THE FINANCES OF THE GERMAN STATES

Thiess Buettner*

Summary

* Thiess Buettner Ifo Institute, Ludwig Maximilians University, and CESifo.
Address: Ifo Institute for Economic Research, Poschingerstr. 5, D-81679 Munich, Germany; phone: +49 89 9224 1319, fax: +49 89 9224 2319, e-mail: buettner@ifo.de.
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1. Introduction

Whereas most government finances are challenged with the problem of raising public funds, subnational government finances, such as the finances of the German Länder, are typically confronted with their own characteristic problems. Basically, these problems have to do with the phenomenon of fiscal mobility.

It is a commonplace that a government's attempt to redirect private funds to the public purse is hampered by the agents' ability to evade taxes and other mandatory contributions. In the case of subnational governments, however, evasion is facilitated by the spatial delimitation of jurisdictions, since for agents' activities, alternative location opportunities exist outside the jurisdiction. As a consequence, taxes and mandatory contributions generate fiscal mobility, thereby contributing to an increase in the cost of raising public funds. For example, a government's attempt to tax income received by individuals or corporations may result in the relocation of households and firms to other, possibly adjacent, jurisdictions. In many cases, therefore, subnational governments tend to rely less on income taxes, especially progressive income taxes. Instead, a larger share of funds is usually raised by taxing immovable property, land in particular. We often observe, however, some degree of cooperation in tax policy among subnational governments, which improves their ability to tax mobile tax bases.

Fiscal mobility also generates important spillovers in the supply of public services. This may be important mainly at the municipality level, where a significant portion of a city's workforce often lives in adjacent jurisdictions and commutes to the city on a daily basis, thereby benefiting from a city's infrastructure services. However, if a government provides public services that benefit a larger geographical area, as for instance the construction of an airport, those spillovers are also important for larger units of government. This calls for some interjurisdictional cooperation in the provision of public services even among states, which may well manifest itself in some form of intergovernmental fiscal relations.

The constraints imposed by fiscal mobility on the subnational governments' ability to raise public funds also result in difficulties in access to credit. Adverse revenue developments, therefore, cannot be easily smoothed out through debt. At the same time, however, as compared to a national or federal

government, subnational governments are generally more exposed to revenue fluctuations. Again, intergovernmental cooperation in terms of transfers among subnational governments, sometimes denoted as risksharing, may help meeting this challenge.

In all these cases, intergovernmental cooperation allows governments to successfully deal with the challenges and constraints imposed on their finances by fiscal mobility. Correspondingly, in most countries, subnational government policy is implemented in a setting of fairly close intergovernmental relations. Nonetheless, the German system of fiscal intergovernmental relations places an unusually strong emphasis on redistribution and cooperation as compared to other federal countries. This might be advantageous in terms of political stability, but it is subject to growing criticism from economists. With regard to cooperation on taxation, not only among the states but also between the states and the federal government, the states are often criticized for forming a "tax cartel".[1] Spillovers between states may justify the extensive use of joint infrastructure investment and public spending programs in Germany, but these programs are often criticized as bureaucratic, inefficient, and lacking in transparency. Moreover, in some policy areas the large extent to which state and local policies are predetermined by federal mandates and cooperative agreements restricts subnational discretion on administrative issues, which has led to the notion of "administrative federalism".[2] Finally, risksharing between German states is provided through a substantial system of fiscal equalization. The overall extent of risksharing provided for the states is, however, not larger than in other countries[3], as the system basically insures against risk related to shocks in the public budget.[4] Moreover, the fiscal equalization system is subject to much criticism because of severe disincentives in states' policies as a result of the heavy redistribution of funds among the German Länder. However, criticism aside, the German system of fiscal federalism has some characteristics that offer interesting

1. See C. B. Blankart, 1999, Die schleichende Zentralisierung der Staatstaetigkeit: eine Fallstudie, *Zeitschrift für Wirtschafts- und Sozialwissenschaften* 119 (1999), 3, 331-350.

2. See R. Schwager, 1997, Redistribution and administrative federalism, *Canadian Journal of Economics* 30 (1997), 4b, 1161-1183.

3. See T. Buettner, 2002, Fiscal federalism and interstate risk sharing: empirical evidence from Germany, *Economics Letters* 74 (2002), 2, 195-202.

4. See J. von Hagen and R. Hepp, 2000, Regional risk sharing and redistribution in the German federation, *ZEI Working Paper* B-15.

solutions to the basic issues to be dealt with in any country with substantial levels of subnational government. Taking on this criticism, this article not only aims at providing an overview of how the states are funded in the current system; it also seeks to put this overview into perspective by offering a critical discussion of the system's weaknesses and adding some suggestions for reform. Hopefully, this will allow us to sketch out what an efficient German state funding "model" could look like.

