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Is the decline of the former European key currency country caused  
by structural sclerosis or by macroeconomic mismanagement?

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## **What ever happened to Germany?**

Is the decline of the former European key currency country caused by structural sclerosis or by macroeconomic mismanagement?

### **Abstract**

This paper challenges the institutional sclerosis view of the German crisis according to which rigid labour markets and generous welfare state institutions have driven Germany into its position as „Europe’s sick man“. In general, the view is not convincing, because the underlying hypotheses about the effects of labour market regulation and welfare state institutions on employment and growth cannot unambiguously be derived from modern labour market theory and are at least partially at odds with accepted empirical findings. In particular, the explanation is unconvincing, because in international comparison Germany’s labour market and welfare state institutions are simply not as sclerotic as often supposed. In most of the aggregate indicators for structural rigidities Germany is not worse than the average OECD or EU country. Moreover, there is a macroeconomic explanation focusing on the combined effects of restrictive and pro-cyclical monetary, fiscal and wage policies in Germany that is broadly consistent with modern macroeconomic theory and is supported by empirical data.

## What ever happened to Germany?

Is the decline of the former European key currency country caused by structural sclerosis or by macroeconomic mismanagement?\*

### 1. Introduction

Despite the general growth slowdown and the overall increase in unemployment since the mid 1970s, Germany was usually considered to be an economy which coped more successfully with the macroeconomic shocks of the 1970s. Stable - although not above average - growth and, in particular, less unemployment in international comparison made some even term it "Model Germany". This picture has changed profoundly since the mid 1990s. Whereas the unification boom in the early 1990s prolonged Germany's upswing and prevented the economy from sliding into the world recession of 1991, Germany was then forced into a serious recession by the Bundesbank's monetary policy in 1993 and did not manage to recover to previous strength in the following period. During the convergence process towards the European Monetary Union (EMU) and, in particular, since the Euro was introduced in 1999 Germany's growth has been falling behind and unemployment has increased to the European average.<sup>1</sup> From 2001 until present the German economy has been facing its most serious crisis in post-war history: GDP growth has come down from 2.9 percent in 2000, to 0.8 percent in 2001, 0.2 percent in 2002 and 0.0 percent in 2003. And an expected real GDP growth rate of 1.4 percent for 2004 will only mean a weak recovery. The German economy seems to have stepped into an ongoing period of stagnation. Unemployment has been rising again and may soon reach its post war maximum. The budget deficit, though not excessively high in international comparison, has been rising despite strong consolidation efforts since 2001. At the end of 2004 it will have exceeded the 3 percent (of GDP) deficit limit of the Maastricht Treaty and the Stability and Growth Pact for the third time in three consecutive years. This has already made the European Commission start the formal excessive deficit procedure which could in turn result in substantial fines for the German government. Of course, many other countries are currently facing economic problems, but in international comparison Germany has been hit much harder than most of the other countries. The former

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\* Very special thanks to Dean Baker, Andrew Glyn, David Howell und John Schmitt for generously supplying us with their complete data set from Baker et al. (2002). We would also like to thank Bernd Muelhaupt, Wade Jacoby and Torsten Niechoj for helpful comments on earlier versions and Barbara Schnieders for assistance with the data. The usual disclaimer applies.

<sup>1</sup> The main source for macroeconomic data in this paper is OECD (2003). Until 1990 the German data only cover the former West Germany. Since 1991 the data are related to the now united West and East Germany.

key currency country of the European Monetary System (EMS) has become “Europe’s Sick Man”.

There has been a lively discussion about the reasons for the German crisis and about how to overcome it. With few exceptions, however, mainstream researchers seem to agree that institutional sclerosis, i.e. rigid and over-regulated labour markets and too generous welfare state institutions have driven Germany into crisis. Consequently, there are many who call for far reaching structural reforms, radical deregulation of the labour market and radical dismantling of the welfare state.<sup>2</sup> Alternative macroeconomic explanations and policy advice are hardly ever considered seriously and are often dismissed as pure attempts to prevent the (perceived) urgently necessary process of structural reforms. The proponents of radical deregulation have been politically successful to a considerable extent: After some reluctance during the first term of the red-green administration (1998-2002) chancellor Schroeder’s „Agenda 2010“ presented in March 2003 has made clear that the government is now determined to implement far reaching structural reforms to overcome the (perceived) institutional sclerosis (Schroeder, 2003).

The purpose of the present paper is to fundamentally challenge the institutional sclerosis explanation of the German crisis. In general, the explanation is not convincing, because the underlying hypotheses about the effects of labour market regulation and welfare state institutions on employment and growth cannot unambiguously be derived from modern labour market theory and are at least partially at odds with accepted empirical findings. In particular, the explanation is unconvincing, because in international comparison Germany’s labour market and welfare state institutions simply are not as sclerotic as often supposed; in most of the aggregate indicators for structural rigidities Germany is not worse than the average OECD or EU country. Additionally there is a macroeconomic explanation focusing on the combined effects of too restrictive monetary policies, too restrictive and sometimes counter-cyclical fiscal policies and too moderate wage policies in Germany that is broadly consistent with modern macroeconomics and with empirical data.

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<sup>2</sup> See for instance the annual reports of the German council of economic experts (SVR, 2002, 2003), the majority view in the bi-annual joint reports of the leading economic research institutes in Germany (Institute, 2002, 2003) and, in particular, an economic policy paper of the German central bank (Deutsche Bundesbank, 2003). The OECD and IMF reports on the German and European economy also aim at structural reforms (IMF, 2003; OECD, 2003). The same is true for the European Commission (2002). For a critique of the institutional rigidity view of European unemployment see recently Schettkat (2003a) and Stockhammer (2004).

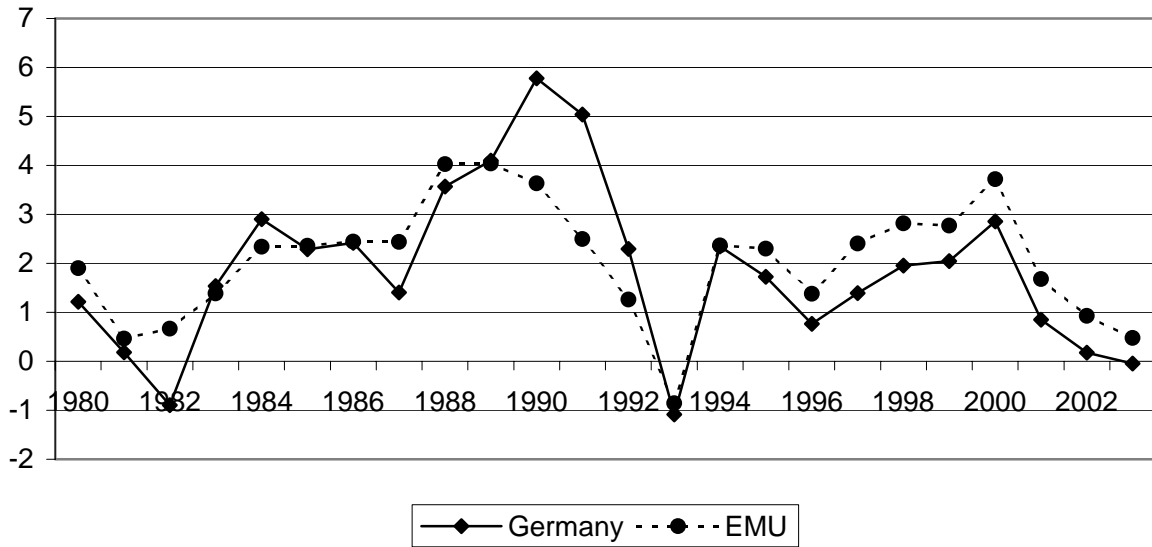
In this paper we will not explicitly address the problem of German unification and its effects on German stagnation. But it should be noted, that there is a substantial discrepancy in macroeconomic performance between West and East Germany in terms of GDP growth and unemployment. West Germany's growth rates exceed those of East Germany since the mid 1990s, i.e. the catch-up process of East Germany has virtually come to a stop since then, and East Germany's unemployment rates are three times higher than those in West Germany. This situation causes eminent fiscal transfers from West to East in the dimension of three to four percent of German GDP. The macroeconomic effects of these transfers, however, cannot be easily assessed, so that we refrain from trying here due to a lack of space.

The paper is organised as follows. Section 2 draws a short picture of Germany's economic problems with respect to growth, unemployment and public deficits, in order to identify the facts to be explained. Section 3 deals with the institutional sclerosis view. The economic theory behind the view is sketched, theoretical and empirical reasons are given why this theory is not very convincing in general before its particular weaknesses with respect to the German data are analysed. Section 4 presents the alternative macroeconomic explanation of German stagnation. The basic idea is explained and the key macroeconomic factors are defined. Comparing the German performance to the EMU average, it is demonstrated that restrictive and ill-coordinated macroeconomic policies can be made responsible for Germany's falling behind. Section 5 sketches the economic policy implications of our findings.

