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Subnational government bailouts in Germany

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Abstract:

The paper presents an investigation of subnational government bailouts in Germany. In a first part we briefly describe the fiscal federalism system in Germany. The main part of the paper examines the bailout of two West German states. We identify the causes of the financial trouble of both states and examine the institutional settings that forced the federal government to provide bailout transfers. In addition, we investigate the impact these transfers had on the fiscal performance of both Länder. In a further section we provide evidence on bailouts of local governments by the German Länder. A final section summarizes our results and presents policy conclusions.

I. Introduction

The bailout problem is currently on the top of the research and policy agenda in Europe. Germany is an interesting case to study because the German government insisted on including a ´no-bailout principle´ in Art 104b of the Maastricht treaty and thus it is of interest to study how Germany handles this problem at home. In addition, studying bailouts in existing federal states might be an important source of information for the future development of some kind of a federal European state. By a careful examination of the political as well as institutional conditions that were at work during episodes of bailouts one can try to derive some knowledge about the proper design of constitutional and political institutions that reduce the probability of bailouts and thus strengthen market forces. Making a distinction between a fiscal bailouts and monetary ones, one has to mention at the outset that the latter is of no importance in our study because in Germany no fiscal unit has access to borrowing from the central bank. Thus we exclusively examine fiscal bailouts.

Default by a subnational government can impose a negative externality upon other subnational governments or the federal government by increasing the cost of borrowing for all fiscal units. An important question that arises in the bailout literature refers to the impact of effective discipline on borrowing that is imposed by the market. These market forces can only work efficiently if subnational governments have no perceived chance of a bailout by the central government (or the central bank).[1] If a bailout occurs it might disturb or even destroy completely market forces - increasing interest rates through higher risk premia for borrowing or even failure to find a creditor - that prevent fiscal units from overborrowing. Lane (1993) claims that an actual bailout is not necessary to destroy market discipline rather the expectation of a bailout is the most important reason for the failure of market discipline. The expectation of a bailout leads to a moral hazard problem both on the side of the lender as well as the side of the borrower. Whereas the former has less incentives to monitor the borrowers´ performance the borrower´s incentives to run a sustainable fiscal policy are reduced. If market forces can work, subnational government that run an unsustainable fiscal policy are facing rising interest rates that not only increases the cost of borrowing but also signals to the market and thus the public a risk of default and the poorness of fiscal policy. If market forces work efficiently, the other fiscal units in a federal system need not be harmed by a default of one governmental unit.

The public finance and fiscal federalism literature has left the bailout issue virtually unaddressed. Only recently some theoretical papers have been presented that investigate the issue. Wildasin (1997) presents a theoretical investigation of fiscal bailouts which suggests that large subnational governments have a higher chance to be bailed out by the central government (´too big to fail´). However, in the Wildasin model there is no public debt - neither at the level of subnational governments nor at the central government level - and bailouts arise because local governments strategically underprovide public goods having nationwide externalities. Thus in this modeling framework bailouts take the form of ex-post grants. In a related paper, Qian and Roland (1999) show that fiscal competition among local governments increase the opportunity cost of bailouts because bailouts are associated with an inefficient expenditure allocation. Another literature that is related to the bailout issue is the work of Kornai (1980, 1986) which examines bailouts of state controlled enterprises by introducing the notion of a ´soft budget contraint´. According to Kornai, enterprises or any other organization that expect to receive a bailout face an incentive-killing soft budget constraint.

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[1] See Lane (1993) for other conditions that have to be fulfilled for the working of financial markets driven borrowing restrictions.

The present paper addresses the bailout issue by using a case study approach taking which focuses on the bailout of two West German states. In section II we present a brief overview on fiscal federalism in Germany, describe the most important institutional facts and present some key figures. In the past there have frequently been (minor) institutional changes. If not indicated otherwise, the institutional settings mentioned in this report refer to those valid in 1998. Section III presents an intensive discussion of the most important bailout that occurred in the Federal Republic of Germany, namely the massive financial transfers to two West German Länder, Saarland and Bremen. Both Länder ran into severe financial trouble in the 80ties and turned to the Constitutional Court in order to force the federal government to support them in coping with their high public debt. Bailouts at the local level are examined in section IV. Finally, section V summarizes the results of our investigation and presents some policy conclusions.

II. Fiscal Federalism in Germany: A short overview

a) Basic facts

The Federal Republic of Germany FRG has a political system with a pronounced federal structure which has three levels of government: federal (Bund), state (Länder) and local. Responsibilities of each level are specified in the Basic Law (Grundgesetz). Before German reunification in October 1990 there were 11 Länder in the former West Germany; with German unity the number of the Länder increased to 16, see map[2]. About 14,000 cities and communities are assigned to the Länder. Three of the Länder - Berlin, Hamburg and Bremen - do not have fiscal independent communities because these Länder are in fact large cities and are called ´city-states´ (Stadtstaaten). To distinguish the city-states from the other Länder, we call the latter ´non city-states´ (Flächenländer). It is rather important to distinguish between these two types of Länder because the budgets of the city-states also cover expenditures and revenues which are typically assigned to local authorities in the non-city states. Consequently, the expenditures of the non-city states include grants to local authorities whereas there are no grants to local authorities in the city-states, because these Länder do not have fiscally independent municipalities and therefore have to run all businesses that are usually covered by communes. Consequently, fiscal data of the two types of Länder are not directly comparable unless the fiscal data of the non-city states are consolidated with the fiscal data of their local governments. This practice we follow in the study, that is, if we report Länder data we always aggregate the budgets of all local governments and the state´s budget.[3]

Table 1 presents some key data on the German Länder. As can be seen, the Länder differ quite substantially in size. The two West German Länder that will be the focus of section III, Bremen and Saarland, are the smallest Länder with a population of about 0.68 and 1.080 mill. respectively. Differences among the West German Länder in economic performance are also

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[2] The former West Germany consisted of the 3 city-states: Hamburg, Bremen, and Berlin (West) and the 8 non city-states: Schleswig-Holstein, Niedersachsen (Lower Saxony), Nordrhein-Westfalen (North-Rhine Westphalia), Hessen (Hesse), Rheinland-Pfalz (Rhineland Palatinate), Saarland, Baden-Württemberg, and Bayern (Bavaria). On October 3rd in 1990 the newly created Laender of East Germany: Brandenburg, Mecklenburg-Vorpommern (Mecklenburg-Western Pomerania), Sachsen (Saxony), Sachsen-Anhalt (Saxony-Anhalt) and Thüringen (Thuringia), all of which are non city-states, entered the Federal Republic of Germany. In addition, the former Berlin (West) and Berlin (East) merged to form the new city-state Berlin.

[3] The data we will use carefully avoids double counting that could occur because states provide grants to local governments and local governments make various payments (of minor importance) to the Länder. These ´intrastate´ payments are excluded from the data on consolidated state and local government budget data.

considerable. Whereas the two southern Länder, Bayern and Baden-Württemberg, had an unemployment rate in 1997 of less than 9%, the West German state Saarland had an unemployment rate of about 13.6% and the unemployment rate in Bremen is almost as high as the unemployment rate in the East German state Sachsen. Similar differences we observe in per-capita-GDP figures. The fiscal data shown in table 1, per capita expenditures and per capita debt, indicate dramatic interregional disparities too. Per capit debt ranges from about 25,000 DM at Bremen to about 5,000 DM at Bayern. In addition, the data in table 1 shows that per capita expenditures in the East German states exceed those of the West German state considerably.

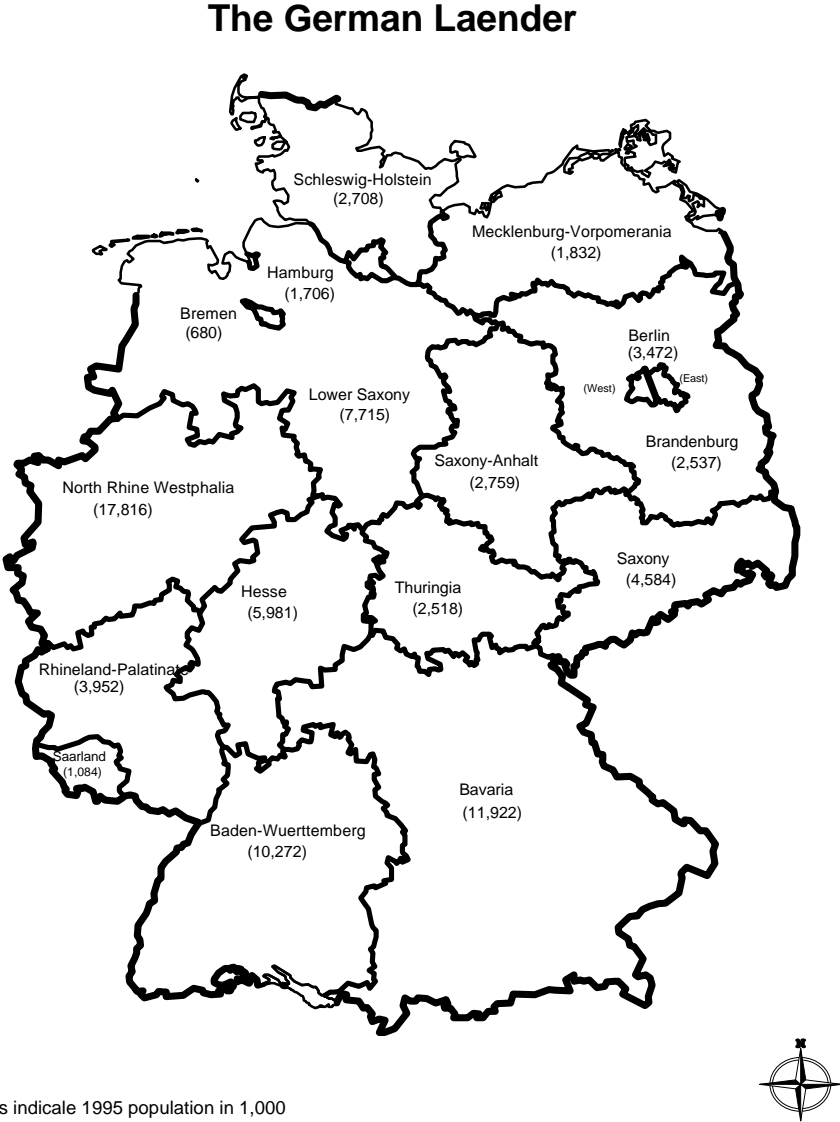**Map**: The Geography of the German Laender after German reunification

The German Laender

Schleswig-Holstein
(2,708)

Mecklenburg-Vorpomerania
(1,832)

Hamburg
(1,706)

Bremen
(680)

Berlin
(3,472)