In order to provide some background, the following section starts with a brief overview of the role of the Länder (states) in the German system of fiscal federalism. Afterwards, in Section 3, the paper focuses on the issue of subnational taxation and revenue sharing, and moves on to discuss fiscal equalization in Section 4. This will allow us to get a glimpse of the core elements of German state finances, which distinguish these states from other subnational governments. Section 5 discusses the need for reform, and Section 6 concludes with some remarks on the German state funding "model".

2. Basic Characteristics of State Finances

Basically, the German public sector consists of three layers: the federal government (Bund), the sixteen states (Länder), and, as of 2002, no less than 14,643 municipalities (Gemeinden). Even though only these three types of government levy taxes, there exist important parafiscal bodies related to social security that also levy contributions. Since social security is overseen from the federal level the parafiscal bodies are usually assigned to the federal government. Further governmental bodies exist at the local level in the form of counties (Kreise), which are important in the provision of services related to social aid, infrastructure, and waste management. However, the counties can be considered as associations of communities, which are a means of formalized cooperation at the local level in specific areas.

The relationship between the three basic levels of government is laid down in the German constitution, which assigns important legislative powers to federal and state governments. The exact dividing line is, however, determined by the principle of "concurrent" legislation (Art. 72 und 105 GG (German Basic Law)). Accordingly, the competency of states in matters affecting their finances is subject to the non-existence of federal rulings. Another crucial feature of this

relationship is that in many cases federal legislation requires a majority vote in the federal parliament as well as in the upper house (Bundesrat), which is made up of representatives of the state governments. This creates a situation where federal policies are to a significant extent codetermined by federal and state governments. At the same time, the states have limited autonomy in determining their own policies.

Although the Constitution acknowledges the role of municipalities in the overall scheme of the public sector and establishes their right to self-management, it is generally understood that municipalities are governed by the states. With regard to their finances, municipalities experience some autonomy; however, the states may restrict their autonomy and will do so when faced with significant fiscal imbalances.

The complexity of state and local finances is reflected in the difficulties encountered in quantifying the degree of fiscal decentralization. Table 1 gives some figures for the degree of decentralization in OECD countries.

Table 1: Tax Revenue Decentralization in OECD Countries (1996 – 2001)

Country	(1)	(2)	Country	(1)	(2)
Switzerland	56.9	53.0	Norway	21.8	21.4
Canada	51.8	51.8	Australia	19.1	19.1
Germany	49.3	7.2	France	18.6	18.4
Belgium	44.7	24.6	Italy	14.8	11.2
Sweden	42.8	42.8	Portugal	8.9	3.3
Japan	41.3	37.5	Luxembourg	8.0	7.9
United States	35.6	35.6	New Zealand	6.0	5.9
Denmark	34.1	32.2	Netherlands	5.1	5.1
Finland	29.7	24.2	United Kingdom	5.0	5.0
Austria	28.2	3.2	Ireland	4.0	2.2
Spain	25.9	22.3	Greece	1.9	0.3
Iceland	25.3	25.3			

(1) Subnational government total tax revenue and (2) subnational government autonomous own tax revenue, both as a percentage of general government total tax revenue.
Source: D. Stegarescu, 2005, Public Sector Decentralisation: Measurement Concepts and Recent International Trends, *Fiscal Studies* 26 (2005), 3, 301 – 333.

The conventional procedure is to consider the relative size of state and federal budgets (cf. column (1) in Table 1). As documented in Stegarescu (2005), if

one follows a common classification of revenue sources, Germany turns out to be a country with a rather high degree of fiscal decentralization. Among the OECD countries, only in Switzerland and Canada do subnational governments command a larger share of revenues than in Germany. However, if one uses an alternative classification, considering as own revenues only those revenues where subnational governments have some autonomy, at least in the sense that these subnational governments are able to determine the level of the tax rate, Germany actually has a very low degree of decentralization (cf. column (2) in Table 1). This striking difference thus indicates that while the German states have little autonomy in taxation as compared to other OECD countries they nonetheless manage to receive comparatively more funds than other subnational OECD governments.

Table 2 gives some figures for the consolidated budget of the German states. The first two columns show some figures related to the finances of both states and municipalities, reflecting the interrelationship between state and local finances; the last two columns refer only to the state level. From the total revenue we can conclude that approximately 70 % of total state and local resources are appropriated on the state level. While the figures indicate the size of different types of revenue in the total state budget, they fail to give an impression of the importance of own sources in determining revenue. One reason for this is that a significant part of the tax revenue is actually received as a revenue-sharing grant. Another reason is that many of the taxes are collected on the basis of the same tax law throughout Germany. A further important aspect of state and local finances, the role of redistribution among governments, cannot be ascertained from the consolidated budget figures as depicted in the table.