## **2. A look at the facts to be explained: Growth, unemployment and budget deficits since the mid 1990s**

A closer look at the annual German GDP growth rates from 1981 to 2003 in comparison with the average of the EMU countries' growth rates reveals a long-term absolute and relative growth problem in Germany since the mid 1990s (Figure 1):

**Figure 1: Real GDP growth rates for Germany and EMU in % (1980-2003)**  
Source: OECD (2003)

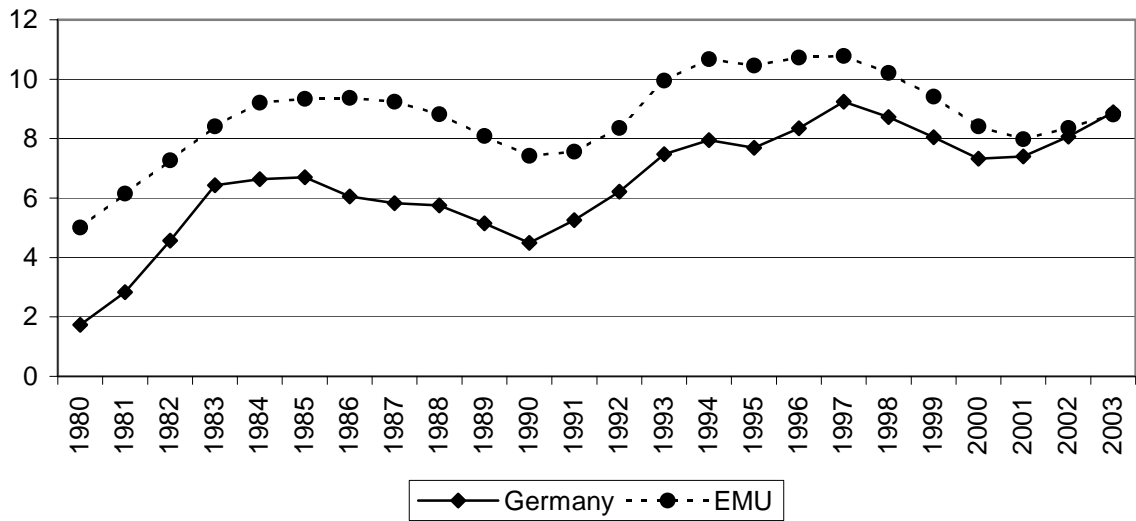


From 1981 until 1994 the German growth rates oscillate around the EMU average, but from 1995 onwards, the German rate is systematically lower than the EMU average. As growth determines (*ceteris paribus*) employment,<sup>3</sup> there is a similar picture for the development of the unemployment rate (Figure 2). Since 1996 German unemployment has been decreasing more slowly or has been increasing faster than the EMU average. Whereas the German rate used to be substantially below the EMU average from 1981 until the mid 1990s, the difference has been decreasing since 1996 and has by now virtually disappeared.

<sup>3</sup> In order to bring down the German unemployment rate, currently an annual GDP growth rate of slightly less than 2 percent is necessary.

**Figure 2: Unemployment rates for Germany and EMU in % (1980-2003)**

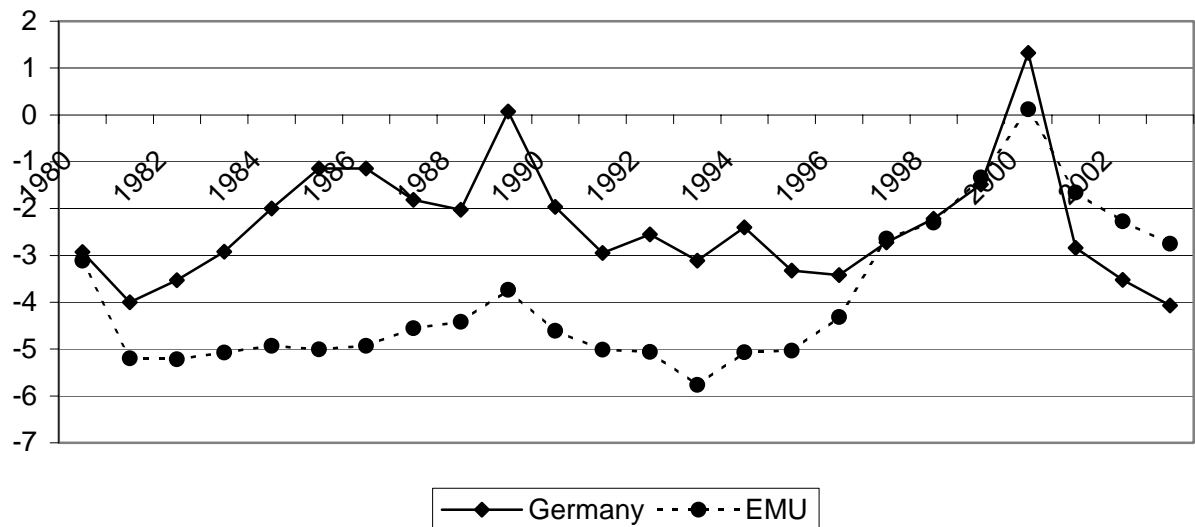
Source: OECD (2003)



The development is even more dramatic with respect to the budget deficit (Figure 3). Whereas Germany used to have budget deficits about two percentage points of GDP below the EMU average, there was a three year process of catching up by the EMU average from 1994 to 1997. Since 2001 the German deficit has even considerably exceeded the EMU average.

**Figure 3: Budget deficit in % of GDP for Germany and EMU (1980-2003)**

Source: OECD (2003)





A convincing explanation for Germany's current economic problems thus has to be able to explain the systematic lagging behind of German growth rates in comparison with the EMU average since the mid 1990s. The development of the unemployment rate and the budget deficit can basically be seen as a consequence of the problem of slow growth.

### **3. Institutional sclerosis as the cause of Germany's economic problems?**

#### **3.1 The institutional sclerosis view**

The institutional sclerosis view has its theoretical foundation in simple neoclassical labour market theory. The theoretical standard of reference is a complete and perfect neoclassical labour market. With such a standard of reference unemployment can only arise because of market imperfections preventing a market clearing real wage at full employment (Siebert, 1997).<sup>4</sup> Institutions of collective wage bargaining, labour market regulation and the welfare state are seen as market imperfections and therefore creators of unemployment:

- Coordinated and/or centralised collective wage bargaining by trade unions and employers' associations on the regional, sectoral or even national level lead to unemployment via excessive wages and an inadequate wage structure due to market power.
- Employment protection legislation raises firms' labour costs leading to lower labour demand and thus higher unemployment. Utmost importance is often attached to the laws concerning protection against dismissals. The resulting higher dismissal and adaptation costs are said to prevent firms from hiring employees.
- The reservation wage set by the welfare state leads to unemployment. First, unemployment benefits and social benefits are seen to reduce the incentives of the unemployed to look for a new job thereby increasing search unemployment. Second, decreased competition because of lower job search activities and the „socialisation“ of the unemployment risk are said to reduce the trade unions' incentives to behave responsibly in the process of wage bargaining, which in turn is said to raise wages and unemployment.
- Taxes on labour (payroll taxes, labour income tax, social security contributions and consumption taxes), the tax wedge, decrease the net wage thus lowering work incentives and the employees' and trade unions' inclination to accept wage moderation which in turn

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<sup>4</sup> Note that in this approach, contrary to what has been stated in the previous section, it is unemployment which lowers the growth rate and not low growth which is responsible for rising unemployment.

is believed to raise wages above the market clearing level and therefore the unemployment rate.

From this theoretical point of view there is only one way to reduce unemployment: Reduce or better abolish the imperfections of the labour market, i.e. impede collective bargaining, deregulate the labour market and dismantle the welfare state as far as possible. Unleash the beneficial market forces and the labour market will start working well again.

In order to render a good explanation for the German crisis, the institutional sclerosis view must obey to three conditions: First, it must be based on a consistent and realistic economic theory. Second, the derived theoretical relation between labour market regulation and welfare state institutions, on the one hand, and unemployment, on the other hand, should be confirmed by empirical studies. Third, in order to be applicable to the German case it must be shown, that German labour market and welfare state institutions are in fact as sclerotic as to fit to the German economic performance since the mid 1990s. In the following sections it will be shown that the institutional sclerosis view does not convincingly obey to any of the three conditions.

### **3.2 Theoretical Doubts**

Once the traditional model of a complete neoclassical labour market as a standard of reference is abandoned and replaced by the models of modern labour market theory it becomes difficult to derive unambiguous implications concerning the employment effects of labour market regulation and welfare state institutions.<sup>5</sup> As soon as asymmetric information between employers and employees, incomplete contracts and active price-setting are taken into account there are good reasons to question the institutional sclerosis view and its economic policy implications.

With respect to employment protection, it remains true that it raises firms' labour cost, which leads to less hiring compared to a situation without employment protection (Jerger, 2003). However, if trade unions take into account that employment protection increases the stability of workers' income and, therefore, demand lower hourly or daily wages, employment protection costs will in a sense be shifted to wages. As employment protection at the same time lowers employment fluctuation, the matching between jobs and employees can be improved leading to lower hiring and training costs. Additionally, long-term relations between

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<sup>5</sup> See for instance Blanchard/Katz (1997), Layard/Nickell/Jackman (1991), Nickell/Layard (1999), Schettkat (2003), Snowdon/Vane/Wynarczyk (1994, pp. 292-318) and Stiglitz (1997, 2002).

employees and firms increase the incentives to invest into firm specific human capital which in turn raises productivity (Schettkat, 2003). Therefore the net employment effect of employment protection cannot be unambiguously derived from theory. It may have negative as well as positive effects. Theoretical considerations as well as some detailed empirical studies suggest that employment protection has no overall effect on unemployment, but that it at best influences the structure of unemployment. It seems to lower employment fluctuation and therefore decreases the share of short-term unemployment but increases the share of long-term unemployment in total unemployment (Nickell, 1997; Nickell/Layard, 1999; OECD, 1999).

In modern as well as traditional labour market theory the extent of replacement rates and the duration of unemployment and social benefits considered in isolation do increase wage pressure, both directly through providing a reservation wage and indirectly through reduced workers' competition on the labour market. If, however, granting benefits is linked to active labour market policies improving job seekers' qualification and mobility, competition will be increased and wage pressure will decrease (Nickell, 1997). Additionally, in incomplete labour markets a longer job search period may improve matching between jobs and employees, which in turn has positive effects on firm specific human capital accumulation and productivity growth (Schettkat, 2003). Therefore, the overall effect of the replacement rate and the duration of unemployment and social benefits on unemployment is theoretically ambiguous.

It is true even for modern labour market theory that increasing union density and higher union coverage increase wage pressure and thus also the unemployment rate. However, a high degree of wage bargaining coordination makes it possible to take into account the macroeconomic effects of excessive wage demands which in turn reduces the unemployment rate (Nickell, 1997). Instead, uncoordinated wage bargaining runs into the danger of neglecting macroeconomic effects of rising wages in favour of sectoral or firm specific relative improvements of wages, thereby increasing inflationary pressures and unemployment in periods of low unemployment. The positive employment effect of wage bargaining coordination is by now widely accepted: A detailed study by the OECD (1997) comes to the conclusion that there is „(...) some tendency for more centralised/co-ordinated bargaining

systems to have lower unemployment and higher employment rates compared with other, less centralised/co-ordinated systems“ (OECD, 1997, p. 64).<sup>6</sup>

Finally, a high tax wedge will only lower labour demand and employment if it leads to higher wage pressure, i.e. if employees or trade unions try to compensate the taxes via higher wages (Nickell, 1997). This implies that taxes decrease labour supply through lower individual incentives to work. The effects of taxes on labour supply, however, are theoretically indeterminate and seem to be quite moderate empirically (Atkinson, 1999; Atkinson/Mogensen, 1993).

