moderate levels of decentralization (Spain, Belgium, and Germany); and two transition economies with lower levels of decentralization (Hungary and Poland). (See Appendix III for background information.). The country-specific information used in this section reflects the institutional regime prevailing at the end of 2000 and may not reflect more recent changes affecting local and regional governments.

A. Budget Coordination Mechanism at the Macro Level

The central government's policy options consist in seeking agreement with or imposing budget targets on lower levels of government. Cooperative approaches to the design and implementation of fiscal policy generally entail making the lower levels of government aware of the macroeconomic implications of their own policies; they also require multilateral negotiations for the monitoring of compliance of fiscal targets. In reality, the actions of a single one of many local governments that follows its own best interests would have no macroeconomic implications if it were to act in isolation, that is, most or all the other local governments would do what is best for the macroeconomy. Otherwise, a challenge could arise with a clear need to coordinate the actions of lower levels of government to ensure macroeconomic stability in a decentralized setting.

Some OECD economies have relied on formal mechanisms for coordination of budget plans between lower levels of government and the central government.[21] In *Belgium,* the High Financial Council (Conseil Supérieur des Finances) oversees the financial policies of regions, communities, and the federal government, issuing statements, an annual evaluation of the financial needs of each entity, and recommendations. The council may, for example, issue a statement on the need to constrain any given entity's capacity to borrow. Cooperation agreements among regions, communities, and the federal government were produced in the framework of the fiscal adjustments required by the Maastricht Treaty to join the European Economic and Monetary Union. To some extent, the agreement internalized stability pacts. The 1994 agreement required all entities to cooperate in the adjustment effort required by the Convergence Plan of 1992: zero real growth of primary expenditure of the federal government, stabilization of the debt-to-revenue ratio of the federated entities, and a requirement that each entity follow the prescriptions of the financial council concerning the maximum ceiling on its deficit.[22] Similar institutional setups for discussions, negotiations, and agreements between central and local governments have been developed in *Finland, Sweden, and Denmark.* In these Nordic countries, the central government and municipal associations enter into annual agreements on joint recommendations, aiming to curb increases in local tax rates and local government spending. In *Germany,* a council (the Financial Planning Council) is in charge of securing consistency of financial plans for each of the *länder* (states) and the federal government with the aggregate fiscal target. The council is chaired by the federal minister of finance, with finance ministers from each of the *länder* and representatives of municipalities as members.

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[21] It is difficult to isolate the impact of coordination mechanisms in preserving the central government's ability to control fiscal policy. Clearly, the enforcement power of internal stability pacts is key to preventing the moral hazard associated with expected bailouts of insolvent local governments. Also, adequate financial reporting and auditing across levels of government are sine qua non to monitoring and enforcing any effort of public expenditure management.

[22] A new pact is in the works for the five-year period starting in 2001.

B. Tax Effort Incentives and Transfer (Revenue-Sharing) Mechanisms

A range of considerations should be taken into account in the assignment of taxing powers to local governments to avoid undermining macroeconomic control at the center. Local taxes are generally not conducive to adequate control of domestic demand and deficit targets, particularly if raising tax rates or better administration automatically increases resources available for spending by local governments. Devolving fiscal powers generally entails increasing revenues at the local government level at the cost of reduced central government control over total public spending. At times, local governments rely on income taxes, owing to their substantial revenue-raising capacity, and these taxes tend to be procyclical. Thus, fiscal devolution has the potential of adding an element of instability, in that balanced budget rules imply that local public spending rises in booms, and falls in recessions.

The general guidance provided in the literature suggests devolving revenue-raising powers to lower levels of government in specific ways that help preserve the central government's ability to manage fiscal policy. In particular, local governments should focus on taxes that are less sensitive to income fluctuations to shelter local governments from cyclical effects and to provide the central government with stabilization instruments. Other considerations when assigning taxes at the local level include the degree of narrowing mobility of tax bases (to limit distortionary tax-induced migration of capital and/or labor), and the distribution of tax bases across regions (to avoid increased regional disparities).

Some of the OECD economies reviewed have managed to reduce the role of transfers and increase taxation at the local level, improving accountability and autonomy of lower levels of government without impairing their ability to manage fiscal policy. In *Finland* and *Sweden*, the share of local tax revenue in total local government revenue is very large—and, as a rule, local governments have large discretion in choosing their own tax rates. Strong administrative capacity at lower levels of government has permitted a strengthening of taxing powers at the local government level without undermining macroeconomic control by the center (Table 2). *Poland* has managed to expand the role of other taxes, notably the property tax, with a less mobile tax base that is also more stable over the business cycle.

Besides taxing powers, intergovernmental transfers—comprising both revenue-sharing arrangements and grants—often provide additional funding for local government spending. Some of the aspects defining the various intergovernmental transfer mechanisms are key to avoiding a loss of central control over fiscal policy: the equalizing mechanisms and objectives that aim to reduce inequalities across local governments; the transfer-setting mechanism (objective criteria or gap filling) to determine the incentive structure and effective discipline on local government spending; the degree of conditionality and how it affects the structure of, and local government's ability to determine, public spending; and the nature of revenue-sharing arrangements (traditionally applicable to personal and corporate income taxes) that may entail procyclical spending behavior. Data on tax effort and revenue sharing vary across countries (Table 2), but several generalizations can be drawn.