(West)   (East)

Lower Saxony
(7,715)

Brandenburg
(2,537)

Saxony-Anhalt
(2,759)

North Rhine Westphalia
(17,816)

Saxony
(4,584)

Hesse
(5,981)

Thuringia
(2,518)

Rhineland-Palatinate
(3,952)

Saarland
(1,084)

Bavaria
(11,922)

Baden-Wuerttemberg
(10,272)

Figures indicale 1995 population in 1,000

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Table 1: Key data on the German Länder 1997

	Population in 1,000	Per capita expenditures in DM	Per capita debt in DM	Interest payments[1] %-share	Unemploy-ment rate	Real per capita GDP in DM at 1990 prices
West German non-city states						
Baden-Württemberg	10,375	7,290	6,580	5.49	8.7	44,410
Bayern	12,044	7,600	4,830	3.64	8.7	44,800
Hessen	5,027	8,290	9,540	7.28	10.4	52,060
Niedersachsen	7,815	7,100	10,220	9.25	12.9	35,470
Nordrhein-Westfalen	17,948	7,800	10,440	8.24	12.2	39,090
Rheinland-Pfalz	4,001	7,200	10,000	8.50	10.3	34,800
Saarland	1,084	7,600	13,970	12.95	13.6	36,810
Schleswig-Holstein	2,742	7,529	11,690	9.71	11.2	35,960
East German non-city states						
Brandenburg	2,554	9,100	9,660	5.84	18.9	20,490
Mecklenburg-Vorpommern	1,817	9,580	8,440	4.98	20.3	18,450
Sachsen	4,546	8,560	6,310	4.40	18.4	18,840
Sachsen-Anhalt	2,724	9,300	9,800	5.63	21.7	17,700
Thüringen	2,491	8,920	8,740	5.63	19.1	17,810
City-states						
Berlin[2]	3,459	12,110	15,330	8.00	17.3	37,170
Bremen	679	11,600	24,970	15.31	16.8	59,370
Hamburg	1,708	10,790	16,750	10,45	13.0	83,500

1) Interest payments as a percentage share of total expenditures
2) Note that West Berlin and the former East Berlin merged in 1990 to form the state Berlin. Consequently, Berlin is a ´mixture´ of East and West.
Source: Data calculated from various sources (Federal Statistical Office, Wiesbaden, Federal Labor Agency, Nürnberg and Federal Ministry of Finance, Bonn)

The German Constitution defines the responsibilities of the different tiers of government. The communes are responsible in particular for local utilities and services such as water supply, sewage and waste disposal, the construction and maintenance of local roads, etc. Local governments are also responsible for the provision of supplementary welfare benefits, especially social assistance benefits. The Constitution guarantees the communities the right to manage their own affairs independently. In practice this independence is rather restricted because the local governments heavily rely on grant financing from the Länder governments and the vast majority of expenditures are mandatory expenditures. In addition, the Länder have to approve all borrowing of local governments and deficit financing can be denied and is frequently denied by the Länder if it is suspected that the communes won´t be able to meet the expected future financial obligations associated with the borrowing. This subject will be taken up again below. The Länder are responsible for cultural affairs, in particular for schools and education, the administration of justice, police and health services. In addition, the Länder and the Federation cooperate on the planning and financing of joint activities, such as regional economic policy, coastline preservation, agricalatural policy as well as public-funded research inside and outside of universities. The importance and expenditure volume of these joint tasks has increased considerably since the passing of the 1949 Constitution which introduced a more or less strict division of power between the federal government and the Länder governments. This strict separation was eroded more and more and a careful comparison of the 1949 Constitution and the current Constitution reveals that the federal government increased its impact on the policy of the Länder considerably, see Blankart (1999). Several authors, such as Blankart (1999), claim that the extension of joint tasks are associated with a centralization process because the co-financing of state projects by the federal government is accompanied by an increasing influence of the Federation on the Länder´s policy. In addition, Blankart claims that the Länder governments gave up part of their autonomy in order to get financial support from the federation and thus at the expense of the nation as a whole. Quite recently in Germany there are tremendous political efforts to reintroduce a more strict division of power between the Länder and the federal government.

b) Fiscal Federalism: The distribution of tax revenues among the tiers of government

There are two important aspect of fiscal federalism in Germany that are rather influential: i) A pronounced fiscal equalization system that is driven by the request of the German Constitution to achieve uniformity of living conditions across the regions and ii) the almost complete lack of regional differentiation in taxation.

Before we turn to a detailed description of the fiscal federal structure in Germany we examine the sources of revenue of subnational governments in Germany, see **table 2**. Because of the dramatic differences between the Länder in the former West Germany and the Länder in the East of Germany we make an East-West distinction. In addition, contrary to our usual practice in this report, we supply data separately for local governments and states. As can be seen only about 10% of the total revenue of the West German Länder are transfers from the federal government and about 3.6% of the West German Länder´s revenue are distributed within the fiscal equalization system to the East German Länder. Things are quite different in the East of Germany. The East German Länder heavily rely upon transfers from the federal government as well as the West German Länder. About 36% of their total revenue are transfers from the federal government and about 6.7% from the West German Länder. Looking at the local governments we also observe large East-West disparities. The West German local governments receive about 30% of their total revenue as grants from the Länder; in East German this ratio even comes close to 60%. In addition there are rather strong differences in

tax financing of local governments between the two parts of Germany. In East Germany tax revenues contribute only about 13% to total revenue whereas in West Germany about 36% of all revenues are out of taxes.

Table 2: The Revenue Structure of Subnational Governments in East and West Germany 1997

Sources of revenue:	States (excluding local governments)	Local Governments
	West German Länder	
Taxes	77,7%	36,4%
fees etc.	4,7%	21,3%
Transfers from the federal government	9,8%	~ 0
Transfers from Länder	-3,6%	28%
	East German Länder	
Taxes	48,5%	13,2%
fees etc.	3,0%	14,8%
Transfers from the federal government	36%	1%
Transfers from Länder	6,7%	57,4%

Source: Federal Ministry of Finance, Bonn, and authors calculations.

Tax revenues in Germany are collected from two types of taxes. The majority of taxes are ´joint taxes´ that is, the revenue out of these taxes accrue to the federal, state and even the local level jointly according to negotiated shares, some of which are even fixed in the Constitution. About 75% of all tax revenues belong to this category. Only 25% of tax revenues are derived from taxes earmarked to only one level of government. Thus the federal government receives all revenues out of the mineral oil tax, insurance tax, tobacco duties and some further taxes of minor importance. States receive taxes collected within their geographic boundary from the motor vehicle tax, net worth tax, inheritance tax, betting and lottery tax, as well as some other taxes of minor importance. However, tax rates of these taxes are fixed at the federal level. Local authorities obtain the real property tax and the local excise taxes as well as most of the revenues from the local business tax.[4] Unlike the states, local governments have discretionary power in setting tax rates and can set the tax rates on local property taxes as well as the local business tax rather independently.[5] **Table 3** shows the distribution of revenues from joint taxes to each level of government (**vertical financial equalization system**) in Germany in 1998 as well as the revenue collected from these taxes in 1997.

The vertical financial equalization system describes only the distribution of tax revenues between the different tiers of government but does not regulate the distribution of the Länder´s share to the individual Länder.[6] This is achieved in a **horizontal fiscal equalization** system. A crucial element of this distribution mechanism is the calculation of an index of *fiscal capacity*. Roughly speaking, the fiscal capacity index if calculated as the sum of tax revenues of the Länder including (approximately) 50% of the tax revenues of their local governments, with all revenue takes on a per capita basis. Whether a state is entitled to transfers from other states or has to make transfers to other states depends upon the relationship of its own fiscal capacity in

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[4] The local business tax is in fact a joint tax. However, neither the federal nor the state governments have a direct influence on the setting of local business tax rates.

[5] However, local governments adjust local tax rates rather rarely and take into account competition with other local governments, see Seitz (1995).

[6] For lack of space we do not describe the distribution of revenues out of joint taxes among the local governments. This distribution is rather complicated and differs among the Länder.

comparison to the average fiscal capacity. This distribution of tax revenues among the Länder is achieved in a multiple stage system:

Table 3: Distribution of revenues out of joint taxes in Germany among federal, state and local governments (Institutional setting of 1998 and revenue data from 1997)

	Federal	Länder	local governments	total revenue 1997 in bill. DM[1]
Value added tax	52,5%	46,7%	2,1%	255
Income tax incl. wage tax	42,5%	42,5%	15%	249
local business tax	4,6%	16,1%	79,3%	48.6
Non-assessed taxes on Earings	50%	50%	0%	14.7
Interest income deduction	44%	44%	12%	11.4
Corporation tax	50%	50%	0%	33.3

1) Note: total tax revenue in Germany in 1997: 797 bill. DM
Source: Federal Ministry of Finance, Bonn.

In a **first** fiscal equalization **step** 75% of the Länder´s share of the VAT is distributed among the Länder according to their population share. The remaining 25% of the VAT that accrue to the Länder is distributed such that financial weak Länder have at least 92% of the average fiscal capacity. If the VAT revenues are not sufficient to reach the 92% target, the target is curtailed; if the VAT revenues are that high, that the 92% target can be reached, the surplus is distributed according to the population share. In a **second step**, redistributive transfers among the Länder are calculated to ensure that every state attains at least 95% of the average fiscal capacity. This procedure creates a very high ´marginal transfer rate´ on additional tax revenues for the financial strong Länder. The marginal transfer rate on tax revenues collected can amount up to 80%(!).

Note that both steps are confined to the level of the Länder. The federal government does not participate in these fiscal equalization procedure and the Federal Ministry of Finance only participates in the process as a clearing agency. Until 1994 the former West Berlin did not participate in the second stage of the fiscal equalization system because of political reasons associated with the special status of West Berlin. West Berlin was funded by the federal government in Bonn. The new Länder in the East of Germany too did not participate in the second stage of the fiscal equalization system and only partly in the first stage up to 1994. Up to this period the Länder in the East of Germany received transfers from a special (debt financed) fund, the Germany Unity Fund, to which we will make some further reference below.

Despite the strong equalizing impact of the equalization system just described there are still large differences in per capita revenues across the Länder after the transfers between the Länder. In order to achieve a further equalization of fiscal capacity the federal government provides **complementary grants** (Fehlbetrags-Bundesergänzungszuweisungen) to financially weak states to ensure that every state receives at least about 99.5% of the average per-capita revenue. These grants from the federal government to the financial weak Länder are looked upon as a **third stage** of the German fiscal equalization system. In 1997 all East German states, Berlin, as well as 4 out of the 10 West German Länder received such grants. The total volume of complementary grants has been about 5.2 bill DM in 1997.