### **3.3 Empirical doubts**

#### **3.3.1 A first look at the data: simple correlations**

In order to study the relation between labour market and welfare state institutions empirical indicators for these institutions are needed. For the present paper the set of indicators compiled by Baker et al. (2002) is utilized. It is the most complete and up to date set comprising aggregate institutional data for 20 OECD countries for eight 5-year-periods from 1960 to 1999. And it is an updated version of the set by Nickell et al. (2002) which is widely used in macroeconomic labour market research.

As a first approximation we present six simple scatter plots relating the change in six relevant institutional indicators (index of employment protection, benefit replacement rate, benefit duration, union density, bargaining coordination and tax wedge)<sup>7</sup> to the corresponding change in the standardised unemployment rate for the four 5-year-periods from 1980 to 1999 in 13 EU countries (Figures 4a-f). The period from 1980 to 1999 has been chosen, because it was the 1980s when the phenomenon of persistently high unemployment in some countries occurred for the first time. Around the same time some countries started with institutional reforms of the kind the present paper is concerned with.<sup>8</sup>

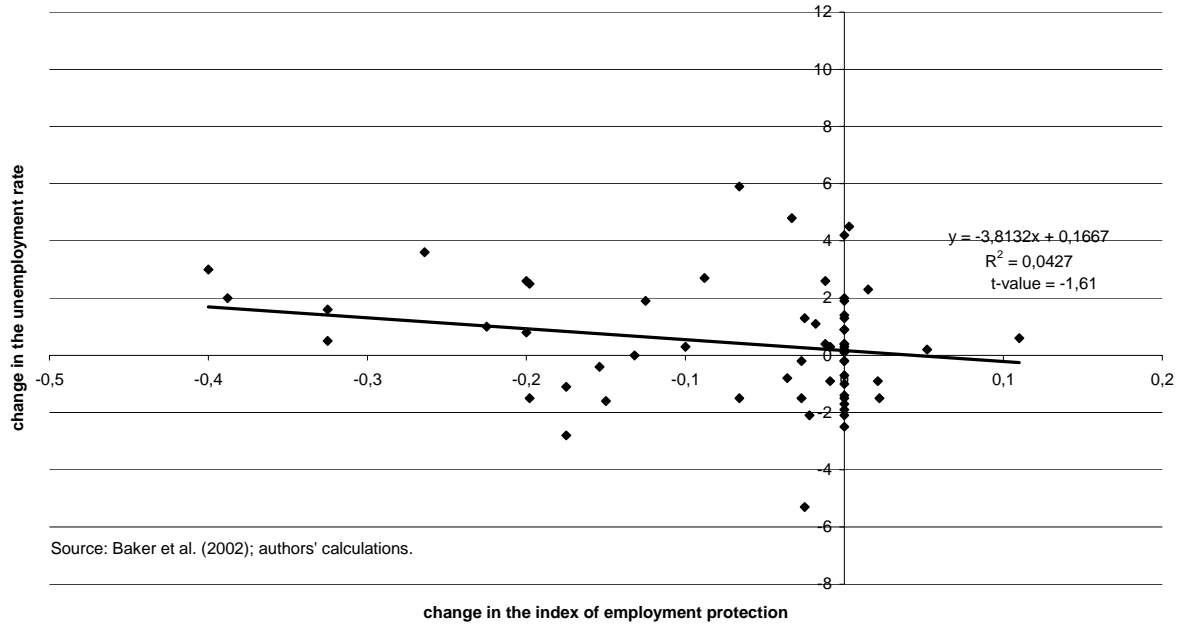
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<sup>6</sup> On the interaction of wage bargaining co-ordination with the central bank's monetary policy and the effects on unemployment see more extensively Hein (2002, 2002a).

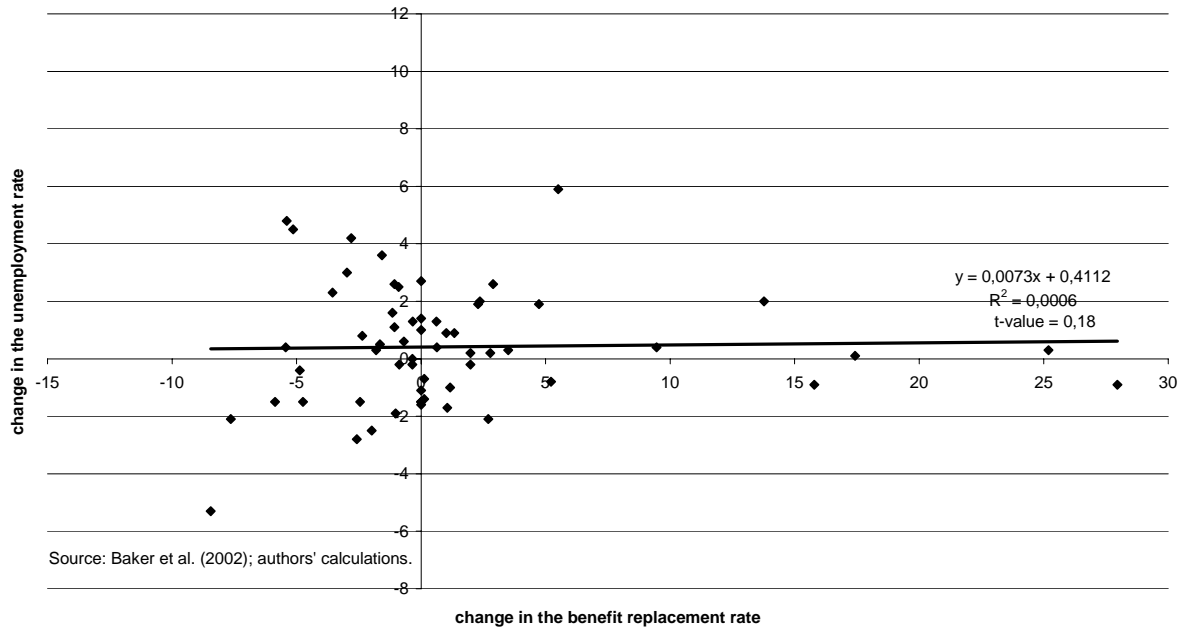
<sup>7</sup> For a definition see table 1 in section 3.4.

<sup>8</sup> It should be noted, however, that the results remain essentially unchanged when the whole period from 1960 to 1999 is studied.

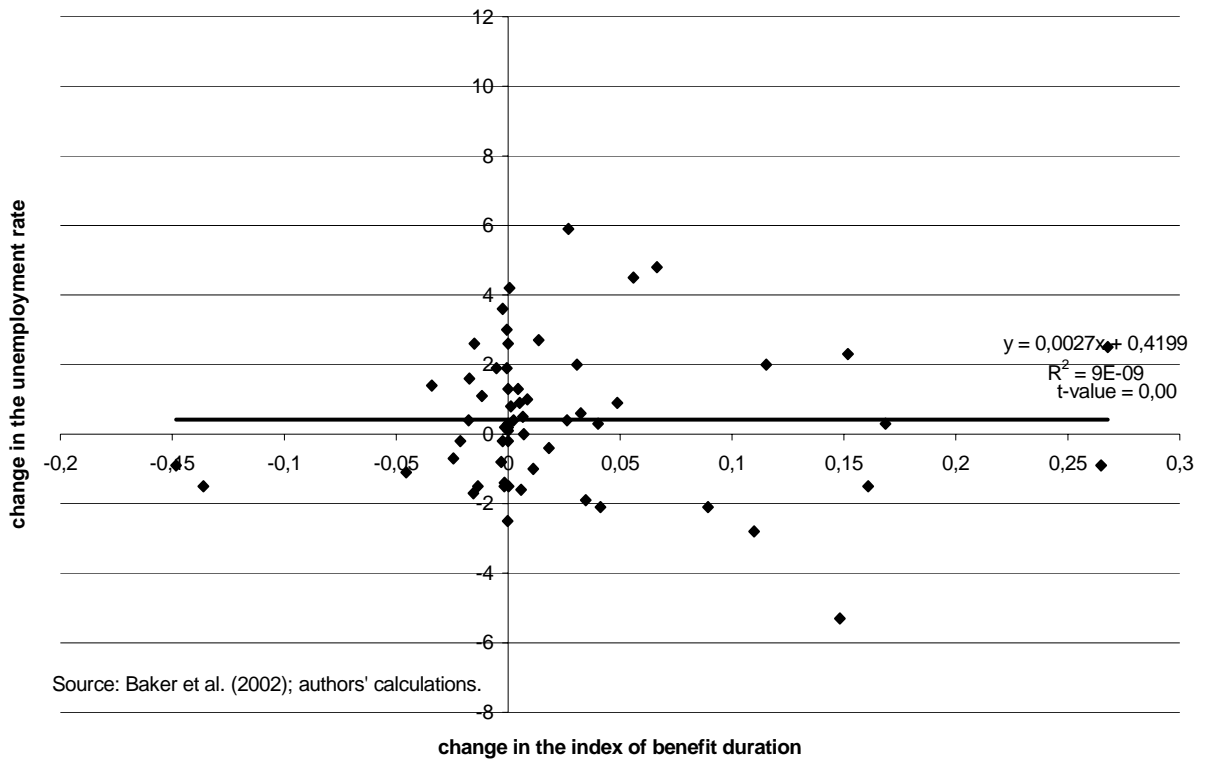
**Figure 4a: Change in the unemployment rate and in the index of employment protection, 1980-99 (20 OECD countries, 4 five-year-periods)**



**Figure 4b: Change in the unemployment rate and in the benefit replacement rate, 1980-99 (20 OECD countries, 4 five-year periods)**



**Figure 4c: Change in the unemployment rate and in the index for benefit duration, 1980-99 (20 OECD countries, 4 five-year periods)**