This said, redistributive intergovernmental transfers can be quite important, for the individual state as well as for the individual municipality. At the state level, this is most obvious from the grants determined within the so-called Länder-Finanzausgleich. While some states contribute a large amount of resources to the others, for some net recipients the transfers finance a large part of the budget. Grants are also very important in the relationship between the states and lower level governments

Table 2: Consolidated Budget of the German States

Revenues	State and Local		State Only	
	€ per cap.	share (in %)	€ per cap.	share (in %)
Taxes	2.544	65.0	1.967	71.1
Grants	619	15.8	571	20.6
Fees	367	9.4	107	3.9
Sale of Public Assets	126	3.2	30	1.1
Capital Income	210	5.4	69	2.5
Total revenue	3.911		2.769	
Expenditures	**State and Local**		**State Only**	
	€ per cap.	share (in %)	€ per cap.	share (in %)
Welfare	796	25.5	339	10.9
Debt Service, Pensions etc.	678	21.7	556	17.8
Schooling	609	19.5	487	15.6
Police, Law Enforcement	358	11.5	281	9.0
Universities and Science	279	8.9	277	8.9
Other Education	71	2.3	48	1.6
Transport and Communication	266	8.5	179	5.7
Total	4.308		3.123	

Source: Author's calculations and Statistisches Bundesamt, *Öffentliche Finanzen – Rechnungsergebnisse des öffentlichen Gesamthaushalts 2002*, Fachserie 14/Reihe 3.1, Wiesbaden 2005.

3. Subnational Taxes and the Distribution of Revenue

Table 3 provides some figures on German state tax revenue structure. The two most important categories, which together make up more than 80 % of the states' tax revenue, are (personal and corporate) income taxes as well as VAT revenue. In both cases the revenue originates from shared taxation between the federal and local level. The states have no direct autonomous influence on the revenues; they affect neither the determinants of the tax base nor the tax rates. Similarly, most of the property and excise taxes are collected simply on the basis of an identical and uniform tax law. Only the municipal property tax and the third category, the business tax, allow for subnational discretion in the sense that municipalities determine the actual tax rate applied to the local tax base, which is defined by the uniform business tax law. However, the revenue from the business tax is mainly received by the municipalities and only a small fraction is transferred to the state level. Hence, the state level displays even less autonomy in tax policy than the local level.

Table 3: Tax Revenue of the German States

	State and Local		State Only	
	€ per cap.	share (in %)	€ per cap.	share (in %)
Income Taxes	1.089	42.8	834	42.8
Value Added Taxes	783	30.8	751	38.2
Business Tax	253	9.9	62	3.1
Property and Excise Taxes	338	13.3	238	12.1
Total Revenue from Taxes	2.544		1.967	

Source: Author´s calculations and Federal Statistical Office, *Öffentliche Finanzen – Rechnungsergebnisse des öffentlichen Gesamthaushalts, 2002*, Fachserie 14/Reihe 3.1, Wiesbaden 2005.

In the distribution of shared tax yields we can distinguish a vertical and a horizontal component. Vertically, the revenue from shared taxes is split between the federal level and the state and local level. Horizontally, the revenue is distributed among the states and the municipalities. For the income taxes, the shares are defined in the constitution. Vertically, 15% of personal income tax revenue is allocated to the municipalities, while the remaining revenue is evenly assigned, with the state and the federal government each receiving 42.5%. Horizontally, the state and local share of personal income taxes is distributed among states according to the spatial distribution of the tax base as determined by the taxpayers' place of residence. The revenue from corporate income taxes is shared vertically on a 50-50 basis between the federal and the state governments. Horizontally, the state share of corporate tax revenue is allocated to the states according to the location of the establishment. In the case of multi-state companies, a formula allocates overall revenue according to the state's share of the payroll.

VAT revenue sharing is more complex. This reflects the fact that the vertical distribution is set forth in the constitution, but determined by the Fiscal Equalization Law (FAG), which is often changed and subject to considerable political controversy. The current rule is that approximately 52% is assigned to the federal level, 46% to the states, and 2% to the municipalities. The state share is then allocated horizontally among the states. However, a maximum of only 75% of the state VAT share is allocated according to its population share, while the rest is distributed according to revenue capacity. The distribution of up to

25% of the state VAT revenue share is thus usually considered as the first step in the fiscal equalization system.

4. Fiscal Equalization

The primary distribution of shared tax revenue among federal and state governments is followed by a comprehensive redistributive system of intergovernmental transfers that strongly reduces fiscal disparities among the states.

The fiscal equalization system consists of three related elements: the redistribution of VAT revenue, the system of fiscal equalization grants, and, finally, additional vertical grants that further reduce fiscal disparities. Each element makes use of some measure of the revenue capacity of a state and subjects this to some sort of indicator of "fiscal need". The former is determined by summing up the tax revenues of a state and part of the revenues of its municipalities. The latter is basically determined by population size and an average of all states' tax revenues. This approach is similar to tax equalization in Canada or Australia, which is based on so-called *representative national average standards*.