In addition, the federal government provides several asymmetrical vertical transfers to the Länder. However, contrary to the just mentioned complementary grants these asymmetrical

vertical transfer are not designed do bring about a further reduction in fiscal disparities but to achieve other political and economic goals. There are four types of these transfers:

- Tranfers to cover the cost of political administration in small states (Sonderbedarfs-Bundes-ergänzungszuweisungen für die Kosten der politischen Führung)

These grants are provided to the small Länder in East and West Germany. It is argued that the per capita cost of political administration decreases with an increase in population size. Thus, small Länder have to burden higher per capita cost for administration. In 1997 the federal government provided about 1.5 bill. DM for this purpose. All East German Länder except Sachsen receive such transfers, Berlin, as well as the three small West German Länder (Saarland, Bremen and Rheinland-Pfalz).

- Transition transfers to West German Länder (Übergangsbundesergänzungszuweisungen alte Länder)

In 1995 the East German states joint the fiscal equalization system among the Länder. Because of the poor economic and fiscal conditions in East Germany all East German Länder receive considerable transfers from this interstate redistribution system. Some West German Länder suffered severe revenue losses as a result of the integration of the East German Länder into the fiscal equalization system. By providing these transfers, which are terminated until 2004, the federal government is trying to smooth the adjustment burden of these states. In 1997 five out of the ten former West German Länder received such grants with a total volume of about 1.1 bill. DM.

- Transition transfers to East German Länder (Übergangsbundesergänzungszuweisungen neue Länder)

Because of the poor economic performance and the small tax base of the East German Länder as well as to support these Länder in the construction of a modern infrastructure, the federal government provides transition grants to all East German Länder, including Berlin. These grants too are terminated until the end of 2004 and the total volume of these grants amounted to 14 bill. DM in 1997. However, the federal government promised the East German Länder that the prolongation of these grants will be negotiated before 2004.

- Consolidation transfers to Bremen and Saarland (Sanierungsbundesergänzungs-zuweisungen)

Two severely indebted West German Länder, Bremen and Saarland, receive financial aid for the amortization of outstanding debt. These grants will be discussed in more detail below. In 1997 the federal government paid 3.4 bill DM to both Länder.

Table 4 reports the transfers in stage 2 of the fiscal equalization system among the Länder as well as the supplementary federal grants. As can be seen, only four West German states make contributions to the fiscal equalization system among the Länder. The state Hessen has to transfer about 6.5% of its resources to other Länder whereas on the other hand Bremen receives about 4.4% of its total revenue out of the fiscal equalization system. All Länder in the East of Germany as well as Berlin are all net-receivers and get on the average about 5% of their total revenue as transfers from West German Länder. Differences are even more striking if we look at the distributional impact of the various supplementary grants of the federal government to the Länder. Five of the West German Länder do not receive any supplementary transfers whereas the states Bremen and Saarland receive about a quarter of their total revenues from the federal government. In the East of Germany, the Länder receive on the average about 13% of their revenues as supplementary federal transfers.

The just mentioned four types of federal transfers to the Länder are not an integral part of the fiscal equalization system in Germany. However, in negotiating the fiscal relations between the Länder and the federal government these grants play an important role. The supplementary

grants by the federal government have been of crucial importance after German unification. As we already mentioned, the Länder in the East of Germany as well as Berlin did not immediately participate in the fiscal equalization system among the Länder after German reunification in Oct. 1990. With the passing of a federal law in 1993 (Federal Consolidation Program) the fiscal arrangements in Germany where fundamentally reorganized and the Länder in the East of Germany as well as Berlin joined the equalization system in 1995. Because the tax base in East Germany was and still is rather poor, the financial requirements of the Neue Länder has been met by increasing the states´ share of the VAT revenues from 37% to 44%. The drop in tax revenue of the federal government has been compensated by introducing an income tax surcharge of 7.5%.

Table 4: Distributional impact of transfers among the Länder as well as supplementary Federal transfers from the federal government to the Länder

	Transfers from (+) and contributions to (-) fiscal equalization among the Länder in 1997[1]		Supplementary federal transfers to the Länder in 1997[2]	
	mill. DM	% of total revenues	mill. DM	% of total revenues
West German Länder				
Baden-Württemberg	- 2,410	- 3.27	0	0
Bayern	- 3,102	- 3.56	0	0
Hessen	- 3,148	- 6.47	0	0
Niedersachsen	+ 672	+ 1.27	1,414	2.68
Nordrhein-Westfalen	- 3,059	- 2.34	0	0
Rheinland-Pfalz	+ 296	+ 1.11	1,037	3.90
Saarland	+ 204	+ 2.34	2,016	23.09
Schleswig-Hostein	-5	- 0.03	346	1.82
Bremen	+ 350	+ 4.44	2,100	26.65
Hamburg	- 273	- 1.62	0	0
East German Länder (including Berlin)				
Brandenburg	+ 986	4.73	2,618	12.57
Mecklenburg-Vorpommern	+ 843	5.40	1,976	12.65
Sachsen	+ 1,918	5.02	4,492	11.76
Sachsen-Anhalt	+ 1,175	5.39	2,870	13.16
Thüringen	+ 1,123	5.63	2,627	13.18
Berlin	+ 4,432	13.90	3,725	11.68

1) Without redistribution of VAT among the Länder. Thus, only transfers at the second stage of the fiscal equalization system among the Länder are included.
2) Supplementary federal transfers comprise the above mentioned federal grants: i) complementary transfers to financially weak states, ii) transfers to cover the cost of political administration in small states, iii) transition transfers to East German Länder, iv) transition transfers to West German Länder, and v) consolidation transfers to Bremen and Saarland

The financial equalization system in Germany produces rather queer incentives because states that run a ´sound´ fiscal policy leading to a rise in the tax base have to pay a considerable share of any tax revenue increase to revenue weak states which kills incentives to run a proper economic policy. Consequently, this system has come under attack by politicians (from revenue strong states) but also by economists who criticize the almost complete lack of incentives to run a tax base increasing policy, see for example Homburg (1994). Whereas the fiscal

equalization system among the Länder does not change the ranking of the fiscal power of the Länder, the numerous supplementary federal transfers change this ranking dramatically such that fiscally weak Länder can and do end up ´richer´ than the fiscally strong Länder, that is, per capita revenues of ´poor´ states can exceed per capita revenues of ´rich´ states after all transfer payments in the fiscal equalization system and supplementary transfers from the federal government to the fiscally weak states. This is the case for all Länder in East Germany but the ranking is also disturbed if one considers the West German Länder only.

Apart from the various supplementary grants mentioned above, all of which are unconditional grants, there are specific conditional grants from the federal government to the Länder, such as support for regional and agricultural policy, as well as research in- and outside of universities. However, these grants request projects to be co-financed by the Länder. Most of these projects are financed 50:50 by the federal government and the state in question and the distribution of these conditional grants among the Länder is roughly proportional to the population size of the Länder.

c) Tax policy in Germany at the subnational level

Some remarks must also be made on tax policy in Germany. The states virtually have no power to set tax rates despite the fact that about 80% of the West German Länders´ total revenue comes out of taxes. Tax rates are set by the federal government. However, the federal government has to pass a law if tax rates of joint taxes or tax rates of taxes that are earmarked to the Länder are changed and the Länder participate in the legislation process through voting in the Second Chamber, the Bundesrat, which is composed of representatives of the Länder governments. Thus, the Länder can jointly influence tax policy but none of the Länder can fix tax rates individually. In addition, the Länder as a whole and the federal government also negotiate the distribution of tax revenues out of shared taxes between the two levels of government. Thus, there is a joint influence of the Länder on tax policy and the distribution of tax revenues between the federal government and the Länder as a whole, but none of the Länder has any individual influence on tax rates or the distribution of tax revenues.

Contrary to the Länder, the local governments can decide - more or less independently - about the tax rates of the local taxes and there are indeed rather large differences in local tax rates across communes. However, the revenue out of these local taxes amounts to only about 8.3% of total tax revenues in Germany and thus the regional differentiation in taxation that is brought about by local taxation is rather modest.

d) Restrictions on borrowing

Finally, we shortly discuss restrictions on borrowing in Germany. Borrowing restrictions on subnational government are an important issue. Ter-Minassian and Craig (1997) argue that hight subnational public debt is a symptom of an inappropriate design of intergovernmental fiscal relations and/or a lack of adequate controls and limits on subnational borrowing. Ter-Minassian and Craig mention four types of controls that can be imposed on subnational governments:
1. reliance on market discipline,
2. cooperation of the different tiers of government in the design and implementation of debt controls,
3. rules based controls and
4. administrative controls.

As we will show below, the first control mechanism is virtually set out of work by the construction of the German fiscal federalism system, the German Constitution but also political reality in Germany. A special institutions, the Financial Planning Council, that is introduced in Section 51 of the ´Law on Budgetary Principles for Federation and Länder´, has the task to coordinate the financial planning of all tiers of government. It is composed of representatives of the federal government, the Länder governments as well as local governments. Especially since the introduction of the Maastricht treaty the Council provides recommendations for expenditure growth and budget deficits. However, because of the independence of federal and state budgeting the negotiated agreements in the Council are not binding. Rules based controls are introduced in the Federal Constitution as well as in the Constitutions of all Länder. Administrative controls are at work at local government borrowing.

According to Article 115 of the German Constitution, federal government borrowing is restricted to the "golden rule" that is, government borrowing cannot exceed the amount on outlays for investment. Similar rules hold at the Länder level. Local government´s borrowing is also restricted to the financing of investment outlays and in addition, there is control by the Länder governments which especially investigate the local governments ability to meet the projected debt service on the debt.[7] However, in 1969 a federal law was passed which makes it possible to exceed the constitutional limit in case of "disturbances of general economic equilibrium". The federal constitution as well as the constitution of all Länder have been adjusted in 1969 to take this exceptional case into account.

As a matter of fact, all levels of government are quite innovative in developing procedures to circumvent debt restrictions such as reclassifying current expenditures as capital (investment) expenditures, the setting-up of entities whose operations are kept off-budget that face less tough debt restrictions and the use of innovative debt instruments, such as private-public partnership in running and financing infrastructure projects[8]. Thus for example, the massive transfers that were necessary to finance East Germany were financed almost completely through off-budget funds, especially the German Unity Fund, which made it possible to avoid the constitutional borrowing restrictions.

III. The Bremen and Saarland Case

a) The fiscal and economic crisis in the states Saarland and Bremen and the ruling of the federal constitutional court

In 1988 two states, Saarland and Bremen, turned to the Federal Constitutional Court asking the Court to force the federal government to support both Länder in coping with their high public debt. Both states claimed that their high public debt was caused by negative economic developments not under the control of the Länder governments - the crisis in the ship-building

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[7] For an international comparison of subnational government borrowing restrictions see Ter-Minassian and Craig (1997).