Table 2. Selected Countries: Local Government's Tax Effort and Revenue

	Number of Gov't Units		Degree of Decentralization 1/	Degree of Fiscal Autonomy 2/	Degree of Fiscal Devolution 3/	Tax Revenue		Grants 5/
	State and Regional	Municipalities and provinces				total 4/	property tax 4/	
	(number of units)		(in percent, unless otherwise indicated)					
Degree of Fiscal Devolution:								
High								
Finland	--	455	37	46	0.17	47	3	21
Sweden	23	288	47	52	0.24	70	5	19
Denmark	14	275	46	48	0.22	47	3	43
Moderate								
Belgium	3	589	6	55	0.03	39	...	52
Germany	16	...	10	33	0.03	40	6	35
Spain	17	8100	10	61	0.06	50	15	35
Low								
Hungary	8	3200	8	19	0.01	27	3	50
Poland	16	2489	9	27	0.02	34	11	34

Sources: GFS, OECD, and staff estimates.

1/ Share of local tax revenue in general government tax revenue. Based on latest published GFS data.

2/ Index based on OECD taxonomy.

3/ Coefficient combining the degree of fiscal autonomy and the degree of fiscal decentralization (See Box 2).

4/ Share of local tax revenue in total local government revenue and grants. Based on latest published GFS data.

5/ From the central government, in percent of total local government revenue.

Whenever fiscal devolution is high, intergovernmental transfers are used less to provide additional funding and more as a way to equalize income across local governments. This helps retain the center's control over fiscal policy in two ways: it avoids "horse trading" or bilateral negotiations between the central government and the lower levels; and it avoids the moral hazard problems associated with the widespread use of gap-filling grants that clearly can undermine the central government's ability to ensure fiscal discipline. In *Spain*, a revamping of the system of transfers for health care replaced annual bilateral negotiations between each region and the national government by a rule, based on the population of each region and targeting per capita equity as an explicit objective. The new system introduced automaticity and helped reduce regional disparities—on a per capita basis—in funding levels (Box 5). In *Finland*, grants provide about one-fourth of local government revenues. The government has eliminated gap-filling grants to avoid perverse incentives that can lead to budget overshooting and cost overruns. By reducing central government financing of local governments, devolution causes local residents to bear the cost of public services and goods at the local level. Local government spending and efficiency are therefore subjected to the scrutiny of local citizens. In sum, where fiscal devolution and administrative capacity at the local level are high, the role of grants as financing mechanisms generally diminishes (Box 6).

Even in countries where equity considerations across municipalities are a priority, the central governments tend to aim at less than 100 percent equalization through grants to maintain incentives for each local government to strengthen its own revenue-generating capacity. In doing so, different localities' abilities to raise revenue are allowed to diverge but each one's revenue capacity is preserved. As a rule, the Scandinavian countries have worked with a very high degree of horizontal equalization. The system aims to average out the level of taxation across municipalities while ensuring a standard cost and uniform provision of public services. In Finland, municipalities with a tax income (on a per capita basis) of less than 90 percent of the national average receive the difference in the form of a state grant, financed largely by reduced transfers to strong municipalities (equalizing state-grants). In Sweden, the equalizing grant is close to the "Robin Hood model" with cross subsidies from relatively rich to relatively poor regions preserving an incentive to municipalities to increase their own tax bases.

C. Expenditure Control and Hard-Budget Constraints

In large and decentralized public sectors, a clear need to control local expenditures emerges if the center wants to preserve its ability to determine overall public spending. However, one of the consequences of fiscal devolution is generally the inability of the central government to determine the level and structure of public spending by lower levels of government. Indeed, the nature and composition of spending at the local government level differ greatly among countries, partly reflecting their varying degrees of fiscal devolution (see Table 3 for an illustration of this point). To the extent that effective control of expenditures rests with lower levels of government, adequate fiscal management by the central government rests on adequate considerations and incentives that can hold down spending and avoid spending overruns. This is key for the central government to maintain its fiscal control and its ability to manage fiscal policy despite a high degree of fiscal devolution.

Box 5. Spain: Regional Funding of Health Care

Spain has succeeded in reforming decentralized spending on health care under the responsibility of regional governments. In Spain, seven autonomous regions provide health care for more than 60 percent of the population and a system of block transfers from the central government is used to finance health expenditures at lower levels of government. While the reform efforts discussed below seem promising, a number of issues remain to be regulated and it is still too early to report on the likely wide-ranging benefits of recent reforms.

Reforms in Spain were designed to address regional imbalances in funding and to improve efficiency in spending by introducing the right incentives for regional governments. The system of transfers was amended in three key ways. First, the regional allocation of transfers, based on annual bilateral negotiations between each region and the national government, was replaced by a rule, based on the population of each region, targeting per capita equity as an explicit objective. The new system introduced automaticity and helped reduce regional disparities—on a per capita basis—in funding levels. Second, the volume of transfers, which had traditionally led to an accumulation of debts at the regional level, was increased to match actual spending by the regions. At the same time, however, the system called for a stabilization of public health care spending as a percentage of GDP over a three-year period. Third, to raise effectiveness in spending, a decision was made to increase resources available to health care, provided that savings generated by the health care system through improved cost control would remain within the system.