**Figure 4d: Change in the unemployment rate and in the trade union density, 1980-99 (20 OECD countries, 4 five-year periods)**

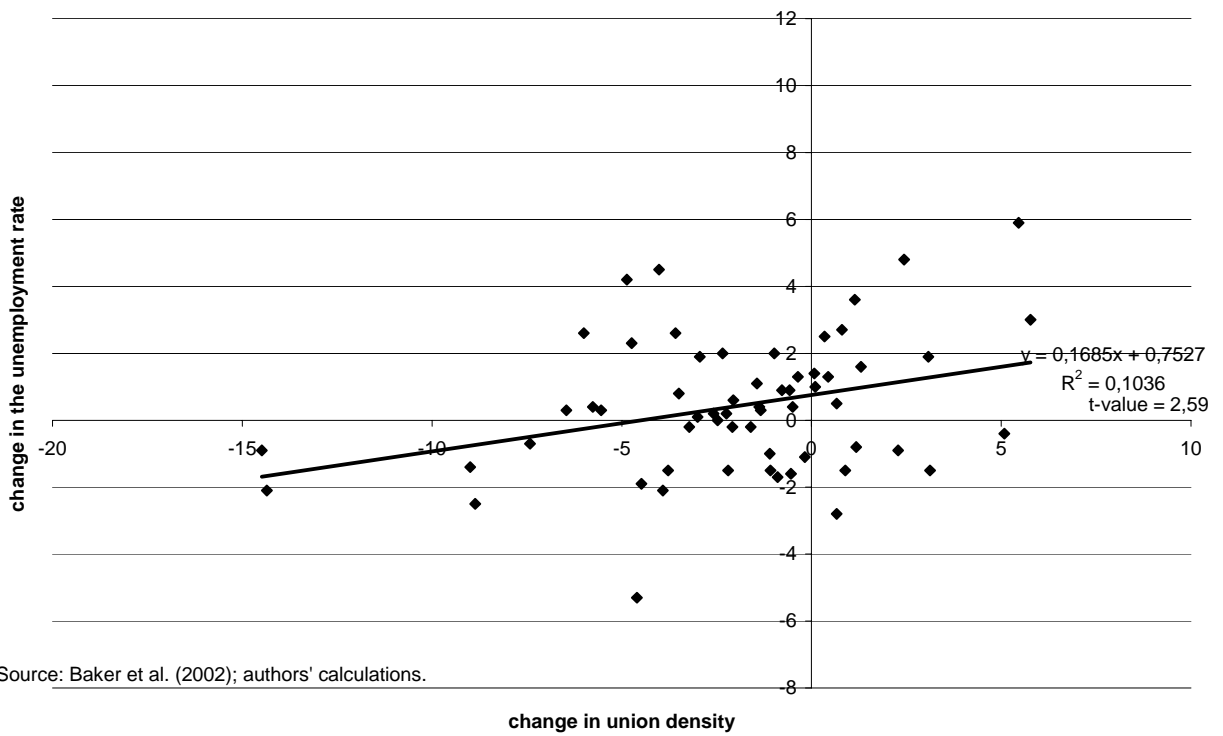


Figure 4e: Change in the unemployment rate and in the index of wage bargaining coordination, 1980-99 (20 OECD countries, 4 five-year periods)

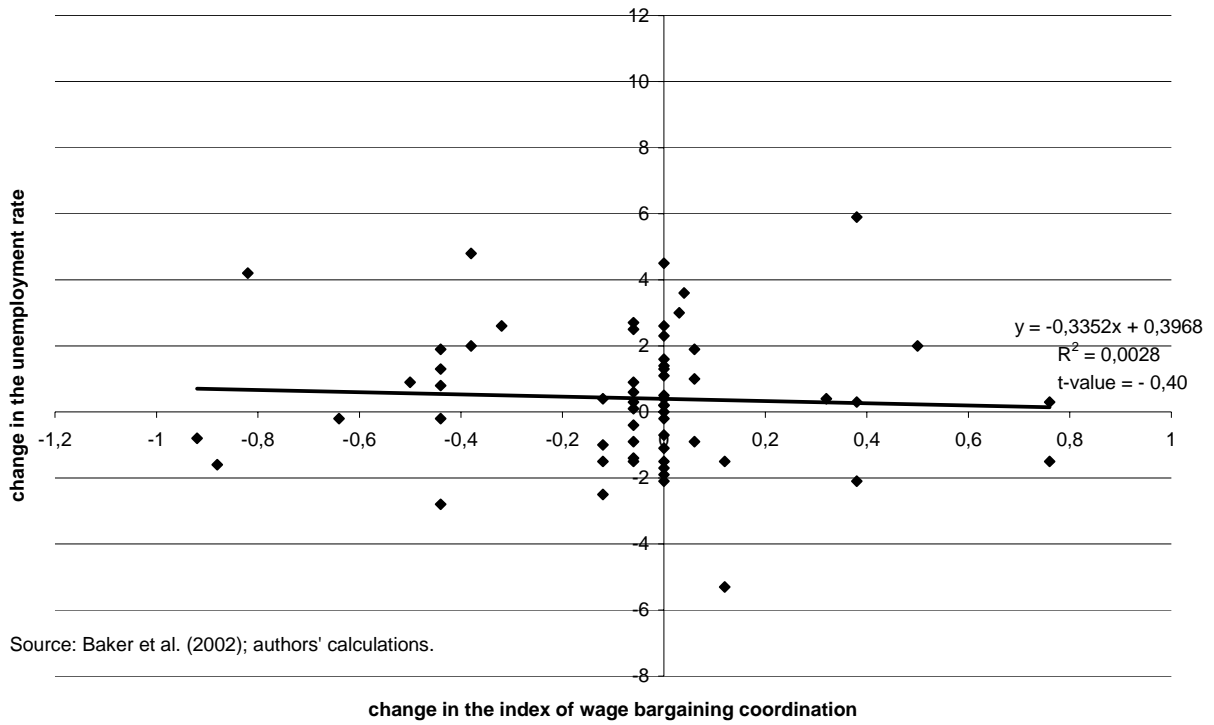
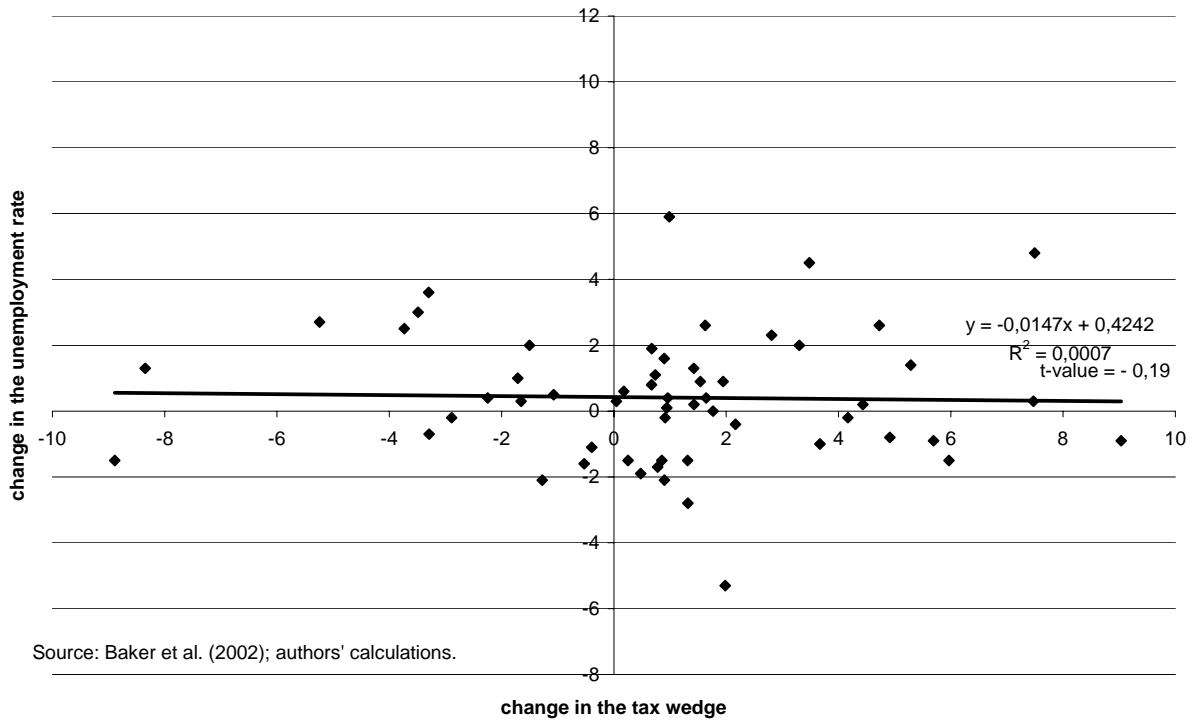


Figure 4f: Change in the unemployment rate and in the tax wedge, 1980-99 (20 OECD countries, 4 five-year periods)



If there are countries that have managed to decrease unemployment by institutional reforms and others that have fallen behind due to a lack of such reforms, this should be reflected in the diagrams by a positive relation between institutional change and change in the unemployment rate. However, this is obviously not the case. The data points are extraordinarily dispersed with the regression lines explaining only a very small fraction of the total variance (low values for  $R^2$ ). Only one of the regression lines (for union density) has a statistically significantly positive sign. All the others are statistically insignificant and almost zero or even negative. The deregulationists' claims cannot, of course, be rejected by simple scatter plots. As a first approximation, however, they show that there is no clear, simple and obvious relationship between deregulation and unemployment. This result is maintained considering the level of institutional indicators and unemployment rates instead of the change in these variables. This has been shown for the same period by Baker. et al. (2002) for the 20 OECD countries in the data set and by Hein/Muelhaupt/Truger (2003) for the 13 EU countries in this data set.