According to the current rules, the first step of fiscal equalization relates to the distribution of VAT revenue among the states. Up to 25% of the state's share of VAT revenue is used to equalize differences in the revenue capacity stemming from the share of income and corporate tax revenues allocated to the states, the state's share of the business tax, and other state tax revenues. A detailed explanation is not possible here, but the current rule is that any state where the revenue capacity per resident is less than 97% of the national average receives transfers financed by the state share of VAT revenue to bring its revenues up to at least 95% of the national average. The remaining difference with respect to the average triggers further transfers, without, however, completely closing the gap.

The second step, then, involves horizontal transfers between the states. Once again, the aim is to reduce revenue disparities. However, revenues in the second step comprise both state and local tax revenues[5], and include the VAT

5. Municipal revenues are considered at a rate of 64 %. See below.

revenues determined in the first step. Moreover, the second step involves not just the equalization of disparities between the per capita tax revenues of a state and the average tax revenues in all states, but attempts to take into account the "fiscal need" of states and municipalities. This is achieved by using fictitious rather than actual population figures, which are increased if the system considers the fiscal need of a state to be higher. More specifically, the system defines transfers as a share of the difference between the actual revenue and the nationwide per-capita average multiplied by some fictitious population number. Thus transfers are formally determined by a formula,

$$TR_i = \alpha \text{ [Fiscal Capacity – Fiscal Need]},$$

where Fiscal Capacity is some indicator of total tax revenue and Fiscal Need is determined by the product of a fictitious population number and an indicator of average tax revenues. The factor determining the extent to which disparities are compensated is itself a complex function of the disparities, but declines with the disparity from a maximum of 75% to 44%.

In the third step of fiscal equalization among states, the remaining differences between the revenue capacity of the states and their fiscal need are compensated by vertical grants from the federal level. After two steps of equalization, a state with less than 99.5% of the average state tax revenues gets a stunning 77.5% of the remaining revenue shortfall compensated from the federal level.

Viewed in its totality, the system of fiscal equalization among states results in an almost complete equalization of state revenue capacity. Due to asymmetries among the German states, four states make the major contribution to the fiscal equalization system: Baden-Wuerttemberg, Bavaria, Hesse, and Hamburg (cf. Table 4).[6] Most of the other states, in particular the New Länder located in the former East Germany, receive large transfers of up to about 1000 € per capita.

6. Note that the figures do not reflect the fiscal equalization rules in their current form, but according to the rules that prevailed before the recent reform. However, the overall magnitude of the transfers is not expected to change substantially.

Table 4: Fiscal Equalization Transfers to States in 2003

Land (State)	1st step	2nd step	3rd step	Total
Baden-Wuerttemberg	–	–203	–	–203
Bavaria	–	–150	–	–150
Brandenburg	591	195	97	882
Hesse	–	–308	–	–308
Lower Saxony	14	49	47	136
Mecklenburg-West.-Pomm.	669	226	98	992
North Rhine-Westphalia	–	–3	–	–3
Rhineland-Palatinate	–	64	96	159
Saarland	–	100	98	198
Saxony	640	216	98	953
Saxony-Anhalt	689	206	98	992
Schleswig-Holstein	28	6	9	42
Thuringia	657	210	97	965
	–	–	–	–
Berlin	58	778	130	966
Bremen	–	523	116	640
Hamburg	–	–377	–	–377

€ per capita. Source: Author's calculations, Bundesfinanzministerium und Bundesrat; with the exception of the 1st step, where data are taken from the Bundesrat, all figures are taken from the Finanzbericht 2005. For population figures, see below.

One of the fiscal equalization system's key problems is that German states are very heterogeneous in size and density. The 16 states comprising the German federation differ substantially in terms of population size, area, and density. As depicted in Table 5, the largest state in terms of population (North Rhine-Westphalia) is almost 30 times larger than the smallest state (Bremen). The differences are even more pronounced with regard to population density. As has been noted in the literature[7], due to the reliance on averages across states, the marked differences in population size create an asymmetry in the elasticity of transfers resulting from changes in a state's revenues: an increase in the revenue of a small state is compensated by offsetting transfers to a larger extent than an increase in the revenues of a large state, simply because the latter has a larger weight in the national average.

7. see K. A. Konrad and H. Seitz, 2003, Fiscal Federalism and Risk Sharing in Germany: the Role of Size Differences, S. Cnossen, *Public Finance and Public Policy in the New Century*, Cambridge MA, 469 - 489.

Table 5: Size and Population Density of German States

Land (State)	Population[a] (in 1,000)	Area[a] (in sqkm)	Density[a] (per sqkm)	Municipalities[b] (number)
Baden-Wuerttemberg	10,693	35,752	299	1.111
Bavaria	12,423	70,549	176	2.056
Brandenburg	2,575	29,477	87	886
Hesse	6,089	21,115	288	426
Lower Saxony	7,993	47,618	168	1.026
Mecklenburg-West.-Pomm.	1,732	23,174	75	979
North Rhine-Westphalia	18,063	34,084	530	396
Rhineland-Palatinate	4,059	19,847	204	2.306
Saarland	1,061	2,569	413	52
Saxony	4,321	18,414	235	535
Saxony-Anhalt	2,523	20,445	123	1.235
Schleswig-Holstein	2,823	15,763	179	1.129
Thuringia	2,373	16,172	147	1.007
Berlin	3,388	892	3.800	1
Bremen	663	404	1.640	2
Hamburg	1,734	755	2.296	1
Germany	82,532	357,030	231	13.148

Source: Statistisches Bundesamt. [a] figures refer to end of 2003, [b] figures refer to end of 2002.