The Spanish reforms are a good illustration of practical ways to improve the system of block transfers to regional governments. The revamped system of transfers is no panacea, however, as it cannot provide for equalization of poorer regions and cannot ensure that minimum national standards on health care are observed. The system of transfers in itself is subject to criticism because it falls short of devolving the responsibility for raising revenues for health care to regional governments. In the absence of their own tax base, individual regions are not free to vary the level of health care services they choose. In addition, under a system of transfers the budget constraints faced by regional governments are also of a somewhat different nature since these governments do not bear the burden of raising taxes.

Box 6. Finland: The Path to Greater Local Government Accountability

In Finland, a key reform affecting the financing of local governments occurred in 1993 when the central government system of grants—which then accounted for 45 percent of local government expenditures—began to be replaced, primarily by revenues derived from taxes. By 1998, the share of transfers had declined to about one-fourth of total local government spending. In addition, transfers were delinked from actual outlays and tied to certain municipal indicators such as population, age distribution, and the level of unemployment. The system has a component of equalization of income across municipalities: local governments with high tax income (based on a threshold set at 90 percent of national average, on a per capita basis) provide the basis for an adjustment to state transfers (equivalent to 40 percent of the tax income above the 90 percent threshold).

As a result of these reforms, the financing of local government expenditures in Finland is mainly through direct taxes. Tax revenues—including a proportional income tax, a share of the corporate tax, and a real estate tax—accounted for a substantial share of total local government revenue in 2000. The rate of the municipal income tax is determined by the municipalities but the central government decides on the threshold income subject to local taxation, and thus, on the revenue base. Local governments' greater autonomy in raising revenues has strengthened their autonomy in their expenditure decisions, increasing their accountability for discretionary actions.

Some countries at a more advanced stage of decentralization have ensured that their central governments devolve revenues and increase funding to local governments broadly proportional to their spending responsibilities. The assignment to sub national governments of major parts of the expenditure program—such as health, education, and social assistance—goes hand in hand with the responsibility for their financing. In *Denmark*, health, education, and social security outlays account for three-fourths of local government spending and are primarily handled by local governments (Table 3). However, local governments are autonomous in controlling their own revenues and accountability at the local level is strong. The strong incentive at the local level to manage costs has led to controlled growth of total public expenditure.

Generally, there are benefits from the aggregation of lower levels of government for economies of scale. Important economies of scale exist with, for example, public health and the services provided by hospitals. A combination of local and regional service systems, alongside adequately designed incentives and mechanisms for cost effectiveness in spending by lower levels of government, is the key to making service provision more cost effective and to preserving uniform quality of statutory services while avoiding free riding across municipalities (Box 7). In addition, in several countries some of the local governments are too small, with large diseconomies of scale that prevent more efficient operations, with no hope for autonomous mergers or associations.

Table 3. Selected Countries: Local Government's Expenditure Assignment

	Education	Health	Social	Housing	Other
	(in percent of total local government expenditure, unless otherwise indicated)				
Degree of Fiscal Devolution:					
High					
Denmark	11	15	58	2	14
Moderate					
Germany	13	14	25	15	33
Spain	4	3	5	22	67
Low					
Hungary	29	18	12	14	27
Poland	32	5	9	29	24
	(local government share of total general government expenditure)				
Degree of Fiscal Devolution:					
High					
Denmark	53	93	74	...	...
Moderate					
Germany 1/	99	26	21	...	...
Low					
Hungary	80	61	4	...	...

Sources: GFS, OECD, and staff estimates.
1/ Including the Länder.

Box 7. Hungary: Difficulties in Handling Health Care at the Local Level

In 1990, local governments became responsible for providing public health care services, assuming the control of local service providers (municipal hospitals, outpatient clinics, etc.). Recurrent expenditures are covered by the Health Insurance Fund but capital expenditures are covered from the local government's own budget. Health care staff are employees of the local government.[1]

Grant-seeking health service providers have little incentive to reduce costs or provide services with a small grant-to-cost ratio. In addition, cost overruns are generally rolled over through regular credit or arrears and local governments generally bear the cost of defaults by health service providers. Capital expenditures are usually financed through targeted grants, subject to the discretion of the central government.

Controlling and reducing the cost of services would require steps in three key areas:

- Associations at a regional level, to lock in the gains of economies of scale while eliminating the perverse incentive of free riding.
- Reform of the current system of grants, with a view to achieving more cost-effective service delivery.
- Effective regulation and supervision of private providers.

[1] For a description of local government financing and health care issues in Hungary, see Kopanyi and others (2000).

D. Criteria and Rules for Borrowing

The criteria governing access of local governments to borrowing are a key determinant of effective control over public spending. Accordingly, borrowing constraints are often needed to safeguard overall public sector deficit targets. The consensus in the literature on fiscal devolution is that it is important to examine various issues affecting local governments' ability and willingness to borrow: whether financial markets exert discipline on local governments; whether local governments can act as privileged borrowers and benefit from portfolio constraints on financial intermediaries that facilitate the placement of government securities (captive markets); whether there are implicit guarantees by the central government underscored by bailouts of municipal governments by the federal government, and so on.

Ideally, policymakers should use a combination of demand-and supply-side controls on borrowing, especially for emerging market and transition economies. On the demand side, some form of coordination of borrowing needs is required. On the supply side, financial markets could ration credit according to creditworthiness and expected returns. Using such market incentives may require appropriate regulation by the monetary authorities.