### **3.3.2 Econometric results from the literature**

What about empirical evidence from more complex econometric studies using multiple regressions? Since the fundamental work by Layard/Nickell/Jackman (1991) various other studies on this subject have been published. Using pooled cross-country regressions, these papers usually try to test whether the six institutional variables (index of employment protection, benefit replacement rate, benefit duration, union density, bargaining coordination and tax wedge) already introduced have a statistically significant effect on the unemployment rate in OECD countries. Sometimes additional or alternative institutional variables like the level of active labour market policies and the bargaining coverage rate are included in the regressions as well. The periods of observation usually cover the time span from the early 1960s till the mid 1990s, in some of the studies only from the mid 1980s till the mid 1990s. Baker et al. (2002) provide a good overview of the more recent econometric studies which we will briefly sketch.<sup>9</sup>

The results from this kind of work are rather mixed and not as clear as the proponents of deregulation like to claim: Only the tax wedge and benefit duration always have a significantly positive effect on unemployment when they are included as explanatory variables. Employment protection and the benefit replacement rate exert a positive influence

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<sup>9</sup> They discuss Belot/van Ours (2001), Bertola/Blau/Kahn (2002), Blanchard/Wolfers (2000), Elmeskov/Martin/Scarpetta (1998), Nickell (1997) and Nickell et al. (2002).



on unemployment in the majority of studies as well. For the replacement rate, however, in some studies the causality is not clear: It cannot be ruled out, that high replacement rates are a political response to persistently high unemployment rates. Furthermore, in most of the studies union density and union coverage are not found to significantly influence the unemployment rate.

In striking contrast to the deregulationists' view all the studies discussed by Baker et al. (2002) come to the result that the degree of wage bargaining coordination exerts a significantly and markedly negative influence on the unemployment rate. Moreover, half of the reviewed papers show a significantly negative effect of active labour market policies. In addition, macroeconomic shocks are found to be of considerable relevance for the explanation of unemployment in most empirical studies. Finally, in some of the papers country and time specific factors play an important part.

The impression that econometric studies do not provide clear cut and unambiguous confirmation of the deregulationists' views has been further strengthened by a recent IMF study using a panel of 20 OECD countries from 1960 to 1998 (IMF, 2003).<sup>10</sup> According to this study some institutional variables, namely employment protection, union density, benefit replacement rate and tax wedge, have the expected significantly positive effects on unemployment. However, the degree of wage bargaining coordination again has a significantly negative effect. Moreover, the unemployment rate depends strongly on its own evolution in the past (persistence) as well as on macroeconomic institutions and factors: The degree of central bank independence exerts a strongly positive influence on unemployment, which can, however, be reduced by effective wage bargaining coordination. And an increase in real interest rates as well as a slowdown in productivity growth lead to higher unemployment.

While careful scrutiny of recent econometric studies already reveals that labour market and welfare state institutions can at best explain only a part of existing unemployment, Baker et al. (2002) have shown that those institutional effects that have been found are not very robust. Even small variations in the observation periods or the institutional indicators used in the regressions can dramatically change the signs of the institutional effects. This is demonstrated with respect to the influential work by Nickell (1997), where shortening the observation period by only two years and adapting the specification of institutional indicators to those in later works by the same author (Nickell et al., 2002) led to a complete collapse of the results:

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<sup>10</sup> The study is based on updated data from Nickell et al. (2002).

Before the re-specification seven out of eight institutional variables had the expected significant sign, afterwards none of them was statistically significant and three even had completely unexpected signs: Employment protection, union density and the tax wedge were estimated to have negative effects on the unemployment rate!

Last but not least, the ambiguity of econometric results is underlined by regressions Baker et al. (2002) ran using their data set for 20 OECD countries from 1960 to 1999. There employment protection is not statistically significant at all. Benefit replacement rate and duration are significant, but have a negative sign, i.e. the higher the benefit replacement rate and duration, the lower is the unemployment rate. The same applies for bargaining coordination. The tax wedge does not influence unemployment. Dummies for the five-year periods are significant and country specific effects are important as well. Finally, the macroeconomic situation, represented by the inflation rate, has a significantly negative effect on unemployment. Thus, on the basis of this study the deregulationists' view cannot be confirmed at all.

To sum it up, recent econometric studies do not provide clear and unambiguous results in favour of the institutional sclerosis view concerning „rigid“ labour markets, welfare state institutions and unemployment. A considerable part of the unemployment differences over time and between countries cannot be explained by differences in the institutional structures of the labour market. Rather time and country specific factors and macroeconomic variables have to be taken into account. Finally, some of the results actually found in favour of the institutional sclerosis view do not seem to be particularly robust.

### **3.4 German labour market and welfare state institutions in international comparison**

Although neither the modern theoretical nor the recent empirical literature is in favour of a clear cut relation between institutional sclerosis and unemployment we will finally take a look at Germany's labour market and welfare state institutions in international comparison in order to show that there is no clear relationship to the development of growth and unemployment sketched in section 2 of the paper. Table 1 lists the six institutional indicators (index of employment protection, benefit replacement rate, benefit duration, union density, bargaining coordination and tax wedge) for Germany taken from the data set by Baker et al. (2002) for eight five-year-periods from 1960 to 1999. It also shows the differences between the values for Germany and the average values for 20 OECD and 13 EU countries.

**Table 1: Indicators of labour market institutions and the welfare state: Germany in international comparison (1960-1999)<sup>1)</sup>**

<b>Indicators for Germany<sup>8)</sup></b>						
Period	Employment protection <sup>2)</sup>	Benefit replacement rate <sup>3)</sup>	Benefit duration <sup>4)</sup>	Union density <sup>5)</sup>	Bargaining coordination <sup>6)</sup>	Tax wedge <sup>7)</sup>
1960-64	0.45	42.7	0,57	33,8	2,5	42,9
1965-69	0.80	41.9	0,57	32,4	2,5	42,8
1970-74	1.54	39.7	0,58	32,5	2,5	46,7
1975-79	1.65	39.6	0,62	35,1	2,5	48,3
1980-84	1.65	38.8	0,62	34,9	2,5	49,7
1985-89	1.63	37.8	0,60	33,4	2,5	50,5
1990-94	1.50	37.4	0,61	31,0	2,5	52,2
1995-99	1.30	36.3	0,60	27,4	2,5	53,9
<b>German indicators minus average indicators for 20 OECD countries <sup>9)</sup></b>						
Period	Employment protection <sup>2)</sup>	Benefit replacement rate <sup>3)</sup>	Benefit duration <sup>4)</sup>	Union density <sup>5)</sup>	Bargaining coordination <sup>6)</sup>	Tax wedge <sup>7)</sup>
1960-64 <sup>11)</sup>	-0.34	17.1	0.22	-4.9	0.29	6.3 <sup>12)</sup>
1965-69 <sup>11)</sup>	-0.05	13.0	0.22	-6.7	0.29	1.7 <sup>13)</sup>
1970-74 <sup>11)</sup>	0.55	7.0	0.19	-8.9	0.26	1.5 <sup>13)</sup>
1975-79	0.53	-0.1	0.21	-10.4	0.20	3.2
1980-84	0.50	-5.0	0.18	-10.5	0.37	1.8
1985-89	0.48	-8.9	0.15	-8.9	0.49	-0.3
1990-94	0.41	-10.1	0.12	-9.7	0.49	0.2 <sup>14)</sup>
1995-99	0.34	-11.1	0.09	-12.0	0.58	1.8 <sup>14)</sup>
<b>German indicators minus average indicators for 13 EU countries <sup>9)</sup></b>						
Period	Employment protection <sup>2)</sup>	Benefit replacement rate <sup>3)</sup>	Benefit duration <sup>4)</sup>	Union density <sup>5)</sup>	Bargaining coordination <sup>6)</sup>	Tax wedge <sup>7)</sup>
1960-64 <sup>11)</sup>	-0.31	17.3	0.20	-5.9	0.23	4.0
1965-69 <sup>11)</sup>	-0.08	12.2	0.22	-8.5	0.21	-0.8
1970-74 <sup>11)</sup>	0.43	5.6	0.19	-12.9	0.11	-1.1
1975-79	0.33	-2.4	0.23	-15.9	0.10	0.6
1980-84	0.27	-6.7	0.19	-16.5	0.30	-1.5
1985-89	0.26	-10.1	0.15	-14.6	0.50	-4.8
1990-94	0.21	-11.7	0.09	-15.4	0.37	-3.4
1995-99	0.21	-12.5	0.05	-18.5	0.42	-2.3
<b>Total indicator of institutional sclerosis<sup>15)</sup></b>						
1995-1999	Germany	Average of 20 OECD countries		Average of 13 EU countries		
	<b>52</b>	<b>47</b>		<b>52</b>		

1) An exact definition and a documentation of the origin of the data is given by Nickell et. al. (2002) and Baker et. al. (2002).

- 2) Index of employment protection legislation (0-2): 0 = low, 2 = high.
- 3) Benefit replacement rate before taxes as percentage of previous income before taxes. Average values for two income levels (100 % and 67 % of average income) and three family types (single, family with one earner, family with two earners), based on OECD-data.
- 4) Index of benefit duration: weighed arithmetic mean of benefit replacement ratios after 2 to 5 years in proportion to first year benefit replacement ratio (see 3). Based on OECD data.
- 5) Index of trade union density: employed union members as percentage of total employed.
- 6) Index of wage bargaining coordination (1-3): 1 = low, 3 = high. Based on OECD data.
- 7) Total average labour tax burden (payroll taxes, social security contributions, labour income tax, consumption taxes).
- 8) Except for benefit duration: West Germany.
- 9) Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.
- 10) Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, United Kingdom.
- 11) without Portugal.
- 12) without Portugal, New Zealand und Norway.
- 13) without Portugal and New Zealand
- 14) without Australia and Neuseeland.
- 15) arithmetic mean of the six single indicators previously scaled to the interval [0; 100].

Source: Baker et al. (2002); Nickell et. al. (2002); authors' calculations.