The large differences in population density indicate that the states differ in the role they play in the spatial structure of the country. Larger states such as Bavaria or North Rhine-Westphalia comprise rural as well as urbanized areas and thus contain cities together with their hinterland. This is different from the smaller states, in particular, the city states of Berlin, Hamburg and Bremen. As cities are centers of services and production they typically have much larger tax bases than rural and peripheral regions. A fiscal equalization system that would basically assign each state the same amount of resources per capita would actually redistribute much of the public funds raised in the cities to the other states. This would deprive cities of their ability to provide agglomeration-specific public services, as, for instance, in the area of transportation. The solution in the German equalization system is to weight the fiscal need of the city states in the equalization system. More precisely, the fiscal need of the three city states is obtained using a fictitious population size, which is 135% the actual population size. The traditional and official justification (MaßstG § 8) for this approach, and thus for the determination of the actual magnitude of the weighting factor, however, has been the higher cost of providing public services in agglomerations. This view, usually assigned to Brecht (1932)[8], has been criticized in the

public finance literature both for theoretical reasons and for its lack of empirical support.[9] Nonetheless, the recent reform of the fiscal equalization system even introduced an additional rule which increases the fiscal need in the states of Mecklenburg – Western Pomerania and Brandenburg with the justification that these state have had higher costs for providing public services due to a particularly low population density in some regions.

A further problem has to do with the interaction between fiscal equalization at the state level and the interaction between state and local finances. If the municipalities are considered as a third independent level of government, there is little reason to include their revenues in the equalization system among states. The current system takes the alternative view and considers the revenue of municipalities as part of a state's revenue capacity. This seems appropriate for the city states, where the state government coincides with the municipal government. However, in the other states this undermines the principle of self-management of the municipalities as it implicitly considers municipalities as agents of the state government. Given that municipalities enjoy not only administrative autonomy, but also autonomy in their expenditure and tax policies, a full inclusion of their revenue in the equalization system would yield severe disincentives, which ultimately would lead to the abolition of municipal autonomy. This justifies why municipal revenue is only partly included (at a rate of 64%) in the state's revenue capacity.

As depicted in Table 6, in addition to the second step of fiscal equalization most states receive unconditional grants from the federal level. A first type of grants (1) is a subsidy to smaller states, Bremen and Saarland, in particular. A second type of grants (2) intended to stimulate the provision of public infrastructure is paid to the former New Länder in former East Germany. A third type of grants (3) is related to a widely recognized Supreme Court decision (BVerfGE 86, 148) that forced the federal government to bail out the governments of Bremen and Saarland.[10] Though the transfers are earmarked for

8. see A. Brecht, 1932, Internationaler Vergleich oeffentlicher Ausgaben, Grundfragen der internationalen Politik 2 (1932), Leipzig

9. see T. Kuhn, 1993, Determinanten der Staatsausgaben: Bevoelkerung und Urbanisierung, *IFO-Studien* 39 (1993), 2, 127–145, and T. Buettner, R. Schwager, and D. Stegarescu, 2004, Agglomeration, Population Size, and the Cost of Providing Public Services: An Empirical Analysis for German States, *Public Finance and Management* 4 (2004), 4, 496 - 520.

10. Note that these payments were phased out in 2004.

debt service, they imply savings of unavoidable expenses, and hence act as unconditional grants.

Table 6: Federal Grants to States 2003 (excl. Fiscal Equalization Transfers)

Land (State)	(1)	(2)	(3)	Total
Baden-Wuerttemberg	–	–	–	–
Bavaria	–	–	–	–
Brandenburg	33	580	–	613
Hesse	–	–	–	–
Lower Saxony	–	–	–	–
Mecklenburg-West.-Pomm.	48	643	–	651
North Rhine-Westphalia	–	–	–	–
Rhineland-Palatinate	28	–	–	39
Saarland	74	–	289	371
Saxony	–	637	–	637
Saxony-Anhalt	33	658	–	691
Schleswig-Holstein	30	–	–	30
Thuringia	35	636	–	408
Berlin	33	591		624
Bremen	97	–	771	880
Hamburg	–	–	–	–

€ per capita. See text for an explanation of categories (1) to (3). "Total" includes other grants not listed under (1) to (3). Source: author's calculations and Finanzbericht 2005.