This section investigates the actual choices made by countries at varying stages of fiscal devolution, ranging from direct control by the center of borrowing at the local level to rules that limit indebtedness (limits on the absolute level of indebtedness, limits on the type of borrowing allowed, for example, for investment projects, or limits on a maximum service

ratio). Colombia and Brazil have adopted this approach as part of efforts to introduce rules for national and subnational fiscal policymaking with stricter controls on subnational debt issuance and management, and to reform the system of intergovernmental fiscal relations.[23]

A rules-based approach applies in Germany: the golden rule, under which *länder* borrowing is restricted to projected investment outlays. Local governments' borrowing is tied to their cash flow and is subject to control by the *länder*. There is no municipal bond market, and in the absence of market discipline, a more explicit rules-based approach is welcome to ensure financial discipline. It is also beneficial to establish a track record of hard-budget constraints. Spending restraint will be more likely if local governments face effective budget constraints, and, specifically, limits on their ability to borrow (see discussion below). Imbalances at the local government level should be corrected and should not lead repeatedly to either debt accumulation or additional transfers from the central government at the risk of compromising fiscal discipline. In *Hungary*, ceilings are imposed by the central government on subnational borrowing. Since 1996, a ceiling on the amount of bank borrowing of local governments is specified by law, and expressed as a percentage of their own revenue (70 percent). Local governments are free, though, to finance their budget deficits through capital markets.[24] For the purpose of calculating the borrowing limit, medium- and long-term debt includes guarantees and other contingent liabilities incurred by local governments.

Alternative policy options for effective borrowing control can be separated into two groups, the first of which is cooperative control where borrowing takes place in the context of a joint program set with other entities. In *Belgium*, borrowing is subject to the control of a state council, which issues an opinion on the financial needs of each entity. Regions and communities can borrow funds, in domestic and foreign currency, in the domestic market or abroad. The council monitors agreements to stabilize debt service to revenue levels (after 2000). Only borrowing from abroad requires approval of the finance minister. But the federal government has the right, under particular circumstances, to constrain one or more regions' or communities' capacity to borrow. Cooperative control requires strong administrative capacity at the local level.

A second option is market-based discipline, as practiced in *Finland*, where no administrative or legal restraint applies to domestic or foreign borrowing. The effective discipline exerted by financial markets rests on the following premises: (i) no perceived chance exists for a bailout of the lenders in the case of impending default; (ii) no captive markets are available for government instruments; and (iii) information on the borrower's debts and repayment capacity is available to potential lenders. The criteria governing access of local governments to borrowing are a key determinant of effective control over public spending. An important complement to market-based discipline is bankruptcy legislation

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[23] Cordoba and de Mello (forthcoming).

[24] The municipal bond market is effectively limited to Budapest.

such as in *Hungary*, in place to regulate debt clearance procedures at the local government level (see Box 8).

Box 8. Hungary: Municipal Bankruptcy Law

Hungary is one of a few countries with a municipal bankruptcy law that regulates the debt-clearance procedure of local governments. Under the law, the local government and its creditor may initiate a debt-clearance procedure if the local government, or the budgetary organization financed by it, falls behind its debt obligations by more than 60 days. During bankruptcy procedures, the central government is allowed to appoint a commissioner to control local finances. The law also forbids the use of core local government assets as collateral.

Since 1997, when the law entered into force, there have been eight municipal bankruptcy cases, leading to debt restructuring. The causes for bankruptcies are generally not current operations but investments in failed businesses or beyond the capacity of the municipality, and loan guarantees. Apparently, the law has helped prevent bailouts by the central government and has forced local governments to negotiate with their creditors.

VI. Concluding Remarks

This paper has discussed how a central government can maintain its ability to manage fiscal policy in a decentralized setting. The focus has been on fiscal management issues that can help the central government maintain its ability to manage fiscal policy while devolving revenue, spending, and borrowing powers to lower levels of government.

The main findings are:

- Evidence from the more advanced OECD economies indicates that high devolution of fiscal powers need not impede strong fiscal consolidation, if appropriate conditions are in place —including adequate administrative capacity at the local level. In particular, central governments should aim to devolve revenue and increase funding to local governments in proportion to their spending responsibilities.

- Good governance is key: decentralization is associated with better fiscal outcomes for middle-income countries with good governance.

- In general, countries with good governance that have successfully maintained fiscal control despite a high degree of fiscal devolution, have used various incentives, rules, and coordination mechanisms among levels of government, while ensuring appropriate planning and monitoring of the local governments' financial situation.

REGRESSION RESULTS

These are linear regression results using ordinary least squares. The dependent variable is the change in fiscal balance of general government for the period 1996–2000 relative to 1990–1995.

Dependent Variable: Change in Government Balance

With Income Per Capita (GNPPC) and Governance

Multiple R	0.40
R^2	0.16
Adjusted R^2	0.13
Standard Error	0.95

Variable	B	SE B	95% confidence Interval		Beta	T	Sig T
DECENTRA	0.21	0.13	-0.05	0.46	0.20	1.64	0.11
GNPPC	-0.08	0.24	-0.55	0.39	-0.08	-0.35	0.73
GOVERNAN	0.36	0.23	-0.09	0.81	0.35	1.58	0.12
(Constant)	0.02	0.11	-0.20	0.23		0.15	0.88

With Governance Only

Multiple R	0.40
R^2	0.16
Adjusted R^2	0.14
Standard Error	0.94

Variable	B	SE B	95% confidence Interval		Beta	T	Sig T
DECENTRA	0.19	0.12	-0.04	0.43	0.19	1.62	0.11
GOVERNAN	0.29	0.12	0.05	0.53	0.29	2.43	0.02
(Constant)	0.02	0.11	-0.20	0.23		0.15	0.88