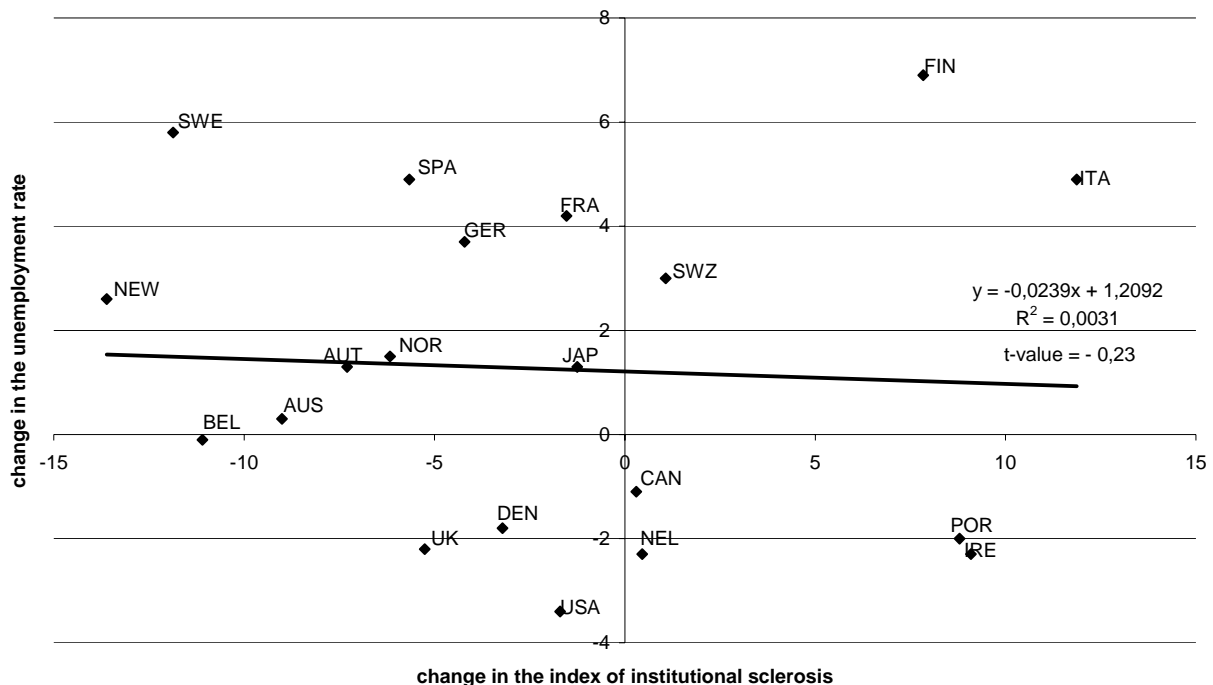
Quite obviously the evolution of the indicators for Germany is not consistent with Germany's economic development and is therefore in striking contrast to the institutional sclerosis view. If the latter were true one would expect the values for Germany to be very high in international comparison and increasing both absolutely and in international comparison over time, in particular during the 1990s when Germany entered its period of absolutely and comparatively unsatisfactory economic performance. However, only one indicator, the tax wedge, has consistently grown over time with considerable increases during the 1990s. This, however, can be explained in the first place by rising unemployment costs levied on labour and in the second place by the costs of German unification which were predominantly financed via the welfare system. Two indicators (bargaining coordination and benefit duration) have remained essentially constant since the mid 1970s. And three indicators have even decreased: Employment protection, the benefit replacement rate and union density have already been decreasing since the mid 1970s and have considerably been reduced further during the second half of the 1990s.

The contradictions to the institutional sclerosis view become even more apparent when the indicators for Germany are compared with the average indicator values for 20 OECD and 13 EU countries: In the second half of the 1990s two indicators for Germany (benefit replacement rate and union density) are lower than the OECD-20 average. In comparison to the EU-13 average, the former two indicators plus the tax wedge are below the average, though the values for the tax wedge are moving closer to the average. With respect to the German indicators above average, only for bargaining coordination the difference has increased during the last 15 years. For employment protection and benefit duration the difference to the OECD-20 and EU-13 average has been continually decreasing since the early (employment protection) or the late (benefit duration) 1970s. In order to capture the sum of all relevant indicators and their changes over time, an aggregate indicator for total institutional sclerosis has been built from the individual indicators for Germany, the EU-13 and OECD-20. As was to be expected from the individual indicators, Germany's total indicator in the second half of the 1990's is a little above the OECD-20 average and exactly equal to the EU-13 average.

In addition, Figure 10 relates the change in the indicator of total institutional sclerosis from the first half of the 1980s to the second half of the 1990s to the corresponding change in the unemployment rate for each of the 20 OECD countries. Obviously there is no positive relation between overall institutional change and the unemployment rate. The regression line has an insignificantly negative slope. Although Germany and Denmark have reduced their

„institutional sclerosis“ by almost the same amount (- 4 points) the German unemployment rate rose by about four percentage points whereas the Danish rate decreased by two points. On the other hand, the Netherlands, Portugal and Ireland were able to decrease their unemployment rates by about two percentage points despite of increasing sclerosis. To sum it up: On the basis of the data presented for Germany hardly any institutional change can be detected that could, according to the institutional sclerosis view, be made responsible for Germany's poor economic performance since the mid 1990s.

**Figure 5: Change in the unemployment rate and the total index of institutional sclerosis from 1980/84 to 1995/99 (20 OECD countries)**



Source: Baker et al. (2002); authors' calculations.

#### 4. A macroeconomic-policy story of Germany's poor economic performance

##### 4.1 Theoretical foundations: Macroeconomic policy coordination as key to growth and employment

A macroeconomic-policy story of Germany's slump can both rely on Post-Keynesian as well as on New-Keynesian approaches.<sup>11</sup> These approaches reject the "(...) single-minded focus on

<sup>11</sup> See Snowdon/Vane/Wynarczyk (1994, pp. 286-330, 367-380) for textbook reviews of the two approaches.

the labour market (which) stems from the naive belief that unemployment *must* be a defect in the labor market, as if the hole in a flat tire must always be on the bottom, because that is where the tire is flat“ (Solow (2000, p. 4). In the two modern Keynesian views monetary, fiscal and wage policies have a common responsibility for employment and price stability. In order to attain these goals the three policies have to be coordinated at least at the national,<sup>12</sup> better even at the international level, in particular in currency areas with a common monetary policy.<sup>13</sup>

In the Post-Keynesian approach the development of aggregate demand determines growth and employment in the short as well as in the long run.<sup>14</sup> Monetary policies' interest rate setting and firms' profit expectations essentially affect private investment which in turn is an essential determinant of effective demand and macroeconomic growth. Fiscal policy is also a central short and long run determinant of aggregate demand working both through the tax and the expenditure channel, in particular through public investment. And it is effective demand which via the level of aggregate output determines the level of employment realised in the labour market. The labour market, in this view, is a derived market because wage setting has no direct influence on employment. Instead, employment is determined by the interaction of the financial market where the interest rate is set - mainly by the policies of the central bank - and the goods market where total output is determined. Nominal wages set by labour unions and employers' associations, however, are the crucial determinant of the price level and inflation: With labour productivity given or following an exogenous trend and mark-up pricing in incomplete goods markets, the nominal wage rate determines the price level when the mark-ups are constant. Whereas monetary and fiscal policies are capable of affecting effective demand and hence employment, wage policies are in charge of preventing cumulative inflation as well as deflation. Therefore, rigid wages have to provide the nominal anchor for the whole system of a monetary production economy.

In New-Keynesian economics effective demand and hence monetary and fiscal policies have at least a short run impact on production and employment because prices and wages are

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<sup>12</sup> A lot of papers have shown that a favourable coordination between monetary and fiscal policies rather than deregulated labour markets can be held responsible for the superior development of the US-economy during the 1990s compared to Germany or the European economies (Flassbeck et. al., 1997; Holtfrerich, 1999; Kalmbach, 2000; Palley, 1998; Solow, 2000).

<sup>13</sup> On the lack of sound macroeconomic policy coordination in the euro area as a reason for slow growth and high unemployment see Hein/Truger (2004, 2004a).

<sup>14</sup> See Davidson (1994), Heine/Herr (1999) and Lavoie (1992) for textbook presentations of the Post-Keynesian approach and Arestis (1996) for a survey.

assumed to adjust rather slowly to their long-run equilibrium values.<sup>15</sup> In the long run equilibrium, however, unemployment is determined by the NAIRU (Non Accelerating Inflation Rate of Unemployment), which may depend on those structural factors discussed in section 2.1 - but the limitations discussed in section 2.2 have to be taken into account. In the short run, however, the exact duration of which is not clear, but which may be assumed to last at least a few years (Blanchard, 2003, p. 34), effective demand determines production and employment. From this it follows, that mainstream New-Keynesian implications for monetary and fiscal policies in the short run are rather similar to the Post-Keynesian approach: Monetary and fiscal policies are capable of stimulating demand and employment when the economy is in a slump and unemployment exceeds the NAIRU. Utmost importance is assigned as well to the coordination of the two policies (Blanchard, 2003, pp. 101-4 and pp. 431-2).<sup>16</sup>

With respect to wage policies, however, the New-Keynesian analysis differs substantially from the Post-Keynesian approach. In the short run, wage policy is strictly speaking not even a policy variable, because the short run is defined by exogenous and/or sticky nominal wages. And in the long run, wage policy is completely endogenous because mainstream models assume nominal wages adapting to the level consistent with the NAIRU (Blanchard, 2003, pp. 113-33). Therefore, in contrast to the Post-Keynesian view, nominal wage moderation can be an effective way to accelerate the reduction of actual unemployment to the NAIRU-level. In New-Keynesian models, however, it is not clear how effective demand determining unemployment in the short run can adjust to the level of production associated with the NAIRU in the long run.<sup>17</sup> In order to have increasing effective demand when nominal wages and prices are falling in the face of unemployment above the NAIRU, either a real-balance-effect has to be assumed. This requires the dominance of exogenous or outside money which is not the case in modern monetary production economies. Or, if we assume the dominance of endogenous money coming into existence via credit creation, symmetric monetary policy interventions are required (Allsopp/Vines, 1998). These may, however, not be sufficient to increase demand and employment when profit expectations are depressed and debt-deflation

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<sup>15</sup> See Auerbach/Kotlikoff (1998), Blanchard (2003), Mankiw (2002) and Stiglitz (1997a) for textbook presentations in the New-Keynesian vein and Truger (2003) for a survey on macroeconomic policy implications.

<sup>16</sup> The requirement of coordinated monetary and fiscal policy intervention increases considerably if hysteresis is taken into account. With hysteresis the NAIRU is not stable but rather depends on the past development of the actual unemployment rate which can be affected by macro-policies (Ball, 1999; Blanchard, 2003, p. 283).