5. The Need for Reform

While the criticism of the strong dependence of state finances on transfers and grants has a long tradition, it is important to relate the debate about the lack of autonomy to the political background against which the state policymakers operate. As argued by Blankart[11], the lack of autonomy can be explained by the strong position of the states in the upper house (Bundesrat), where they can use their impact on federal tax policy decisions and transfer a significant part of the revenue into their own budgets, without the need to justify their revenue requirement to the taxpayer. This access to the common pool of federal fiscal resources without the need to incur the political costs of raising their own taxes might well explain

11. see above

why the share of resources appropriated by the states is relatively large when compared with other OECD countries.[12] In a broader perspective, the close relationship between governments in their expenditure and revenue decisions undermines the transparency of policymaking for the electorate and, at the same time, makes the political process quite difficult. Moreover, state prime ministers of opposition parties vote strategically against federal policies in the Bundesrat on an almost regular basis. German federalism has thus contributed to the emergence of the "Joint-Decision Trap" of the German political system, characterized by a situation where "[...] national policy initiatives are at the mercy of an opposition whose primary strategic interest is in unseating the government of the day".[13]

While the perception of problems in the German federal system has been growing since the 1970s and 1980s, German unification multiplied the problems inherent in the federal system. Unification not only brought about a huge increase in the demand for public funds, but the fiscal equalization system is now challenged by much larger revenue disparities. The poor economic performance of the German economy after the short unification boom further contributed to declining revenues for both state and federal governments. Meanwhile, the accession of Central and Eastern European Countries to the European Union further challenged the attempts to establish new investments in former East Germany, as the new members compete with low tax rates, whereas former East-Germany taxes investment at the much higher German level. The current situation is characterized by huge deficits both at the federal and the state level. As a recent analysis of the sustainability of state finances by Buettner and Hauptmeier (2005) reveals[14], these deficits indicate a substantial lack of sustainability at the federal and state levels. Table 7 displays the expenditure gap using the OECD concept of measuring the sustainability of public finances. The figures indicate the reduction in public spending necessary to keep the debt level constant relative to economic capacity *(i.e.*, the debt-GDP ratio) over a period of 5 or 17 years. While all states, as well as the federal level, need to make substantial cuts in public expenditures, there are striking differences between the states. In the shorter time period, shown in Table 7, there is a tenfold difference

12. Empirical support is given by D. Stegarescu, 2005, ibid.

13. see F. W. Scharpf, 2005, No Exit from the Joint Decision Trap? Can German Federalism Reform Itself?, MPIfG Working Paper 05/8, September 2005.

14. see T. Buettner and S. Hauptmeier, 2005, *Schuldenmonitor: Konzeption und Umsetzung einer Analyse der Tragfähigkeit der Haushalte von Bund und Ländern*, Gütersloh.

in the necessary expenditure reduction between Saxony on the one hand, which follows a comparatively sound fiscal policy, and Bremen, on the other.

Table 7: Expenditure Gap in € per capita

Land (State)	2003 – 2008	2003 – 2020
Baden-Wuerttemberg	210	217
Bavaria	296	291
Brandenburg	435	707
Hesse	394	396
Lower Saxony	447	469
Mecklenburg-West.-Pomm.	589	860
North Rhine-Westphalia	397	407
Rhineland-Palatinate	475	515
Saarland	566	650
Saxony	143	396
Saxony-Anhalt	666	971
Schleswig-Holstein	393	390
Thuringia	413	666
Berlin	1.175	1.384
Bremen	1.373	1.478
Hamburg	836	813
Germany	230	118

Source: Buettner and Hauptmeier, ibid., and author's calculations.

The high levels of debt aswell as the large expenditure gaps reflect the lack of restraints on state borrowing. While there is a formal requirement in the German constitution that a government's net borrowing shall not exceed its investment expenditures, the constitution links this requirement to standard economic conditions, which immediately lessens the strictness of the rule. The problems with the lack of fiscal discipline are aggravated by the lack of autonomy on the revenue side. As state governments have no substantial discretion in their tax policy, deficits cannot be adjusted on the revenue side. At the same time, the constitutional requirement of equal living conditions across states (Art. 72,2 GG) enables states to call for assistance in times of fiscal crisis, a right that Bremen and Saarland have already exercised (see above). The growing fiscal crisis in Berlin, along with the difficult situation in many other state budgets, in particular among the new Länder, is therefore likely to be resolved through further federal assistance. The relatively limited need for consolidation at the federal level, as indicated in Table 7, is thus underestimated. Moreover, it seems that the

softening of budgetary constraints due to the requirement of assistance in times of fiscal crisis, as determined by the constitutional court (see above), is already contributing to problems of sustainability. It is quite obvious that the German case does in fact provide incentives for the states to "raid the commons"[15] and to extend public expenditures well beyond the level that could be financed with available resources – with serious consequences for the public sector as a whole.