With Governance Only and No Constant

Multiple R	0.40
R^2	0.16
Adjusted R^2	0.13
Standard Error	0.94

Variable	B	SE B	95% confidence Interval		Beta	T	Sig T
DECENTRA	0.19	0.12	-0.04	0.43	0.19	1.63	0.11
GOVERNAN	0.29	0.12	0.05	0.53	0.28	2.45	0.02
(Constant)							

Cluster Analysis

Cluster analysis is a useful way to organize data when there is no underlying theoretical model to give structure to data. The methodology involves partitioning data into clusters with common characteristics. This paper adopts a k-means algorithm based on minimizing Euclidean distance (i.e., the square root of the squared difference) between the points within a cluster relative to those in other clusters.[25] Thus, the algorithm sorts data into "natural" groupings based on similarities within a cluster relative to other clusters.

We used a large dataset drawn from World Bank and IMF data to obtain variables of interest. Government Finance Statistics data are used for computing the average overall fiscal balance for 1990–2000, changes in the overall balance for 1996–2000 relative to 1990–1995, and the variability (standard deviation) of the overall balance over 1990–2000 and the degree of decentralization (average of the share of subnational expenditure and taxation in general government expenditure and taxes, respectively). Governance data is obtained from the World Bank dataset compiled in 2000 by Daniel Kaufmann, Aart Kraay, and Pablo Zoido-Lobatón. A composite index is obtained by averaging the indicators with equal weight to each variable.

The database comprises 174 countries with government finance data on deficits available for 169 countries, data on the share of subnational spending for 85 countries, various governance indicators for 154 to 167 countries, and GDP per capita for 162 countries. Combining the available data provided 76 observations: 15 low-income countries with per capita GNP in 1998 of less than US$1,350, 38 middle-income countries, and 23 high-income countries with per capita GNP in 1998 above US$10,000. The data was normalized by computing for each data point the deviation from the mean for the whole sample and dividing this by the standard deviation. Thus, the values for the mean for each variable within each cluster should be interpreted as the average deviation from the mean.

The analysis clusters the data into the groups indicated in Table A.1.

[25] See Everitt's standard work on cluster analysis (1974).

Table A.1. Characteristics of Clusters and Countries in Each Cluster for the Full Sample of 76.

Cluster	Country	General Government Balance - Difference average (1996–2000) minus average (1990–95)	General Government Balance - Standard Deviation (1990–2000)	Normalized Governance	1998 GNP (US$)	Average Normalized Decentralization Taxes & Expenditure
1	BOLIVIA	-0.8	1.0	1.2	1,010	-0.9
1	BURKINA FASO	0.9	1.2	0.8	740	-1.5
1	CHINA	-0.7	0.9	0.2	1,340	-1.5
1	ETHIOPIA	0.2	2.6	1.0	240	-1.4
1	GUINEA	0.8	0.9	-0.1	140	-1.5
1	HONDURAS	-0.5	3.0	0.1	750	-0.1
1	INDIA	0.0	1.0	1.7	100	1.6
1	MACEDONIA, FYR	4.5	4.6	0.7	370	1.0
1	NICARAGUA	1.8	2.1	0.3	300	-0.9
1	PAKISTAN	1.1	0.9	-0.4	1,290	-0.6
2	BURUNDI	-3.5	2.4	-1.5	440	-1.6
2	KAZAKHSTAN	0.8	2.8	-0.5	530	-0.5
2	KENYA	2.9	3.5	-1.2	350	-1.5
2	NIGERIA	-4.0	6.1	-1.9	470	1.1
2	UKRAINE	8.5	6.7	-0.1	980	0.4
3	BRAZIL	-5.4	3.9	-0.3	4,620	0.9
3	CROATIA	-2.8	2.8	-0.4	3,150	-0.6
3	ECUADOR	-2.9	2.9	-1.0	3,670	-0.2
3	JAMAICA	-11.6	6.4	-0.6	3,310	-1.3
3	LATVIA	-3.4	4.6	0.2	2,560	-1.0
3	LITHUANIA	-4.3	4.6	0.4	4,520	-1.3
3	PARAGUAY	-3.3	2.4	-1.8	1,740	-0.7
3	TURKEY	-4.5	2.9	-1.2	2,540	-0.8
4	ANTIGUA AND BARBUDA	-2.0	2.9	0.5	8,450	-0.7
4	ARGENTINA	-1.9	1.4	0.3	8,030	-0.6
4	BARBADOS	-0.1	2.9	1.5	7,693	-0.7
4	BELARUS	0.9	2.5	-1.7	2,660	0.0
4	BELIZE	2.3	2.7	0.9	4,630	-1.1
4	COLOMBIA	-3.5	2.1	-1.0	5,150	1.1
4	CZECH REPUBLIC	-2.5	2.6	1.2	3,360	0.6
4	DOMINICA	0.7	2.2	1.3	4,510	-0.7
4	DOMINICAN REPUBLIC	-1.2	1.9	-0.7	8,600	-1.1
4	EL SALVADOR	-0.6	1.2	-1.0	3,840	-0.7
4	ESTONIA	-0.6	3.1	0.7	2,990	0.5
4	GUATEMALA	-0.2	1.4	-1.6	3,910	-0.4
4	HUNGARY	1.8	2.9	1.3	9,780	0.2
4	KOREA, REPUBLIC OF	-1.2	1.9	1.2	3,660	-0.7
4	MALAYSIA	0.1	2.4	0.6	6,070	-0.5