<sup>17</sup> For a critique of the New-Keynesian NAIRU approach from a Post-Keynesian perspective see Sawyer (2001, 2002) and Hein (2004).



works its way through the private sector. Because of these considerations we prefer the Post-Keynesian view of rigid nominal wages as a macroeconomic stabilizer rather than the New-Keynesian view of nominal wages as an adjustment variable to the long-run equilibrium.

#### **4.2 The impact of macroeconomic policy variables: empirical indicators**

In order to analyse whether macroeconomic policies, i.e. monetary, fiscal and wage policies, can be made responsible for Germany's slump, empirical indicators for these factors have to be chosen. In this section the indicators used in the subsequent empirical analysis are introduced. We concentrate on those indicators for which a direct influence on GDP growth can be assumed according to the theoretical background sketched in the previous section, because growth can be considered the key to the understanding of the course of unemployment and budgeted deficits.

The effects of monetary policies can be assessed by the short-term real interest rate. The policy instrument is certainly the short-term nominal interest rate which can rather directly be controlled by the central bank. As the Bundesbank and the ECB since 1999 have (implicitly or explicitly) targeted inflation they must have conducted their policies with an eye to the concomitant changes in the short-term real interest rate. Changes in this rate then exert inverse effects on GDP growth via different transmission channels:<sup>18</sup> An increase in the short-term real interest rate has an immediate restrictive effect on those demand components which are short-term financed. As an increase in the short-term interest rate also causes a tendency towards increasing long-term interest rates via arbitrage and expectation effects, investment as a key factor for growth will be negatively affected as well. In addition to these interest rate channel effects, negative asset price effects (credit channel) and potentially upward currency revaluations (exchange rate channel) have to be taken into account. The effects of interest rate changes will usually be subject to significant time lags of about one year.

Wage setting affects growth via its effects on unit labour cost growth and inflation as sketched above.<sup>19</sup> If nominal wages increase at a faster pace than productivity plus the price level do, unit labour cost growth and inflation will speed up. This will cause real interest rates to fall and may make the central bank increase nominal interest rates in order to reach its inflation target. If nominal wages increase at a rate below the sum of productivity growth and inflation rate, unit labour cost growth will slow down and cause disinflation. Finally, deflation may be

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<sup>18</sup> For an overview see Cecchetti (1995) and Bernanke/Gertler (1995). See Bondt (2000) for the relative importance of the different transmission mechanisms in European countries.

<sup>19</sup> See Arestis/Sawyer (2003) and Hein (2002, 2004) for models of distribution conflict and inflation.

the consequence. Deflation causes increasing real interest rates and rising real debts with negative effects on investment and growth. If deflationary processes have started, lowering interest rates may be ineffective. Wage policies, however, may not only affect prices, but may also change distribution if firms do not completely pass unit labour cost variations to prices. Under these conditions nominal wage moderation causes the labour income share to fall.<sup>20</sup>

Hypothetically, the effects of income shares on GDP growth are ambiguous (Bhaduri/Marglin, 1990). With the propensity to save out of wages falling short of the savings propensity out of profits, a falling labour income share means a cut-back in consumption with directly contractive effects on investment and GDP growth. A fall in labour income shares that is associated with nominal wage restraint would, on the other hand, improve international competitiveness and, therefore, stimulate demand for exports, investment and growth. With a slowdown in inflation, the central bank may also cut interest rates and stimulate investment and growth. Finally, a falling labour income share is associated with rising unit profits which may also improve investment and growth. Since the stimulating effects of wage moderation and declining labour income shares for investment and growth are rather indirect and uncertain, the direct and contractive effects may dominate and the relation between the labour income share and GDP growth may be (slightly) positive - or insignificant. Nominal wage hikes according to the sum of productivity growth and inflation and hence constant labour income shares should be favourable conditions for growth.

In order to capture the effects of fiscal policies at least two alternative measures can be used. As a first approximation for the overall effects the annual change in the structural primary government deficit ratio (PDR) can be consulted. Using primary deficits allows us to focus on those components of public debt directly connected to effective demand. By using cyclically adjusted data and relating them to potential GDP, the attempt is made to exclude the cyclical effects of automatic stabilisers on the budget deficit. This makes it possible – if only in an imperfect way – to view the budget deficit as an exogenous policy variable affecting demand and growth. An increase in the PDR will have an adverse effect on real GDP growth and vice versa. A second important indicator for fiscal policies is the annual growth rate of real government investment. In the short run government investment is an essential component of aggregate demand. Moreover it provides public infrastructure making it a key condition for

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<sup>20</sup> Empirical analysis for Germany and the EMU in the 1990s has shown, that the development of unit labour costs determines the development of output prices (Hein/Schulten/Truger, 2004). Falling unit labour cost growth rates, however, are not accompanied by proportionally falling inflation rates. Therefore, nominal wage moderation is also associated with a tendency of labour income shares to fall.

growth also in the long run. In contrast to the PDR the endogeneity of which can never fully be excluded, public investment is a variable effectively under the government's control. We assume a positive relationship between its growth rate and GDP growth.<sup>21</sup>

In Hein/Truger (2004) and Truger/Hein (2002) we have used pooled least square regressions with annual data for 11 EMU countries in the period from 1981 to 2001 in order to verify whether the macro-policy indicators sketched above have had a statistically significant impact on GDP growth in these countries. The estimated coefficients for the real short-term interest rate, the labour income share, the PDR or the growth rate of real government investment all have the expected signs and are statistically significant, predominantly at the 1 per cent level. Therefore, the regression results do not contradict the theoretical claims made above with respect to the growth effects of the macroeconomic policy variables.

#### **4.3 Causes of the German crisis: Restrictive and ill-coordinated macroeconomic policies**

In the previous sections it has been argued that monetary, fiscal and wage policies are important for the explanation of GDP growth both from a theoretical and from an empirical point of view. However, in order to provide an explanation for the German slump, it must be shown, that the expected impact of macroeconomic policy variables is indeed consistent with the German data. In order to provide a macroeconomic explanation for Germany's decline to "Europe's sick man", it must be shown that monetary, fiscal and wage policies for Germany have indeed been less favourable than for the EMU average since the mid 1990s.<sup>22</sup> We should therefore expect German real interest rates to be higher, German wage policies to be too moderate causing below average inflation rates and falling labour income shares, and German fiscal policies to be more restrictive and/or public investment growth to be lower. In what follows it will be shown that these conditions are met to a considerable extent. Thus, Germany's poor economic performance can indeed be explained by these macroeconomic factors.<sup>23</sup>

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<sup>21</sup> At least for Germany long-term positive growth effects of public infrastructure investment should be uncontroversial. See Kitterer (1998) and Pfähler et al. (1996).

<sup>22</sup> It should be noted, that using the EMU average as a standard of reference does by no means imply that macroeconomic policies for the EMU have been optimal or adequate. On the contrary, EMU macroeconomic policies have in general suffered from the same problems as Germany: macroeconomic mismanagement and a lack of coordination (Hein/Truger, 2004). Unfortunately German macroeconomic policies have even been worse.

<sup>23</sup> There is a fourth macroeconomic factor that is not explicitly addressed in the current paper, but that is nevertheless particularly suited to explaining the extraordinarily pronounced fall in relative German economic performance in 2001 and the subsequent years: The German economy depends considerably stronger on cyclical

With respect to monetary policies, Germany has lost its former status as the key currency country within the EMS at the start of EMU in 1999. Since then it has no longer been in a position to reap the advantages of lower interest rates it used to have compared to the other EMS countries. During the process of convergence these countries gained from a considerable decrease of short- and long-term nominal interest rates towards the lower German level. This convergence and decrease in nominal interest rates was associated with a stronger decrease in real interest rates for the EMU average than for Germany over the 1990s (Figure 6). Since the German inflation rate is lower than the EMU average and the nominal interest rates have almost completely converged since 1999, Germany's real interest rates have even been higher than the EMU average since then (Figure 7). Thus, Germany currently suffers more from the ECB's monetary policies than the other EMU countries, because the uniform monetary policy addresses average EMU inflation and cannot take into account Germany's special economic situation with both a higher output gap and lower inflation than the EMU average.<sup>24</sup>

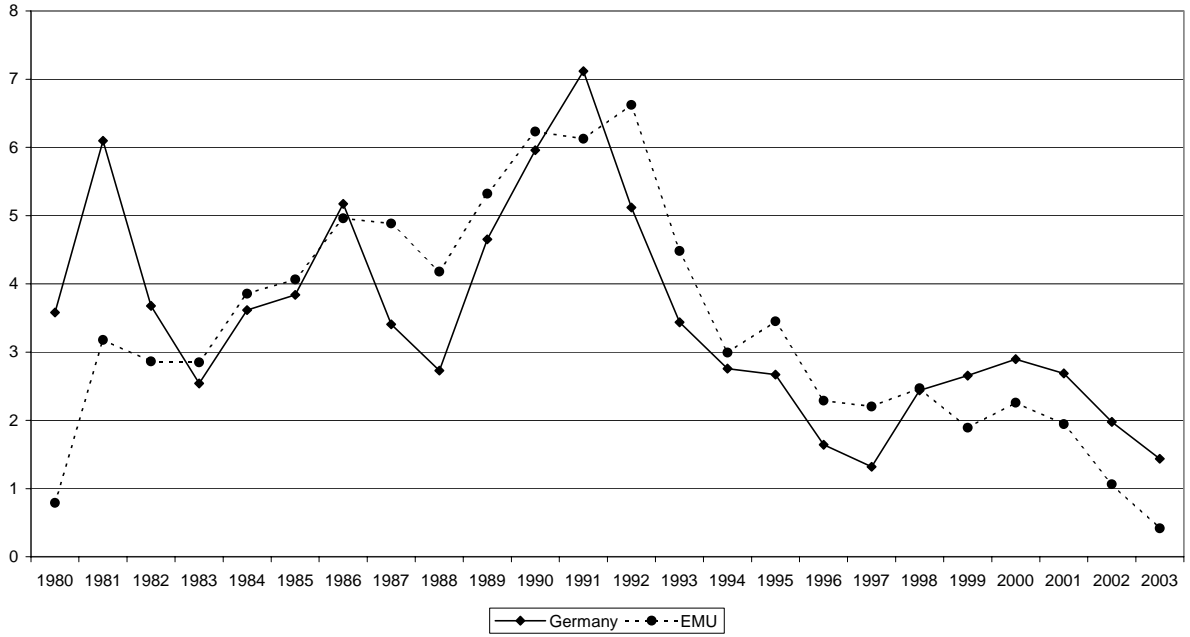
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fluctuations of the US economy than the other EMU countries (SVR, 2001, pp. 251-266). This is true for the dependence of German exports on US demand, the stronger correlation between German and US share price indices and the transmission of cyclical fluctuations via direct foreign investment. Furthermore, the transmission of negative cyclical shocks from the US to Germany seems to be stronger than that of positive ones.