[8] That does not mean that we believe public-private partnership to be a bad thing. The problem is that it is usually difficult to judge who has to carry the burden of a potential default. Thus for example, in the state Brandenburg a state-controlled bank arranged the construction of large-scale apartment buildings by private companies. When one of the major private investors run into financial trouble, medium-sized local companies turned to the state Brandenburg and asked for financial support because of the indirect involvement of the state in the project. The political pressure, especially because there are elections to be held in this year, resulted in a (partly) bailout of private debt by the state government.

industry in Bremen and the crisis in the iron, steel and coal industry in Saarland - and that the tremendous fiscal burden associated with the high public debt made it impossible for both Länder to fulfil their constitutional duties. In addition, both Länder argued that they were forced to violate the requirements of Art. 115 of the Constitution[9] which limits the budget deficit to the volume of investment. Both states also claimed that if they would have to cope with the fiscal burden by themselves, they would have to introduce such severe expenditure cuts, associated with dramatic reductions in the supply of public services, that they would run counter to another requirement of the German Constitution, namely the equalization of living conditions throughout Germany. Furthermore, both Länder put forward that the majority of states´ expenditures are fixed by federal law – such as welfare payments etc. - and thus significant expenditure cuts would mean to follow a policy that runs counter to federal legislation.

It took the Court four years to arrive at a decision. In 1992 the Federal Constitutional Court made a very important ruling and supported the claims of both Länder. The court claimed that the German Constitution, especially the fiscal federalism system set out in Art. 104 to 107 of the Constitution, aims to establish fiscal homogeneity and equalization of living standards throughout Germany. These objectives can only be achieved by mutual support from the Länder to the federal government, the federal government to the Länder and amongst the Länder. Thus the court stressed the solidarity principle of the German federal system and concluded that if states (or the federal government) experience ´extreme budgetary hardship´ - as was claimed by Saarland and Bremen - it would be entitled to financial support from all other members of the federation.

The Constitutional Court as well as the two Länder put forward three arguments to support the claim that there was an extreme budgetary hardship: i) the poor economic performance, ii) the far above average per capita indebtedness and iii) the unusual high ratio of interest payments to total expenditures which limits the ability to pay-off the debt without significant cuts in the supply of public goods and services that are enforced upon the Länder by constitutional law. We examine these facts in some detail.

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[9] In the Constitution of both states there are deficit financing restrictions similar to Article 115 of the Federal Constitution.

Figure 1: Employment in the states Saarland and Bremen as well as in West Germany. Normalized series 1970 = 100.
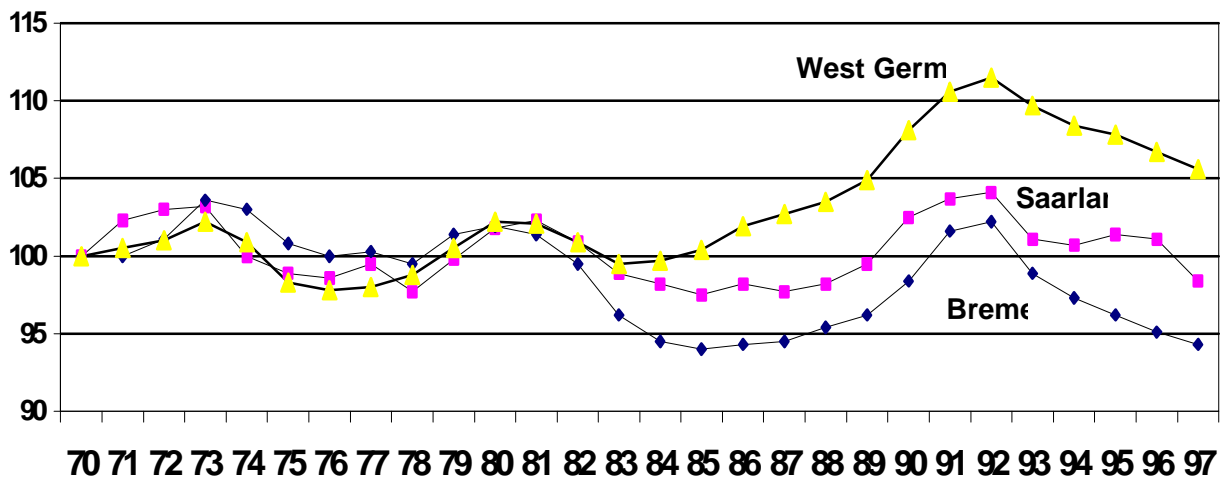
Source: Federal Statistical Office, Wiesbaden and calculations by the author.

Figure 2: Unemployment rates in the states Saarland and Bremen as well as in West Germany
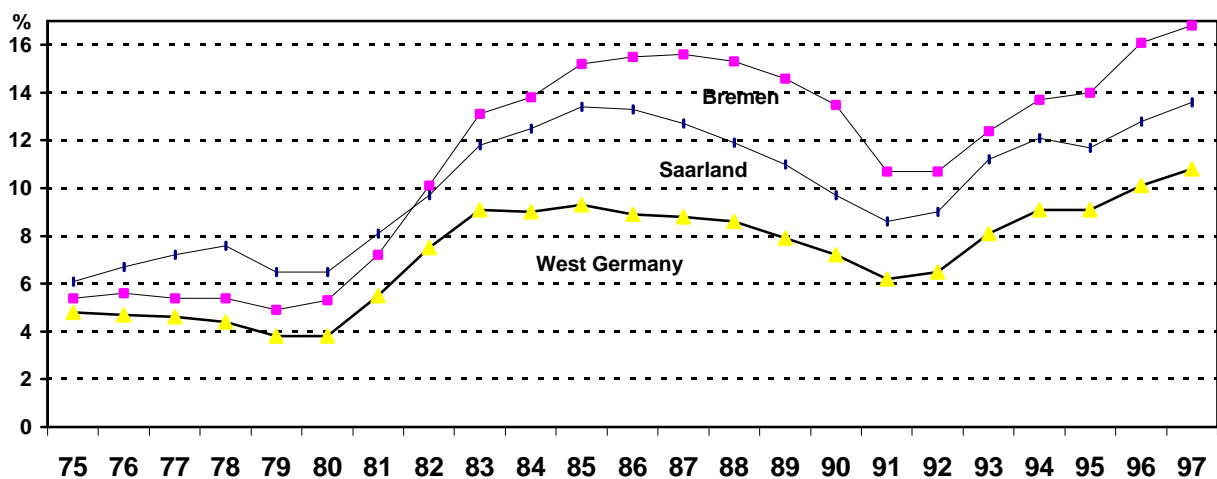
Source: Federal Statistical Office, Wiesbaden.

Table 5: Per capita debt and interest payments of the German Länder in 1988 and 1992

	Per capita debt in DM		Interest payments as a percentage of total expenditures, %	
	1988	1992	1988	1992
Bremen	19,150	24,050	14.62	15.38
Saarland	11,650	14,730	13.06	14.71
Hamburg	10,760	12,164	9.61	8.93
Nordrhein-Westfalen	7,780	8,510	9.35	8.77
Schleswig-Holstein	7,710	9,120	8.84	9.07
Niedersachsen	7,260	8,180	8.73	8,23
Rheinland-Pfalz	7,150	7,960	8.97	8.55
Hessen	7,030	7,920	6.81	7.00
Baden-Württemberg	4,980	5,730	5.35	5.32
Bayern	3,820	4,100	4.71	4.36

Source: Federal Ministry of Finance and calculations by the author.

Figure 1 shows normalized employment series. Starting in the early 80ties employment in the state Saarland and especially Bremen fall considerably below the West German average. The poor labor market performance of both Länder is even more visible if we look at the time series of unemployment rates as depicted in **figure 2**. Ever since 1975 none of the other West German Länder had an unemployment rate that exceeded that of Saarland or Bremen. Recently, the unemployment rate in Bremen even gets close to that of the East German states Thüringen and Sachsen. The reasons for the poor economic development in both states are that they were dominated in the early seventies by one or two industries: The shipbuilding industry in Bremen and the iron, steel and coal industry in Saarland. With the deep recession after the first oil price shock in 1973/1974 both industries suffered from tremendous losses in employment and none of the jobs lost in these industries could be regained after the recession was over. Because both states are rather small – see table 1 above – there was no sufficient compensating labor demand from other industries with favorable growth performance that could absorb the unemployed from the old industries. The unemployment performance would have been even worse if their would not have been severe migration out of these two states. In the period 1975 to 1995 Bremen lost about 6.1% and Saarland about 2.5% of its population, whereas the other West German Länder experienced population growth of about 7.5%.

Next we examine debt and interest payment figures. **Table 5** presents for each West German state (consolidated data of state governments and local governments) per capita debt figures as well as the ratio of interest payments to total expenditures[10] in 1988 (the year both Länder turned to the Constitutional Court) and 1992 (the year of the ruling of the Constitutional Court).[11] These information has been of considerable importance in the arguments of the Constitutional Court as well as the two Länder.[12] Both fiscal indicator – per capita debt as well as the interest payments to expenditure ratio – were in 1988 as well as in 1992 well above the West German average as well as above the corresponding figures of any other West German state. The Court was convinced that the data could be taken to be strong indicators of ´severe budgetary hardship´ and followed the line of arguments by the two Länder. The Federal Constitutional Court even presented an estimate of the monetary resources necessary to support the two states. In the case of Saarland the Court presented an estimate of about 7.6 bill. DM and about 8,5 bill. DM for Bremen claiming that these transfers would be necessary to bring both Länder fiscally in line with the average of the West German Länder.[13]

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[10] In fact, the Constitutional Court relied on the ratio of interest payments and ´adjusted´ tax revenues and not total expenditures. For the ease of discussion we neglect this point.

[11] Berlin is not taken into account in this table. In 1988 there was only West Berlin that belonged to the Federal Republic and in 1992 West Berlin and the East Berlin were already merged to form the new city state Berlin. Therefore, data on Berlin cannot be compared to that of the other West and East German Länder.

[12] Kitterer (1994) presents a detailed analytical investigation of the financial indicators used in the case before the Constitutional Court.

[13] However, the written rule does not permit the reader to follow the calculations of the Court which resulted in these estimates.