4	MEXICO	-0.6	1.1	-0.6	2,180	0.3
4	NETHERLANDS ANTILLES	3.6	2.2	-0.7	2,470	0.7
4	PANAMA	-0.6	1.3	-0.3	1,640	0.3
4	PERU	1.7	1.9	-1.0	2,440	-0.5
4	POLAND	0.1	2.6	1.1	1,360	0.3
4	ROMANIA	-3.6	2.8	-0.5	2,260	0.9
4	RUSSIA	6.7	6.2	-1.4	3,700	1.4
4	SLOVAK REPUBLIC	3.5	4.7	0.2	3,530	0.3
4	SLOVENIA	-1.3	0.8	1.2	1,770	1.8
4	SOUTH AFRICA	2.9	2.6	0.1	1,520	-0.5
4	ST. LUCIA	-1.1	0.9	1.5	1,850	-1.1
4	ST. VINCENT AND THE GRENADINES.	0.0	2.1	1.0	1,740	-1.4
4	TRINIDAD AND TOBAGO	-2.6	2.1	0.9	2,420	-1.2
4	URUGUAY	-1.7	1.5	0.7	1,760	1.4
4	VENEZUELA, REP. BOLIVARIANA DE.	6.4	5.7	-1.2	3,160	0.4
5	CANADA	8.0	4.6	0.5	16,180	2.1
5	FINLAND	3.7	4.2	0.9	10,670	1.4
5	GREECE	9.2	5.3	-2.0	26,830	-0.5
5	ITALY	6.5	3.8	-1.2	24,210	0.3
5	NORWAY	6.8	4.6	1.0	32,350	1.0
5	SWEDEN	6.2	5.7	0.7	25,580	1.9
5	UNITED KINGDOM	5.1	3.8	1.0	21,410	0.2
6	AUSTRALIA	3.1	2.1	0.6	12,125	0.0
6	AUSTRIA	1.3	1.3	0.4	25,380	0.6
6	BAHAMAS, THE	-0.5	1.3	-2.0	11,740	-0.7
6	BELGIUM	5.0	3.0	-1.0	18,710	0.2
6	DENMARK	3.5	2.1	0.9	20,090	1.9
6	FRANCE	1.7	1.6	-0.6	14,100	2.0
6	GERMANY	1.1	1.4	0.3	20,640	0.4
6	ICELAND	4.3	2.5	0.3	19,170	1.0
6	IRELAND	4.4	2.7	0.1	33,040	-0.5
6	ISRAEL	-0.4	0.9	-1.4	24,280	-0.4
6	JAPAN	-5.4	3.7	-0.7	26,570	1.9
6	NETHERLANDS	3.6	2.2	1.1	27,830	0.1
6	PORTUGAL	2.8	1.8	-0.4	24,780	0.1
6	SPAIN	2.9	2.2	-0.1	34,310	0.4
6	SWITZERLAND	1.7	1.6	1.6	39,980	0.9
6	UNITED STATES	4.3	2.6	0.0	29,240	0.5

Sources: World Bank and IMF.

Table A.2 Fiscal Decentralization in Hungary, Spain, Belgium, Finland, and Germany

	Hungary	Spain	Belgium	Finland	Germany
1. Lower Levels of Government	Local governments exist at two levels: the municipality and the county. Municipalities, consisting of villages and cities, are the basic units responsible for providing public services. Counties are a particular type of local government. They primarily provide services of a regional character. Importantly, counties do not have supervisory authority over municipalities. In 1999, seven regional development councils were established.	Spain has a large number of municipalities and an intermediate level of government formed by 17 autonomous regions (territorial governments). At the local level, provinces have been integrated into regions, except for two autonomous cities (Ceuta and Melilla).	The intermediate level of government comprises five state and regional subunits—the French community, the German community, Wallonia, Flanders, and Brussels. The government of the Flemish–speaking community has merged with the government of Flanders. Regions and communities account for about 80 percent of revenues handled by lower levels of government.	Lower levels of government consist of local governments and six provinces. There are no intermediate levels of government.	There is an intermediate level formed by 16 states (the *länder*). At the local level, municipalities are separate entities, but the *länder* manage three-fourths of the tax revenues handled by lower levels of government.

Sources: Ter-Minassian (1997) and various Recent Economic Development and Staff Reports.

Table A.2 (continued) Fiscal Decentralization in Hungary, Spain, Belgium, Finland, and Germany

	Hungary	Spain	Belgium	Finland	Germany
2. Degree of Decentralization	Moderate. Local governments account for less than ten percent of total tax revenue.	Moderate. Regional governments account for about 13 percent of total tax revenue. Regional governments manage about one-fourth of total public sector expenditure	Moderate. Local governments, communities, and regions account for almost 30 percent of total general government tax revenue. Regions and communities manage about 40 percent of public expenditure.	High. Municipalities and the regional government of Aland account for roughly one-fourth of total tax revenues. Local governments account for about three-fourths of total public sector employment.	Moderate. The *länder* and local governments account for almost 30 percent of general government tax revenues. The *länder* and local governments account for about two-thirds of total public sector expenditure.
3. Scope of Activities for Lower Levels of Government	Mandated services include the provision of basic health and welfare services, education (kindergarten and primary school), local public roads, the provision of drinking water, and the protection of the rights of ethnical and national minorities. Optional services are generally determined on the basis of local requirements and available resources.	For most regions, main activities are health care, primary and secondary education, social services, labor market policies, and some infrastructure investments. The social security system is managed at the federal level.	Government activities include primarily education and social services.	Local governments are the main providers of primary and secondary education, health and social services, and public utilities.	The states are responsible for education, health policies, the environment, and culture. Municipalities are responsible for communal services, schools, and local health facilities. The responsibility for investment in infrastructure, including roads, is shared across different levels of government.