In order to avoid further fiscal crises of subnational governments in Germany, it is of central importance to strengthen both the willingness and the ability of states to follow sound fiscal policies. These include state autonomy in taxation as well as borrowing restrictions for state governments. Another priority is to prevent further bail-outs during state fiscal crises. However, the introduction of state autonomy in taxation is proving particularly difficult, since it requires a significant reform of the fiscal equalization system. This is because tax autonomy makes little sense without a corresponding autonomy in revenue. If, for instance, state income taxes are introduced, it is important to allow states to keep the additional revenue and not to redistribute it within the fiscal equalization system[16] However, if states could keep their additional tax revenue, they would experience significant disparities in their taxrevenues, which would seem difficult to accept, given the strong emphasis on redistribution in the German system. In the East German states, this results in the somewhat paradoxical situation that while these states may need urgent tax reductions, the most due to their competition with other countries that are undergoing economic transformation, they resist the introduction of tax autonomy because they fear losing intergovernmental revenue.

Given its strong emphasis on redistribution, the system of fiscal equalization creates a further problem that calls for reform. Due to the high level of redistribution for many states, a loss or a gain in tax revenue results only in small changes in revenue after equalization, which generates serious disincentives. A measure of the disincentives is the marginal contribution rate depicted in Table 8. This measure gives the percentage of one additional euro of revenue that a state has to transfer to the federal and state governments. According to the current rule, for some states, for every additional euro of revenue, 97 cents are

15. see W. E. Oates, 2004, Toward a Second-Generation Theory of Fiscal Federalism, *International Tax and Public Finance* 12 (2005), 349 - 373.

16. See T. Buettner and R. Schwager, 2003, Länderautonomie in der Einkommensteuer: Konsequenzen eines Zuschlagsmodells, *Jahrbücher für Nationalökonomie und Statistik* 223 (2003), 532 – 555.

transferred to the fiscal equalization system and only 3 cents are kept. If we follow the fiscal equalization literature[17], such a strong redistribution of revenue will generate disincentives, for instance for state tax policy. While the states have little discretion in taxation, and, hence, little leeway to adjust their tax policy strategically, Baretti, Huber, and Lichtblau (2002) argue that the high marginal contribution rates reduce the states' willingness to collect tax revenue.[18]

In the face of growing criticism, the latest reform of the fiscal equalization law introduced some special rules aimed at reducing the high degree of redistribution of additional revenue. However, *although* the reform has lowered the marginal contribution rate for several states, the median of the contribution rates, which previously was at almost 95%, is still around 84% (see Table 8).

Table 8: Marginal Contribution Rate to the Fiscal Equalization System (in %)

Land (State)	pre – 2005 rule	current rule
Saarland	98.71	98.32
Mecklenburg-West.Pomm.	98.09	97.56
Thuringia	97.13	96.63
Saxony-Anhalt	97.03	96.58
Brandenburg	96.56	96.43
Lower Saxony	90.18	89.20
Thineland-Palatinate	89.40	84.33
Saxony	95.26	83.35
Schleswig-Holstein	90.66	78.30
Baden-Wuerttemberg	65.17	61.73
Hesse	71.56	60.14
Bavaria	64.26	54.55
North Rhine Westphalia	16.71	41.02
Bremen	98.93	93.32
Berlin	94.70	83.76
Hamburg	94.70	63.62

Source: T. Buettner and S. Hauptmeier, and R. Schwager, 2005, Efficient Revenue Sharing and Upper Level Governments: Theory and Application to Germany, CESifo Working Paper, Munich, forthcoming. The marginal contribution rate is calculated for a 1% increase in a state's corporation tax revenues using 2004 budget figures. See text for further description.

17. see B. Dahlby, 2002, The Incentive Effects of Fiscal Equalization, in: Boothe, P. (ed.): *Equalization: Welfare Trap or Helping Hand?*, Halifax, and T. Buettner, 2006, The Incentive Effect of Fiscal Equalization on Tax Policy, *Journal of Public Economics*, forthcoming.

18. see C. Baretti, B. Huber and K. Lichtblau, 2002, A Tax on Tax Revenue: the Incentive Effects of Equalizing Transfers: Evidence from Germany, *International Tax and Public Finance* 9 (2002), 631- 649.

6. Outlook: the German Model

Undoubtedly, German federalism has its virtues. It has provided the Bonn Republic with a degree of long-term stability that was neither obvious nor trivial at the time of its foundation after the Nazi dictatorship and the Second World War. German federalism even managed to unify West Germany's Länder with the area of the former German Democratic Republic in 1990.

However, the troublesome problems with sustainability at the federal and state level are a clear indication of growing tensions between the rising demands for transfers and the inability of the budgets to actually finance additional transfers. The basic underlying problem is a weak compromise between subnational autonomy and centralized decisionmaking. As a recent report from the Council of the Advisory Board at the German Ministry of Economics and Labor has emphasized:[19] this compromise was already present in the consensus between decentralized and unitarian views on the government in the Constitutional Assembly, which prepared the 1949 constitution under the supervision of the Allied forces. The strong unitarian tendencies in the German federation were then put into law in the major 1969 reform of the federal system. This reform, however, still granted the states substantial rights in their budget and expenditure policies, even if the states have practically no discretion over revenue, and major spending mandates further limit autonomy in state expenditures. The fiscal crises of Bremen and Saarland in the late eighties already foreshadowed a critical situation where the states might engage in a policy of raiding the commons. German unification put further stress on the system as fiscal disparities increased considerably and the proportion of poor states in the Bundesrat rose. The dawning fiscal crises could lead to a hardening of budgetary constraints, since not just some but all budgets are now running deficits. In any case, formal fiscal restraints for states are still necessary.