Figure 3: Per capita deficit of the states Saarland and Bremen as well as the total of the West German Länder
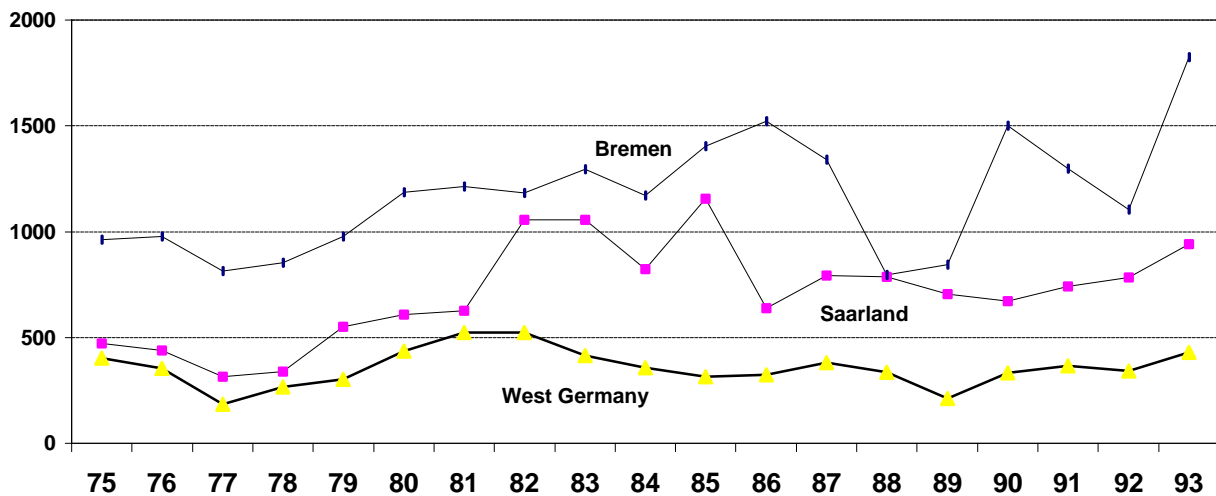
Source: Federal Statistical Office, Wiesbaden and calculations by the author.

Finally, we look at some further fiscal data in order to grasp which type of expenditures have been responsible for the poor fiscal performance of the two states. Because of the strong equalizing impact of the fiscal equalization system in Germany below average revenues in both Bremen as well as Saarland cannot have contributed to the high public debt. This has also indirectly been admitted by the two states because this point was never raised in the case before the Court. **Figure 3** presents the per capita deficits of the two Länder as well as the average per capita deficit of the West German Länder. The time series indicate that Bremen was running permanently significant higher deficits in the period 1975 to 1993, with the exception of 1988 and 1989. In the state Saarland deficits started to be considerably above average in the period 1982 to 1985 and decreased in the period 1986 to 1993 slightly, while still staying above the West German average. A comparison of deficits over time suggests that the state Saarland ran into fiscal trouble because of ´transitory´ problems whereas in the case of Bremen an inspection of the time series suggests a ´permanent´ fiscal crisis. This conclusion is also supported by the facts presented in figure 4 and 5. **Figure 4** shows the time series of per capita welfare payments.[14] As can be seen from comparing figure 1 and figure 4, welfare payments started to explode especially in Bremen with the deterioration of employment at the beginning of the eighties. In the state Saarland welfare payments also exceed the West German average, however there is far less dynamics than in Bremen. **Figure 5** examines another important type of expenditure which is generally held responsible for the fiscal imbalance in the two Länder, namely investment subsidies paid by the two states to private firms. In the period 1981 to 1983 the state Saarland tried to keep the local iron and steel industry alive by providing tremendous financial support. However, despite these massive transfers the downturn of this industry could not be prevented. In Bremen this policy of support for dying industries started in the mid of the 80ties as Bremen tried to prevent the local shipbuilding industry from total collapse. This policy turned out to be ineffective too. We also inspected personnel expenditures of both Länder. Personnel expenditure growth in the state Saarland

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[14] In Germany, there is a specific welfare system, called social assistance, that provides transfer payments to people with insufficient income. The majority of people receiving these welfare payments are the elderly, asylum seekers, unemployed persons who have no claims to the unemployment insurance as well as lone parents. In fact, the local governments are responsible for these welfare payments. However, because we consider consolidated budgets of state and local governments, this distinction does not matter. For an investigation of the financing of social assistance expenditures in Germany see Seitz and Kurz (1998).

since 1975 closely kept in line to the other West German Länder. In the case of Bremen we observe an above average growth rate of personnel expenditures but this growth rate does not differ significantly from that in the other city state Hamburg.

Figure 4: Welfare Transfer Payments (per capita)
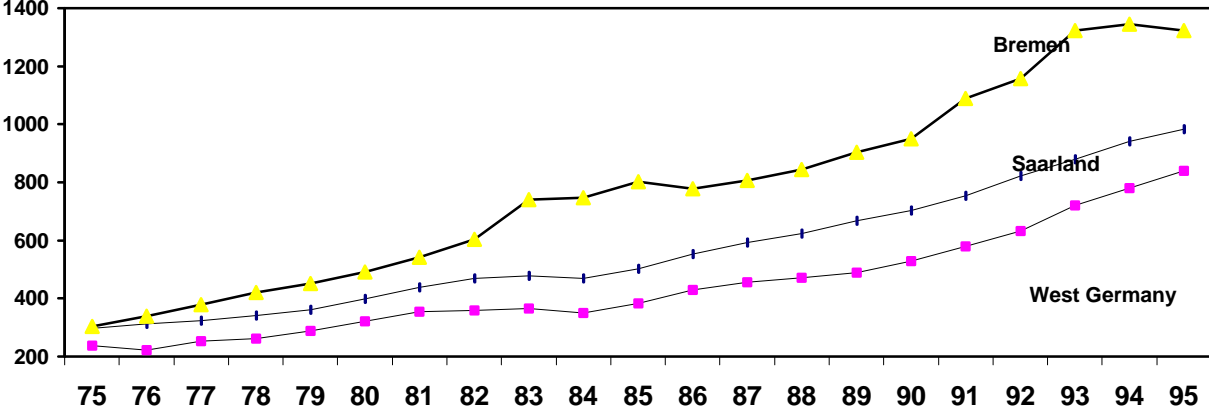
Source: Federal Statistical Office, Wiesbaden and calculations by the author.

Figure 5: Investment subsidies to private firms (per capita)
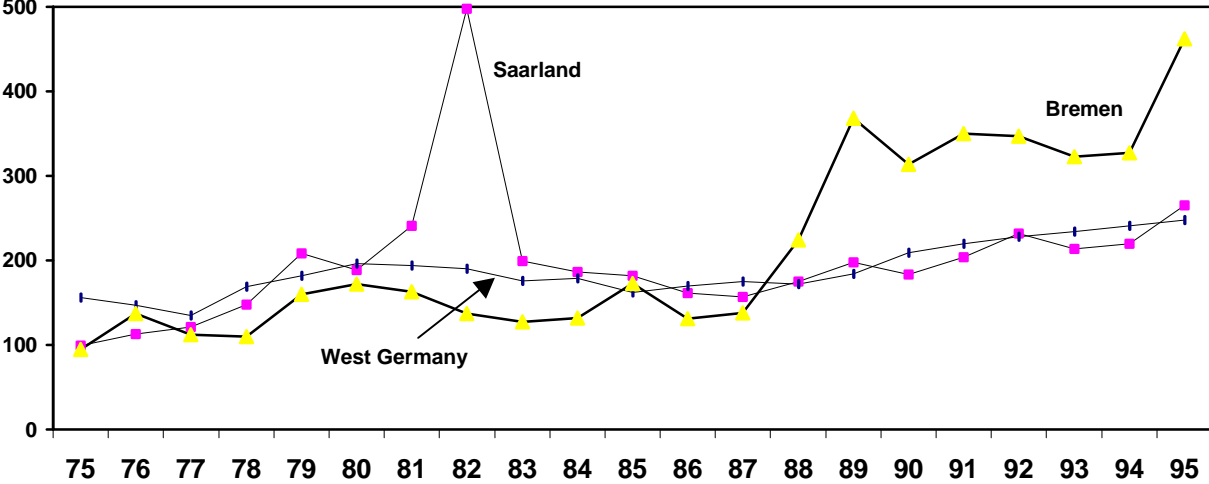
Source: Federal Statistical Office, Wiesbaden and calculations by the author.

Last to mention is the fact that both Länder used a lot of resources as well as ´marketing activities´ to document their fiscal stress position and to get the support from other Länder as well as the support of trade unions, the private local economy, etc., by preparing voluminous reports and even publishing books.

Five arguments had been put forward by the Constitutional Court to justify the need of special transfers to overcome the fiscal crisis in both states: i) both Länder violated Art. 115 of the German Constitution, which restricts borrowing to investment outlays, for 15 consecutive years, ii) the public debt of both states exceeds the expenditure volume by a factor greater than 2, iii) interest payments in both Länder increased since 1980 by more than 300% as compared to an increase of about 180% in the other West German Länder, iv) the ratio of the interest payments to total revenues exceeds the West German average considerably and finally v) the Court believed that both Länder would be unable to cope with the burden of the debt by their

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own and thus the federation as a whole – that is the federal government as well as the other West German Länder – are obliged to support both Länder.

In 1993 the federal government made a contract with the Länder Saarland and Bremen which promisses both Länder annual payments until 1998 to reduce the financial burden of the high debt[15]. This contract promised Bremen annual bailout transfers of about 1,8 bill. DM and about 1.6 bill. DM for Saarland. The transfers are quite significant: In the state Saarland, the bailout-payments amounted to about 18% of total expenditures and in Bremen to about 22,5%. Contrary to the usual practice in the case of bailouts of local governments, on which we report below, both Länder do not have to repay the money they received. Both Länder made a commitment to limit (primary) expenditure growth to a maximum of 3% per year; this limit was reduced in 1997 to 2%. According to the contract the payments had to be used for the reduction of public debt and the savings in interest payments had to be used either for a further reduction of public debt or for additional infrastructure investment. In addition, Bremen and Saarland had to present regular reports on the progress of their fiscal consolidation program to the federal government as well as the Länder. Thus both Länder had and still have to ´justify´ their fiscal policy which might have influenced their fiscal policy because every decision was closely monitored. The contract further specified that in 1997 an intensive evaluation of the financial status of both states should be made to bring about a decision about the necessity of support beyond the year of 1998. However, in 1997 as well as in 1998 no decision on this subject could be achieved and the issue could not be settled before spring 1999.[16] The new contract between the federal government and the Länder Saarland and Bremen on the prolongation of the bailout over the period 1999 to 2004 introduces two novelties as compared to the 1993 agreement: i) the bailout transfers are decreasing in time and ii) further transfers beyond the year 2004 are excluded. The latter restriction was completely lacking in the 1993 contract. Quite the contrary, the 1993 contract explicitly mentioned the possibility of further transfers beyond the year 1998. **Table 6** reports the bailout transfers to both states in the period 1994 to 1998.