Table A.2 (continued) Fiscal Decentralization in Hungary, Spain, Belgium, Finland, and Germany

	Hungary	Spain	Belgium	Finland	Germany
4. Decentralization Regime	Transfers and tax shares account for more than half of all local government revenues. Only the central government has the authority to establish local taxes, although local governments can set rates within limits established by the law.	Revenue sharing (the Common Regime) is based on fixed coefficients. For most taxes, the revenue-splitting formula can only be changed with the consent of regional governments. The Regime limits the possibility of central government discretion in determining revenues accruing to regions.	Revenue is shared through legally prescribed shared and joint taxes (*impôts partagés* and *impôts conjoints*). The old system of grants, in effect until 1989, was phased out over a ten-year period. Regions can affect the effective tax rate, within limits.	Tax revenues are levied by municipalities, with a high degree of autonomy. Local governments have considerable discretion to set tax rates.	Revenue is shared. The *länder* have no control over major taxes. Vertical grants from the federal government help cofinance specific state projects.

Table A.2 (continued) Fiscal Decentralization in Hungary, Spain, Belgium, Finland, and Germany

	Hungary	Spain	Belgium	Finland	Germany
5. Revenue Sources for Local Governments	Local governments use their own revenues (property tax, communal taxes on plots or buildings, income taxes on for-profit organizations); fees and others of their own revenues (including profits and dividends from local government property); tax shares (personal income tax and motor vehicle tax); and normative and targeted grants.	Local governments use shared taxes: a share of personal income tax; a share of overall tax revenues; and "ceded taxes," including taxes on inheritances, capital transfers, legal acts, and gambling.	Regions receive shared and joint taxes (70 percent of regions' total revenues, primarily personal income tax (PIT) and value-added tax (VAT)); their own tax revenue; grants paid by the federal government; and nontax revenue, including fees and asset sales.	Local governments receive their own tax revenue, comprising an income tax (about 80 percent of tax revenues) and a real estate tax (about 5 percent of tax revenues); a share of the corporate tax; and nontax revenue, including fees and asset sales.	Local governments receive shared taxes (three-fourths of tax revenue for the *länder*) consisting of a legal share of the personal income tax (42.5 percent) and the VAT (45.9 percent). Their own tax revenue comprises a wealth tax, inheritance and gift taxes, and other state taxes.

Table A.2 (continued) Fiscal Decentralization in Hungary, Spain, Belgium, Finland, and Germany

	Hungary	Spain	Belgium	Finland	Germany
6. Fiscal Autonomy of Lower Levels of Government	Full executive and limited decision-making powers. Local governments have some degree of autonomy with regard to local taxation and rate setting. Only the parliament has the discretion to establish local taxes and their maximum rates.	Full executive and limited decision-making powers. Regions have some autonomy to modify the personal income tax in their jurisdiction by varying the marginal tax rates and deductions, within certain limits. However, regions cannot impose a tax on a tax base that is already taxed by the central government.	Full executive and limited decision-making powers. However, regions and communities usually follow the recommendations of the Conseil Superieure de Finance. For joint and shared taxes, regions can raise surtaxes or allow rebates on the personal income tax, and are able to control partially the effective tax rate. About ten percent of regions' tax revenue is raised through taxes fully transferred to the regions, including with a transfer of prerogatives.	Full executive and extensive decision-making powers. The local income tax rate is determined at the local level, but the central government decides on the threshold income, subject to local taxation. Also, local governments set the rate for the property tax, within statutory limits. The corporate income tax revenue split is determined by the parliament but it may unilaterally be changed by the central government. Regions are fully autonomous in their expenditure decisions, even though many of their functions are statutory with limited scope for discretionary actions.	Full executive and joint decision-making powers. The *länder* have no power to change the tax bases or tax rates of major taxes autonomously. However, the Bund cannot enact any changes in tax laws affecting the regions' tax revenues or tax administration without the consent of the majority of the Bundesrat (second chamber of parliament, representing the *länder*). At the same time, tax legislation proposals introduced by the *länder* governments need the consent of the Bundestag to be enacted.