Due to this severe lack of sustainability and in order to improve state responsibility, it is important to provide the states with some ability to raise or lower the tax rate on some important tax base. In keeping with the suggestion in Art. 106,5 of the German Constitution, aimed at the municipalities, it would

19. see Wissenschaftlicher Beirat beim Bundesministerium für Wirtschaft und Arbeit, 2005, *Zur finanziellen Stabilität des deutschen Föderalstaates,* Bonn.

seem advisable to introduce state income taxes using a common income tax base. However, the introduction of state powers in taxation conflicts with the strong degree of redistribution present in the fiscal equalization system.[20]

The fiscal equalization system features an interesting system of intergovernmental transfers that is quite effective in stabilizing asymmetric budgetary shocks. Nevertheless, this stabilization comes at the cost of strong disincentives, as adverse developments in states' revenues are, to a great extent, shifted to other states while positive developments are appropriated by other states. It is important to reduce the degree of redistribution within the fiscal equalization system, not only because of resulting inefficiencies in tax collection or tax efforts, but because severe disincentives in state policies should be avoided.

A final problem that should be addressed has to do with state administrative boundaries. The strong degree of heterogeneity among the states in terms of their size and the insufficient degree of consistency between the spatial structure of the economy and the administrative boundaries that are most obvious in the case of the city states place a burden on the equalization system and necessitate some difficult compromises. Nonetheless, the constitutional status of the states, as well as their considerable power in the Bundesrat, prevents the required reorganization of the states, including the fusion between city states and their respective hinterlands.

However, with increased state tax autonomy, less redistribution of fiscal revenue among states, stricter borrowing restrictions, and, perhaps, a more appropriate spatial definition of states, German federalism may offer an interesting model for the solution of the problem of financing subnational governments.

20. see T. Buettner and R. Schwager, 2003, ibid.

ABSTRACT

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Thiess Buettner, Ifo Institute, Ludwig Maximilians University, and CESifo

en The finances of the German States
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This paper gives an overview of the basic structure underlying the finances of the German states, their current state, as well as the main problems. It argues that while the system has generated a comparatively large amount of public funds to the states, most of the funds received are basically intergovernmental transfers and shared taxes. The German system is further characterized by a substantial lack of autonomy and a softening of state budget constraints which calls for a substantial reform, including restraints on borrowing, a reduction of the redistributive element in the system of fiscal federalism, and the assignment of some tax autonomy to the states, for instance, related to income taxation.

Key words: fiscal federalism; Germany; tax-revenue sharing; public debt; decentralization.

RESUM

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Aquest treball dóna una visió general de l'estructura bàsica subjacent que té el sistema financer dels estats federats alemanys, la seva situació actual i els principals problemes que presenta. La tesi és que, si bé aquest sistema ha generat una relativament elevada quantitat de recursos públics per als estats federats, la major part són bàsicament transferències intergovernamentals i impostos compartits. El sistema de finançament alemany es caracteritza, a més, per una substancial manca d'autonomia i una relaxació de les restriccions pressupostàries dels estats federats, que reclama una reforma a fons, incloent-hi restriccions sobre préstecs, una reducció del component redistributiu dins el sistema de federalisme fiscal i l'assignació d'un cert grau d'autonomia als estats federats, per exemple pel que fa a tributació sobre la renda.

Paraules clau: federalisme fiscal; Alemanya; compartició d'ingressos fiscals; deute públic; descentralització.

RESUMEN

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Thiess Buettner, Instituto Ifo, Universidad Ludwig Maximilian y CESifo

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El presente trabajo proporciona una visión general de la estructura básica subyacente del sistema financiero de los estados federados alemanes, su situación actual, así como los principales problemas que presenta. La tesis es que, si bien este sistema ha generado una cantidad relativamente elevada de recursos públicos para los estados federados, la mayor parte son básicamente transferencias intergubernamentales e impuestos compartidos. El sistema de financiación alemán se caracteriza, además, por una sustancial falta de autonomía y una relajación de las restricciones presupuestarias de los estados federados que reclama una reforma a fondo, incluidas restricciones sobre préstamos, una reducción del componente redistributivo dentro del sistema de federalismo fiscal y la asignación de cierto grado de autonomía a los estados federados, por ejemplo en lo referente a tributación sobre la renta.

Palabras clave: federalismo fiscal; Alemania; ingresos fiscales compartidos; deuda pública; descentralización.