Table 6: Bailout-Transfers to Bremen and Saarland in mill. DM

	1994-1998 per year	1999	2000	2001	2002	2003	2004	Total 1994 – 2004
Bremen	1,600	1,200	1,050	900	750	600	500	13,000
Saarland	1,800	1,800	1,600	1,400	1,200	1,000	700	16,700

For comparison: Total expenditures 1998: Saarland: 8,300 mill. DM, Bremen 7,900 mill DM
Source: Federal Ministry of Finance, Bonn.

One of the main objectives of the bailout transfers was the reduction of per capita debt to about 11,500 DM at the end of 1998 (for comparison the per capita debt in both Länder was in 1992 about 16,000 DM). This target was missed considerably: At the end of 1998 the per capita debt of Bremen was about 16,600 DM (virtually identical to the 1992 figure) and about 16,650 DM in Saarland (virtually identical to the 1991 figure).

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[15] It should be mentioned that both Länder received special transfers from the federal government to cope with their high public debt already in the period 1987 to 1993. However, these transfers were quite modest: Saarland received annually about 75 mill. DM and Bremen about 50 Mill. DM.

[16] A probable reason for this might be the fact that in 1998 there were federal elections and the president of the state Saarland was one of the leading opponents of chancellor Kohl.

Table 7: Primary Expenditure growth rates in %.

	Saarland	Bremen	Average of the other West German Länder
1994	0.1	-0.5	1.5
1995	2.2	2.4	3.0
1996	2.5	1.1	0.9
1997	-1.6	1.6	-0.9
1998	0.9	0.9	2.1
1994 – 1998	4.1	5.7	7.4[1)]

1) Behind this average figure a wide spread of expenditure growth rates is hidden, ranging form 3.7% in Hessen to 9.8% in Niedersachsen.
Source: Authors calculations based on data supplied by the Federal Ministry of Finance, Bonn,

b) Results of the bailout

As **table 7** shows, both Länder kept the growth rate of primary expenditures below the average of that of the other West German Länder. Whereas Bremen increased primary expenditures in the period 1994 to 1998 by about 5.7% and Saarland by about 4.1% the other West German Länder increased primary expenditures by about 7.4%. However, a detailed investigation of fiscal data of each individual state reveals that some of the West German states even kept primary expenditure growth below that of the two bailed out states. Hessen increased primary expenditure in the period 1994 to 1998 by only about 3.7% and thus followed a more restrictive policy as the states Saarland and Bremen. This suggests that both Länder did not run a very tough restrictive fiscal policy.

In order to examine the usage of the ´consolidation grants´ we compare the actual debt performance in the period 1994 to 1998 with hypothetical debt figures. This we achieve by running two simulation experiments using the dynamic budget constraint model for the period 1994 to 1998:

Public debt, B,. evolves according to:
$$B_t = B_{t-1} + (E_t - R_t)$$
with R denoting revenue. Total expenditure, E, are determined by:
$$E_t = P_t + r_t B_{t-1}$$
with r_t denoting the ´effective´ interest rate[17] and P is primary expenditure which evolves according to:
$$P_t = P_{t-1}(1+\pi_t)$$
with π_t denoting the growth rate.

Simulation I assumes that both Länder adjusted primary expenditure growth according to the formula:
$$\pi_t = Min(3\%; \text{growth rate of primary expenditures in the other}$$
West German Länder) for t = 1994, 1995, 1996

$$\pi_t = Min(2\%; \text{growth rate of primary expenditures in the other}$$
West German Länder) for t = 1997, 1998.

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[17] We calculated an ´effective´ interest rate by dividing interest payments in period t by the value of debt at the end of period t-1.

This scenario corresponds to the commitment of both Länder in the 1993 contract with the federal government. In **simulation II** we examine which debt both Länder would have accumulated until the end of 1998 if there would not have been a bailout and if both Länder would have followed the same expenditure policy as they actually did in the period 1994 to 1998. This we achieve by setting π_t equal to the actual value and cutting revenues R by the bailout transfers. [18]

The objectives of these two simulations are obvious: Simulation I evaluates the ´own´ contribution of both Länder to the reduction in public debt whereas simulation II estimates the effects of the bailout transfers on public debt. As a matter of course, both simulation experiments rely upon the assumption that the bailout transfers both states received did not significantly affect expenditure behavior. However, it could be possible that if the Constitutional Court would have denied bailout transfers, both Länder would have adjusted their fiscally policy dramatically. The pressure on both Länder to run a very restrictive expenditure policy has been considerably reduced by the transfers.

Figure 6a: Debt Performance of the state Saarland
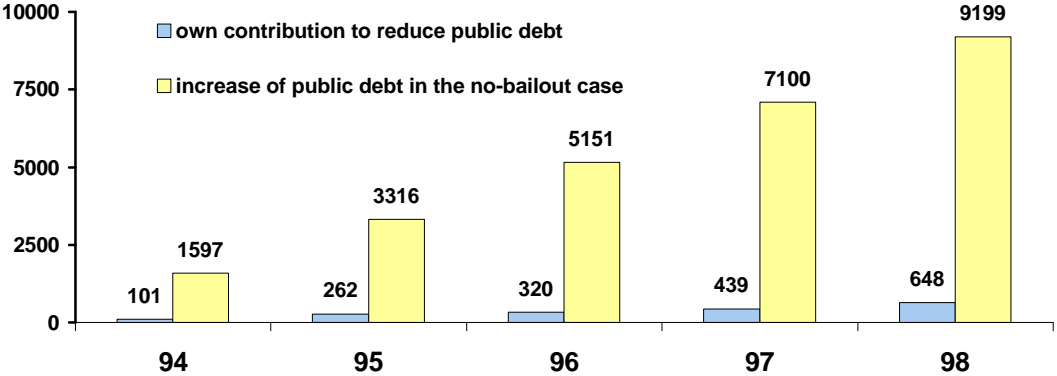
Figure 6b: Debt Performance of the state Bremen
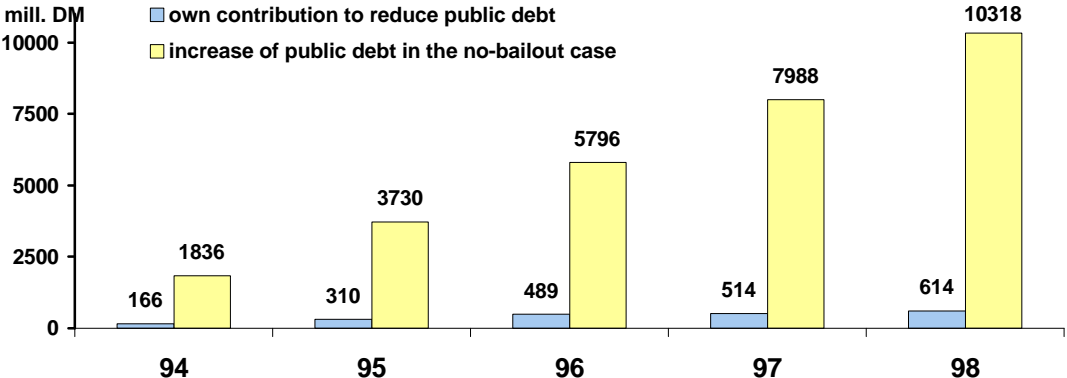
Source: see text.

Figure 6 presents the results of our estimates. The series labeled ´increase in public debt in the no bailout case´ reports the amount of money by which public debt in both states would have been higher if they would not have received bailout transfers. Correspondingly, the series

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[18] In simulation I total revenue, R, is identical to the actual revenue figures.

labeled ´own contribution to reduce public debt´ indicates the amount of money by which the public debt in the period 1994 to 1998 would have increased if both Länder had adjusted primary expenditure growth as set out in the contract between the two Länder and the federal government in 1993. As table 7 showed, both states kept their expenditure growth slightly below this limit and thus made more consolidation efforts as the federal government in fact requested them to do. If there would not have been a bailout, total debt in the state Saarland would have increased by about 9,200 mill. DM from about 17,000 mill. DM at the end of 1993 to about 26.200 mill. DM at the end of 1998. In the state Bremen, public debt would have increased from about 17,200 mill. DM in 1993 to about 27,500 mill. DM in 1998. In the same period, the other West German Länder increased their public debt by about 17% which is dramatically lower than the theoretical increase by 54% in Saarland and by 60% in Bremen in the no bailout case. The data in figure 6 suggest that both Länder have contributed only marginal to the improvement of their fiscal position. Our simulation results suggest that the bailout as well as the restrictive expenditure policy in Bremen brought about a public debt that is about 10,300 mill. DM below the debt in the no-bailout case. However, only about 600 mill. DM can be attributed to the fact that Bremen followed a moderately more restrictive policy as compared to the other West German Länder. In the case of Saarland the figures are rather similar: Public debt at the end of 1998 is about 9,200 mill. DM below the theoretical debt level that would have occurred in the no-bailout case and only about 650 bill. DM are due to ´own´ contributions.

However, the bailout transfers to both Länder have been used for debt reduction and not misused to finance additional primary expenditures. It should also be pointed out that despite these massive transfers the reduction of the interest payment ratio, defined as interest payments divided by total expenditures, are rather modest. The state Saarland reduced this ratio from 14.8% in 1993 to 12.8% in 1998 and Bremen from 15.8% in 1993 to about 14.2% in 1998. In the same period, the other West German Länder reduced the interest payment ratio by about 0.4% despite their increase in public debt. This has been due to significant drop of the interest rate in this period. It is interesting to note, that virtually all states as well as the Federal Ministry of Finance did not consider the support to be a success. However, nevertheless virtually all Länder as well as the Federal Ministry of Finance supported the prolongation in spring 1999. Insiders as well as political observers note that this consent is due to the fact that Saarland is governed by a SPD-majority government whereas in Bremen there is a great coalition of SPD and CDU.[19]

Table 8: Simulation of changes in public debt in the state Saarland and Bremen 1999 – 2004 as compared to debt in 1998 in mill. DM

	Saarland		Bremen	
	Pessimistic	Optimistic	Pessimistic	Optimistic
1999	+2	-69	-43	-105
2000	+119	-100	+86	-106
2001	+360	-95	+399	+2
2002	+730	-55	+906	+222
2003	+1,239	+19	+1,620	+557
2004	+1,844	+74	+2,654	+1,112
% increase as compared to 1998:	+11.8%	+0.4%	+ 16.0%	+6.8%

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[19] The SPD (Social Democratic Party) and the CDU (Christian Democratic Party) are the two dominant parties in Germany and no government can be formed either in the states nor at the federal level without participation of at least one of these two parties. On average, both parties receive about 40% of the votes.

Source: See text.