Table A.2 (continued) Fiscal Decentralization in Hungary, Spain, Belgium, Finland, and Germany

	Hungary	Spain	Belgium	Finland	Germany
7. Latest major Steps on Decentralization	In 1996, the Regional Development Act established county and regional development councils, allowing for the establishment of development regions through free association of one or more counties. Under an October 1999 amendment to the 1996 Law, Hungary reinforced the role of an intermediary of government by establishing regional development councils. Seven regional development councils were established, in an attempt also to improve coordination in the context of European Union regional policy. The councils, however, do not have independent sources of revenue.	The Common Regime was introduced in 1997. The new regime delinked the regional share of overall tax revenues from central government tax revenues. It also eliminated the need for renegotiating the shared portion of national tax revenues (the PIE) with the central government every five years.	The regional system was reformed in 1989. The central government system of grants was phased over a ten-year period, toward a regime where most of regions' revenues are derived from the personal income tax collected over their territory.	The central government system of grants to local governments was reformed in 1993. The new system moved toward an autonomous tax-revenue based system. Remaining transfers have been delinked from actual outlays and tied to certain municipal indicators such as population, age distribution, and level of unemployment.	The Joint Tasks were introduced in 1969, establishing a joint body of federal and state officials to manage regional policy, university construction, and agricultural structural policies. The Joint Tasks allowed federal cofinancing of regional projects.

Table A.2 (continued) Fiscal Decentralization in Hungary, Spain, Belgium, Finland, and Germany

	Hungary	Spain	Belgium	Finland	Germany
8. Sharing Mechanism	Total revenues from the personal income tax are split between the central government and local governments. The share of local governments is fixed by parliament as part of the annual budget law.	The shared portion of national tax revenues and the regional share of the personal income tax vary according to nominal GDP.	The sharing key of the PIT is based on the revenue collected on the territory of each region and adjusted each year according to GDP. For the VAT, the sharing key is the number of school-age residents. The VAT share increases in line with inflation and the highest birth rate in the two major communities.	For the corporate income tax revenue, the local government share is about 35 percent, as determined by the parliament.	The income tax share (42.5 percent) is set by the constitution. Except for grants, any adjustment of the vertical distribution of public funds is effected through the shares of the VAT, subject to negotiation between federal and state governments. The outcome of negotiations is written into law that must be approved also by the Bundesrat.
9. Equalization Mechanism	Moderate. The overall resources available to local governments are determined annually by parliament. Since 1999 a part of the PIT is used to equalize income across municipalities.	Moderate. The central government guarantees each region's share of the personal income tax to raise at least as fast as national GDP.	Moderate. The share of PIT is adjusted by an equalization transfer to regions whose per capita tax revenue lies below the national average.	High. Equalization transfers from local governments with high tax income (more than 90 percent of the national average, on a per capita basis) to weak local governments. Transfers are equivalent to 40 percent of the tax income above the 90 percent threshold.	Very high. Up to one-fourth of states' VAT share can be used to support weaker states. The cap for equalization is 92 percent of the average tax revenue per capita. In addition, there is a zero-sum interstate equalization (*finnanzaugleich*) based on per capita fiscal capacity of individual regions. Finally, the federal government provides asymmetrical vertical grants given to financially weak states.

Table A.2 (continued) Fiscal Decentralization in Hungary, Spain, Belgium, Finland, and Germany

	Hungary	Spain	Belgium	Finland	Germany
10. Borrowing Limits and Control	The value of the medium- and long-term debt issued by local governments cannot exceed seventy percent of the adjusted current income of the local government. For the purpose of the limit, medium and long-term debt includes guarantees and other contingent liabilities.	Administrative controls exist. Central government approval is required for all bond issues and foreign currency borrowing of autonomous communities. Domestic bank borrowing requires no approval. Short-term borrowing can be undertaken only for purposes of liquidity management, and long-term borrowing can occur only to finance investment expenditure. In addition, debt service cannot exceed 25 percent of an autonomous community's current revenue.	Regions and communities can borrow funds, in domestic and foreign currency, in the domestic market and abroad. The latter requires approval of the finance minister. Borrowing is subject to control of the state council in the context of a joint program set with other entities.	Market-based discipline exists.	A golden rule functions. *Länder* borrowing is restricted to projected investment outlays.

Table A.2 (concluded) Fiscal Decentralization in Hungary, Spain, Belgium, Finland, and Germany

	Hungary	Spain	Belgium	Finland	Germany
11. Fiscal Policy Discipline and Coordination	Local governments have their own assets and independently manage their budgetary revenues and expenditures. The local government budgeting process is formally independent from the state. In practice, however, the high dependence on transfers from the central government is a major determinant of the budgeting process at the local level.	Transfers are being gradually phased out. There is no explicit stability pact. Fifteen of the 17 regions are covered by the Common Regime for sharing revenues. Two regions are treated separately for historical reasons. Coupled with legal limits on borrowing, the Common Regime can effectively determine the budget balance of regions. It has also the potential to ensure expenditure control.	With regard to an internal stability pact, cooperation agreements among regions, communities and the federal government, have been produced in the framework of the fiscal adjustment required by the Maastricht Treaty. The High Financial Council (Conseil Supérieur des Finances) oversees the financial policies of regions and communities, issuing statements, an annual evaluation of the financial needs of each entity, and recommendations. Cooperation agreements required stabilization of the debt-to-revenue ratio of federated entities, and adherence to the maximum ceiling on regions' deficits.	Transfers are being gradually reduced. There is no explicit stability pact. By controlling transfers, the central government can affect the budget balance of local governments.	Annual budgets are part of the medium-term financial plan. A financial planning council, representing all three tiers of government, is in charge of designing the medium-term plan. The council has a statutory task of ensuring that budgetary policies are consistent with macroeconomic stability. The council can also issue recommendations, but these are nonbinding. The *länder* governments can introduce their own fiscal initiatives through the Bundesrat. However, consent of the Bundestag is necessary.

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