Using our simple model we can make an estimate of the evolvement of the public debt in both states until 2004. However, we need some assumptions about the growth of total revenue – net of bailout transfers – as well as primary expenditures. We assumed that primary expenditures grow annually by 1% in both states and the interest rate in the period 1999 to 2004 to be equal to the interest rate in 1997[20]. With respect to revenue growth – net of bailout grants – we assume in an optimistic scenario an annual growth rate of 2.5% and 1.5% in an alternative pessimistic scenario.[21] **Table 8** presents our simulation results that are based upon the scheduled bailout transfers as shown in table 6. In the pessimistic case both states will further accumulate debt until 2004, about 12% as compared to 1998 in the case of Saarland and about 16% in the case of Bremen. In the optimistic scenario the state Saarland will have in 2004 about the same level of debt as in 1998 whereas Bremen will increase public debt by about 7%. Thus, in the optimistic scenario one should expect that the debt-GDP ratio of both states decline moderately until the year 2004. However, if both Länder want to stick to their promise to reduce the absolute level of debt, they have to increase their efforts to keep primary expenditure growth below the assumed 1% growth rate, even if revenue growth is favorable. Expenditure cuts are even more unavoidable if revenue growth keeps below the assumed growth rate of 2.5% in the optimistic scenario. If revenue growth is closer to the pessimistic scenario the debt-GDP ratio in both Länder is expected to increase until the year 2004.

Apart from the transfers from the federal government the West German Länder also provided indirect bailout transfers to the state of Saarland and Bremen that were virutally unnoticed by the public. As already mention in section II the East German Länder received transfers in the period 1991 to 1994 from the German Unity Fund that was almost completely bond financed. The West German Länder (including the local government sector) and the federal government reached an agreement about the sharing of the financial burden associated with the servicing of the debt of the German Unity Fund. Because in 1991 Bremen and Saarland had already turned to the Constitutional Court and claimed to be unable to serve their part of the debt of the German Unity Fund the West German Länder agreed to cover a considerable part of the payments that both Länder should make. These payments – that is the saved payments of the two Länder – are a form of hidden bailout to Saarland and Bremen by the other West German Länder. **Table 9** reports the total payments to the German Unity Fund in the period 1991 to 1997 by the Länder. As can be seen, both Saarland and Bremen made per capita contribution that are only about 50% of that of the other West German Länder. However, one has to take into account that the contributions of the West German Länder are differentiated according to their financial capacity and thus not all differences can be identified as bailout payments. We estimate that about 40% to 50% of the difference between the per capita payments of Saarland and Bremen as compared to the average of the other West German Länder can be classified as an indirect bailout in which case the state Saarland received ´transfers´ (saved expenditures) of about 200 mill. DM and the state Bremen ´transfers´ of about 100 mill. DM.

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[20] The latter implies, that we assume that the historic low interest rates in 1998 will slightly increase to the 1997 level.

[21] Note that we assume a restrictive fiscal policy at the state level in the near future both in the pessimistic as well as in t he optimistic scenario.

Table 9: Contributions of the West German Länder to the financing of the
German Unity Fund in DM

	Bremen	Saarland	other West German Länder	total of the West German Länder
1991	0	0	965	965
1992	0	0	2,462	2,462
1993	58	85	8,517	8,660
1994	103	149	13,003	13,255
1995	24	31	6,573	6,628
1996	26	34	6,788	6,848
1997	28	38	7,783	6,849
1991-1997: total, mill. DM	239	337	45,090	45,666
per capita, DM	350	310	730	710

Source: Federal Ministry of Finance

c) Response to the bailout by the market

As suggested by theory, the rule of the Constitutional Court signals to the market a high chance of bailout of the lenders. That´s exactly what happened in Germany. Recently, leading credit-rating agencies[22] have started to monitor the debt and debt-servicing capacity of Länder governments. In financial market practice there are indeed minor differences in risk premiums on Länder bonds. Insiders observe that Bavaria receives on the average an at least five point reduction in interest rates as compared to the East German state Sachsen-Anhalt. In March 1999 the international rating agency Fitch IBCA (London) rated all German Länder and reached the conclusion, that there are no differences in the default risik of the Länder and evaluated all Länder with the best possible ranking, namely triple A (AAA).[23] In a detailed press release Fitch IBCA mentions three main arguments for this rating: i) the close federal linkages in German federalism (Politikverflechtung), ii) the principle of federal solidarity (Prinzip der Bündnistreue) set out in the German Constitution and in the 1992 ruling of the Federal Constitutional Court, and iii) the fiscal equalization system (Länderfinanzausgleichssystem) in Germany.[24]

- With respect to the close federal linkages, the rating agency claimed that despite the fact that in the German Constitution there are exclusive powers of the federal government and the Länder, the political reality in Germany is characterized by close interdependence of decision making and interwaving of power between the federal level and the state level. Reference is also made to art. 106 of the German Constitution which asks for fiscal homogeneity and equalization of living conditions as well as to fiscal federalism principles as set out in art. 104-107 in the German Consititution, which asks for the balance of resources between the two layers of government as well as a balancing of resources between fiscally strong and weak Länder.

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[22] In fact, some states, as the East German state Sachsen-Anhalt, requested credit-rating agencies to rate their debt-servicing capacity.

[23] It would be more interesting to compare credit-ratings before and after the rule of the Constitutional Court in 1992. However, we are not aware of any credit-rating of German Länder before 1992.

[24] The following exposition rests upon a press release of Fitch IBCA, London, dated March, 25th, 1999.

- Based upon the ruling of the Constitutional Court in 1992, the rating agency argues that the German constitution enforces upon the federal government and the Länder a bailout in case of default. Consequently, all Länder carry the same risk and any state can rely upon the support from other Länder as well as the federal government, and as a matter of course, the federal government in turn can rely upon the support from the Länder in case of fiscal problems.
- With respect to the fiscal equalization principle, the rating agency points out, that the tax sharing and transfer system has an equalization effect across all Länder and claims, that this establishes a ´preventive framework designed to prevent the Länder from falling into financial difficulties´.[25]

One should expect that both decision of the Constitutional Court as well as the response of the market as documented in the above mentioned report of an influential rating agency will have a long-run and permanent effect upon fiscal federalism in Germany. Other candidates for a bailout are already standing in line, such as Berlin. In 1991 Berlin had a per-capita debt of about 4,000 DM (comparison: Hamburg 12,400 DM) which increased dramatically to about 17,000 DM per capita in 1998 (Hamburg 16,500).

IV. Bailouts of local governments in Gemany

After having examined the two important bailout cases at the level of the Länder we briefly inspect bailouts of local governments. Before we proceed we take a look at some facts. **Table 10** reports the per capita debt of the Länder, separated by state and local government level for the non-city states in West and East Germany in 1998. Two important conclusions can be drawn. First, per capita debt of the states is in all Länder considerable higher than per capita debt of the local governments. Second, both local as well as state governments in East Germany have on the average per capita debt that is very close to the West German average, despite the short history of the East German Länder.

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[25] While the former point is undoubtedly correct, the latter conclusion does not correspond to the rules of the game in the fiscal equalization system. To begin with, the fiscal equalization system does take expenditures or debt and deficits into account. In addition, the specific grants paid to the Länder Saarland and Bremen as described above are not part of the fiscal equalization system and one should expect that every state or the federal government that would make reference to the solidarity principle and request financial support would probably have to turn to the Constitutional Court again.

Table 10: Per capita debt of state and local governments in Germany 1998 in DM.

	Total per capita debt	
	State	Local governments
West German non city states		
Baden-Württemberg	5,290	1,430
Bayern	3,010	1,980
Hessen	6,920	2,790
Niedersachsen	8,270	2,170
Nordrhein-Westfalen	8,000	2,760
Rheinland-Pfalz	8,440	1,990
Saarland	11,530	1,980
Schleswig-Holstein	10,480	1,560
East German non city states		
Brandenburg	8,910	1,360
Mecklenburg-Vorpommern	7,190	2,110
Sachsen	4,230	2,390
Sachsen-Anhalt	8,520	2,210
Thüringen	7,240	2,350

Source: Federal Statistical Office, Wiesbaden

The influential ruling of the Federal Constitutional Court in 1992 never mentioned local governments. From the constitutional point of view the communes are part of the Länder and the Länder even have the right to dissolve communes, for example by merging several small municipalities to form a larger municipality with one administration only, which happens very frequently because of organizational reforms. During the 60ties and 70ties in West Germany significant organizational reforms reduced the number of municipalities from about 20,000 to about 10,000. Some Länder in the east of Germany also started such reforms. Thus for example the state Brandenburg in East Germany has reduced the number of independent communes since 1991 from about 2,000 to 1,500 in 1999 by merging several small communes to form one large municipality. A further difference between Länder and communes is the strong control Länder have on local governments whereas the federal government has absolutely no command over the Länder. State governments review and authorize the borrowing of local governments. However, the states have to rely on the completeness and seriousness of all information provided and they would hardly be able to identify cheating or suppression of relevant information. It happens quite frequently that the Länder refuse local governments borrowing. A typical reason for such a refusal arises if the Länder believe that the commune will not be able to service the debt in the future.

Table 11: Bailout Funds in German Länder for local governments

	Volume of money provided by special funds for grants to communes in ´fiscal hardship´
Baden-Württemberg	average annual volume of 2 – 5 million DM
Brandenburg	1998: about 30 mill. DM
Bayern	1998: about 16 Mill. DM
Mecklenburg-Vorpommern	1998: about 15 Mill. DM
Hessen	1998: about 50 Mill. DM
Rheinland-Pfalz	1998: about 110 Mill. DM
Sachsen-Anhalt	1997: about 80 Mill. DM
Sachsen	1997: about 14 Mill. DM
Thüringen	1997: about 30 Mill. DM

Note: The other non-city states (Nordrhein-Westfalen, Niedersachsen, Schleswig-Holstein) did not present detailed reports. However, further investigations revealed that these Länder too have similar funds.
Source: Bericht des Arbeitskreises Kommunalfinanzen der Länder (Report of the regular workshop on local public finance of the Länder), dated August, 12th, 1998.

Despite the rather strict state control in West Germany it happens occasionally that communes are close to default and these cases are much more frequent in East Germany. All Länder claim to follow the principle that no commune will be bailed out. However, in reality every state practices some form of bailouts. Recently representatives of the Ministries of Finance of the German Länder discussed the subject of financial support of local governments in default in order to achieve some consent among the Länder governments about how to cope with this problem. The meeting revealed that all non-city states have special funds to support communes in default. However, as **Table 11** reveals the amount of money involved is rather small, never exceeding 30 DM per capita. In addition, the usual case seems to be that the bailout is a loan which is requested to be repaid. All Länder ask the communes to present a schedule and to report regularly about the progress of consolidation. Most Länder provide the possibility that the loan does not have to be repaid if local governments stick to the consolidation program to which they made a commitment when they apply for the transfers. Some Länder, such as the East German state Sachsen, finance these funds by reducing regular grants to the total of the local public sector which means that the burden is distributed across the total of the local government sector.

A crucial point that arises in bailouts of local governments is associated with the monitoring of local government borrowing by the Länder that we already mentioned above: In case of severe financial trouble communes turn to the state government and ask for financial support. This request is very often backed by the argument that the borrowing has been monitored, controlled and approved by the state government and thus, if the local government cannot service the debt, local governments claim that the state is held at least partially responsible for the default. To the best of our knowledge, up to the present, no local government turned to a State Constitutional Court on this subject in order to get a final decision. The usual practice seems to be that the issue is settled in negotiations and states provide bailout transfers.

Finally, we examine local government bailouts in East Germany in the immediate period after German unification in some more detail. After German unification the federal system at the state and local level had to be implemented and lack of experience made it very difficult to handle financial issues without tensions in East Germany. Thus for example, in the East German state Brandenburg, the communes received in 1991 and 1992 about 500 mill. DM

from a special ´bailout fund´ which was about 5% of total revenues of local governments. These payments declined to about 40 mill. DM in 1995, see **table 12**. In addition, table 12 reports the repayments of the communes which amount on the average to about 25% of the funds received. Similar evidence can also be reported for the other East German states.

Table 12: Bailout payments and repayments in the East German State
　　　　　Brandenburg in mill. DM.

	Bailout payments	Repayments
1991	~ 500	~ 0
1992	485	105
1993	72	96
1994	140	14
1995	40	8
1996	41	8
1997	38	14
1998	104	11

Source: Ministry of Finance of the state Brandenburg

This evidence from East Germany suggests that in transitional periods, such as periods after the introduction of a federal system or in periods after fundamental changes in the federal system, significant bailouts might be very hard - if not impossible - to avoid. Lack of experience both by communes (adjusting expenditures to available resources) as well as by states (adjusting grants to the financial needs of subnational governments) might be identified as the major reason. In fact, the federal government made a similar experience: In the period 1991 to 1994 the amount of money provided to the East German Länder via the German Unity Fund had to be increased several times in order to meet the financial requirements of the newly implemented Länder in the East of Germany.

V. Conclusions

The paper examined bailouts of subnational governments in Germany. The focus has been on the Saarland and Bremen case, the two smallest (West) German Länder that received and still receive considerable bailout transfers from the federal government. We argued, that the federal government was in fact forced by the Constitutional Court to bailout these two states. However, taking political reality in Germany into account one should suspect that a bailout would have also occurred - probably to a much smaller extend - if both states would not have appealed to the court.

In a study of the fiscal crisis of the city of Philadelphia Inman (1995) mentions four important factors that can push a city or any subnational government to severe financial problems:
1) unfavorable economic developments in the local economy because of temporary or structural problems,
2) unfavorable demographics (such as an inflow of poor families or an outflow of middle-income and rich families),
3) unfavorable federal public policies (reducing aid to state or local governments or to introduce new legally mandated expenditures as for example by increasing standards or introducing new laws that create additional expenditure obligations) and
4) local politics.

The arguments put forward in our discussion of the Saarland and Bremen case provided plenty of evidence that facts 1, 2 and 4 contributed significantly to the fiscal crisis in both states. With respect to the 3rd fact, unfavorable federal public policies, we could not get hold of any hints that the federal government introduced any policy changes that hit both states specifically.

Referring to Lane (1993), the ruling of the Federal Constitutional Court has established firm expectations of bailouts of any fiscal unit of the Federal Republic and thus destroyed any market induced discipline by lenders and creditors. This shortcoming can only be overcome by imposing hard constitutional restrictions on borrowing on all tiers of government. The current German Constitution does not impose that hard restrictions on borrowing because there is always the ´emergency exit´ of declaring the general economic equilibrium to be disturbed. In addition, the Saarland and Bremen case revealed that nobody really cared at the state level when the constitutional restrictions, the sticking to the ´golden rule´, was violated for more than 15 consecutive years. The Maastricht guidelines – 3% deficit quota and 60% debt-GDP ratio – too do not solve this problem especially in federal states as Germany. The distribution of the Maastricht guideline among the different tiers of government as well as among the individual states and local governments, is still an unresolved issue.

An inspection of expenditure data of the two bailed out states revealed that both Länder made tremendous (investment) transfers to private companies. This suggests that a considerable part of the bailout transfers are in fact ´delayed´ subsidies by the federal government and thus the tax payer to private firms. In addition we have shown that both Länder, especially the state Bremen, had to make far above average welfare transfer payments that also contributed to the accumulation of public debt. Thus welfare payments, designed to be covered by the region, were partly deficit financed and with a proper time lag financed by the federal government and thus taxpayers all over the nation.

An important fact seems to be that both Länder are small. Bremen has a population of about 680,000 and Saarland about 1.060.000. Smallness is important for several reasons:
- To begin with small regions usually have an industry structure that is less diverse than that of large regions. If demand and supply shocks are not perfectly correlated across industries in small regions there is a smaller chance that if an industry with a significant employment share is hit by negative demand and/or supply shock there are other industries of significant size can absorb these shocks. Both bailed out Länder were dominated in 1970 by large old industry sectors: Shipbuilding in Bremen and the iron and steel industry as well as coal mining in Saarland. All sectors mentioned were immediately and severely hit by the deep recession following the first oil price shock and none of these industries regained any employment lost at those years or latter.
- A second important issue associated with smallness is that policy makers in small states are much closer (in terms of distance) to the public and to everyday life problems as in large regions. In addition, they have to care and are involved in ´solving´ small problems. Thus the closing down of a company having 100 jobs in Saarland or Bremen with a population of less than 1 million is much more significant than the closing down of an identical company in the state Nordrhein-Westfalen with a population of 18 million.
- A third reason is related to the cost of a bailout. Supporting small states like Saarland and Bremen is ´cheap´. If similar transfers would have to be made to Nordrhein-Westfalen, the federal government would have had to make annual payments of about 27 bill. DM which is about 6% of federal expenditure. Such tremendous transfers could never be borne by the federal government and thus all other Länder in Germany would have had to make

significant contributions to finance these transfers. Thus, big states simply cannot be bailed-out in the same extent as small states.

- A fourth reason, that has been put forward by Homburg (1993), is specific German. All Länder have votes in the Bundesrat and small states are over-represented in terms of ballots per one million inhabitants. Thus for example both Bremen (population: 680,000) and Saarland (population: 1,080,000) have 3 votes in the Bundesrat, the state Nordrhein-Westfalen, with a population of 17 million has only 6 votes. Because the federal government can pass most laws only with the consent of the Bundesrat, it is much cheaper to ´buy´ the votes of two small states than the vote of the population rich Nordrhein-Westfalen.

The just mentioned facts provide arguments that support the conclusion that smaller states have a higher chance to receive a bailout and can therefore free-ride on the federation as a whole. However, our conclusion that smallness seems to be important is considerably influenced by the German experience. We mentioned in the introduction the conflicting conclusion of Wildasin (1997) who shows in a theoretical model that larger subnational governments have a higher chance to receive a bailout. Indeed, several arguments can also be put forward to support the notion ´too big to fail´. Thus, one should expect that a large region with a considerable share of the population and thus voting power can put more pressure on central governments to provide a bailout. In addition, high public debt of large subnational governments might have a nonmarginal impact on interest rates and risk premium and the externalities on the other fiscal entities of the nation might provide an incentive to provide a bailout. Landon and Smith (1999) present some evidence for Canada that suggests that there are significant inter-jurisdictional government debt spillover effects on creditworthiness and interest rates.

Apart from the case of the two German Länder we also briefly examined bailouts of local governments by state governments. The evidence presented suggests that minor bailouts occur throughout all German Länder. However, local governments are more closely monitored and controlled in their borrowing behavior and thus the state governments can intervene usually before local governments amount debt which they are unable to serve. The evidence presented on East Germany suggests that introducing a fiscal federalism system in countries or achieving major reforms of a fiscal federalism system might be associated with transitional periods in which bailouts might occur as a result of planning errors or lack of experience.

References:

Blankart, Charles (1999), "The Process of Government Centralization: A Constitutional View", manuscript Humboldt-University, Berlin.

Bundesverfassungsgericht (1993), "Entscheidungen des Bundesverfassungsgerichts", 86. Band, J. C. B. Mohr, Stuttgart, Entscheidung Nr. 13, p. 148 ff.

Homburg, Stefan (1994), "Anreizwirkungen des deutschen Finanzausgleichs", Finanzarchiv, Vol. 51, 313-330.

Homburg, Stefan (1996), "Notwendigkeit einer Finanzreform", Wirtschaftsdienst, Vol. 1996/VII, 336-339.

Inman, Robert (1995), How to Have a Fiscal Crisis: Lessons from Philadelphia, AER, 85, 378-383.

Kitterer, Wolfgang (1994), "Finanzausgleich im vereinigten Deutschland", Schriftenreihe des Lorenz-von-Stein-Instituts für Verwaltungswissenschaften, Kiel, Vol. 16.

Kornai, Janos (1980), The Economics of Shortage, North-Holland, Amsterdam.

Kornai, Janos (1986), The Soft Budget Constraint, Kyklos, 39, 3-30.

Landon, Stuart and C. Smith (1999), Government Debt Spillovers and Creditworthiness in a Federation, manuscript University of Alberta, Canada.

Lane, T. (1993), "Market Discipline", IMF Staff Papers, Vol. 40, 53-88.

Qian, Yingyi and Gérard Roland (1999), Federalism and the Soft Budget Constraint, forthcoming in: American Economic Review.

Seitz, H. (1995), The productivity and supply of urban infrastructures, Annals of Regional Science, 29, 121-141.

Seitz, H. and C. Kurz (1999), Determinants and Financing of Local Welfare Expenditures in Germany, Discussion-Paper European University Viadrina.

Span, P. (1993), „The design of federal fiscal constitutions in theory and practice", in: The Economics of Community Public Finance, European Economy, Vol. 5, 1993, 63-100.

Ter-Minassian, Teresa and Jon Craig (1997), "Control of Subnational Government Borrowing", in: Teresa Ter-Minassian (ed), "Fiscal Federalism in Theory and Practice", International Monetary Fund, p. 157-172.

von Hagen, Jürgen and Barry Eichengreen (1996), "Federalism, Fiscal Restraints, and European Monetary Union", American Economic Review, Papers and Proceedings, 1996, 86, 134-138.

Wildasin, David (1997), Externalities and Welfare, mimeo, Vanderbilt University, Nashville.

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