<sup>24</sup> For a general critique of the ECB's "anti-growth bias" see Bibow (2002) and Hein (2002). This "anti-growth"-bias consists of a too restrictive definition of price stability for the heterogeneous currency area - as an annual increase of the harmonised consumer price index of below but close to 2 percent - and an asymmetric response to the expected deviation of actual from target inflation. The ECB has tended to tighten whenever inflation increased above the target without relaxing when inflation expectations came down.

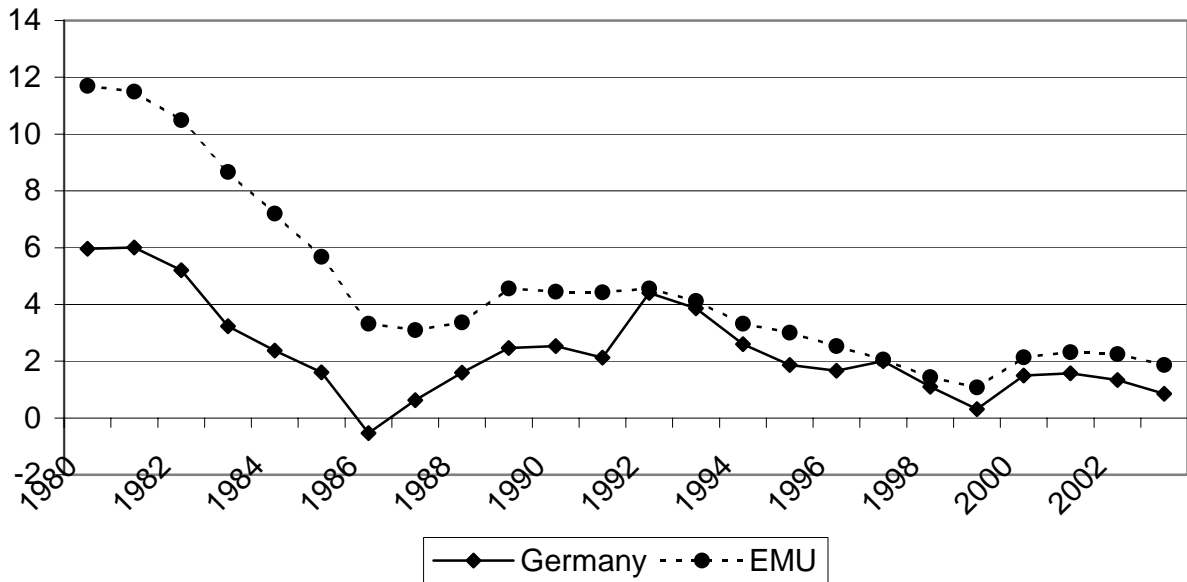
**Figure 6: Short term real interest rates in the EMU and in Germany, in % (1980-2003)**

Source: OECD (2003)



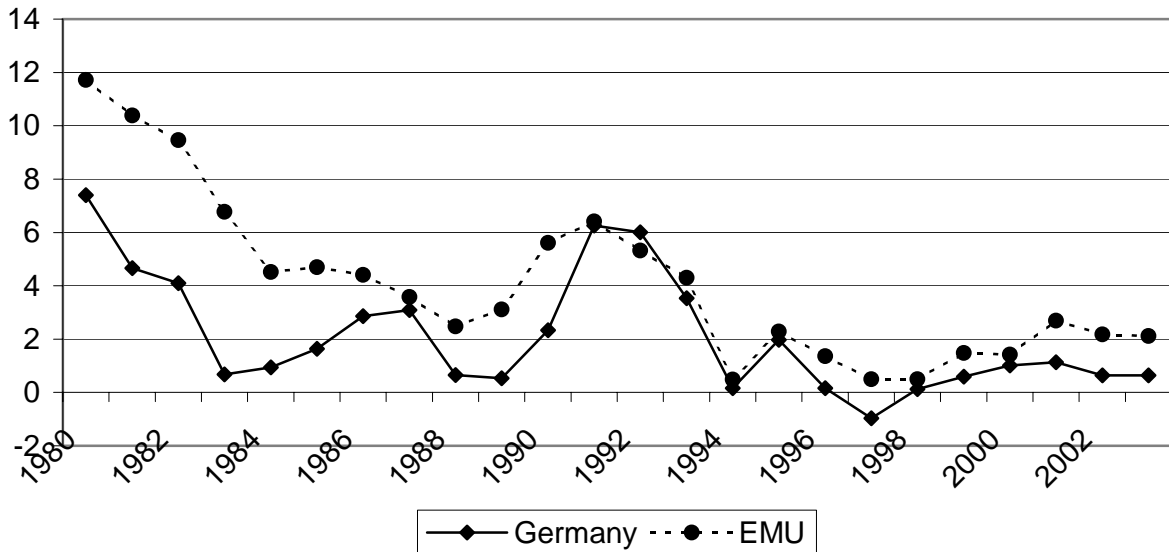
**Figure 7: Inflation rates (consumer prices) in Germany and the EMU in % (1980-2003)**

Source: OECD (2003)



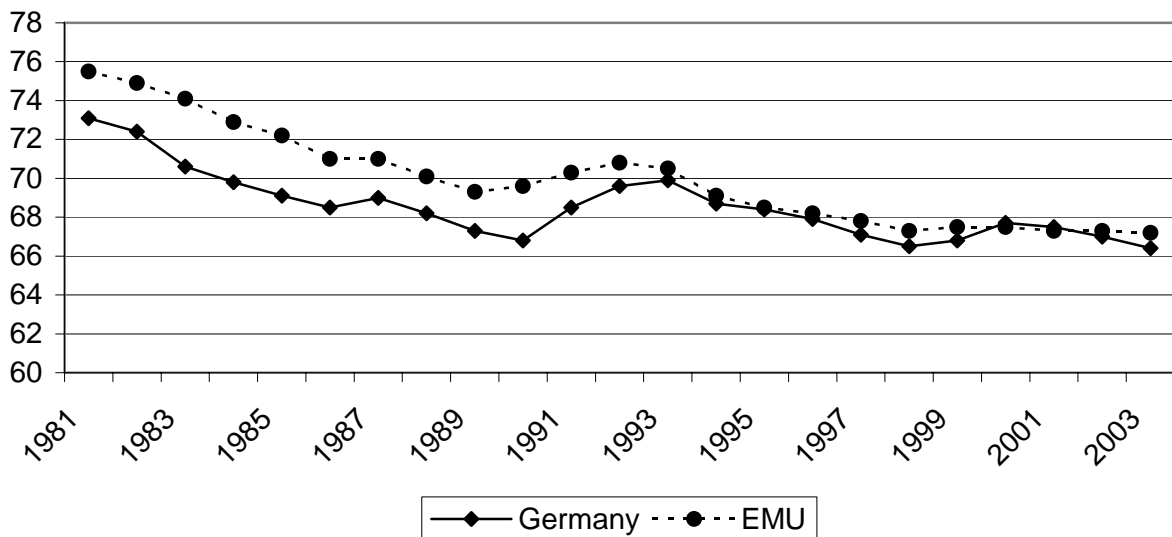
**Figure 8: Unit labour cost in Germany and the EMU, annual increase in % (1980-2003)**

Source: OECD (2003)



**Figure 9: Labour income share in Germany and the EMU, in % of GDP at factor costs (1981-2003)**

Source: European Commission (2003)



Germany's below average inflation rate is caused by too moderate nominal wage increases: Unit labour cost growth and inflation have been considerably below the EMU average since the late 1990s (Figures 7 and 8). However, this has also been true for the 1980s when Germany's absolute and relative economic performance had been much better. But during the

1980s low unit labour cost growth and the resulting low inflation rates were the basis for the Deutschmark's status as the regional key currency within the EMS, allowing the German Bundesbank to set substantially lower nominal and actually real interest rates than in the other EMS countries. Since the beginning of the interest rate convergence process in the mid 1990s and with the completion of EMU in 1999, however, lower inflation rates for Germany do no longer pay offs in terms of lower interest rates.

The too moderate wage setting in Germany did not only cause below average inflation rates. This wage policy also contributed to the continuing tendency of a declining labour income share which already started in the early 1980s (Figure 9).<sup>25</sup> Germany's labour income share has been below EMU average during the 1980s and the first half of the 1990s as well. By the mid 1990s, however, the gap to the EMU average was almost closed but continued to widen afterwards. This means that during the EMU convergence process German wage policies have been less successful than those in the other EMU countries in exhausting the scope for distribution, the sum of productivity growth and inflation. As a consequence German domestic demand has been weaker than in the EMU as a whole, which further contributed to Germany's poor economic performance during the second half of the 1990s. In 2000/2001 Germany's labour income share exceeded the EMU average. This was due to the more pronounced growth and productivity slowdown in Germany than in the EMU on average.<sup>26</sup> Since 2002 the German labour income share has again been falling behind and has weakened domestic demand. On the other hand, however, moderate wage policies have improved price competitiveness and profitability of German firms which made German export surpluses almost triple between 2000 and 2003. Germany's share in international trade improved making Germany the 'world champion' in exports in 2003. But this extraordinary export performance was insufficient to compensate for the associated deficiencies in domestic demand.

Considering fiscal policies, the Maastricht Treaty and the Stability and Growth Pact (SGP) have led to budget consolidation and restrictive policies all over Europe. In order to correctly assess whether fiscal policies have been economically adequate, the change in the structural primary balance in relation to the change in the output gap is considered (Figures 10 and 11). From this it can be seen that German fiscal policies during the period from 1995 until 2003

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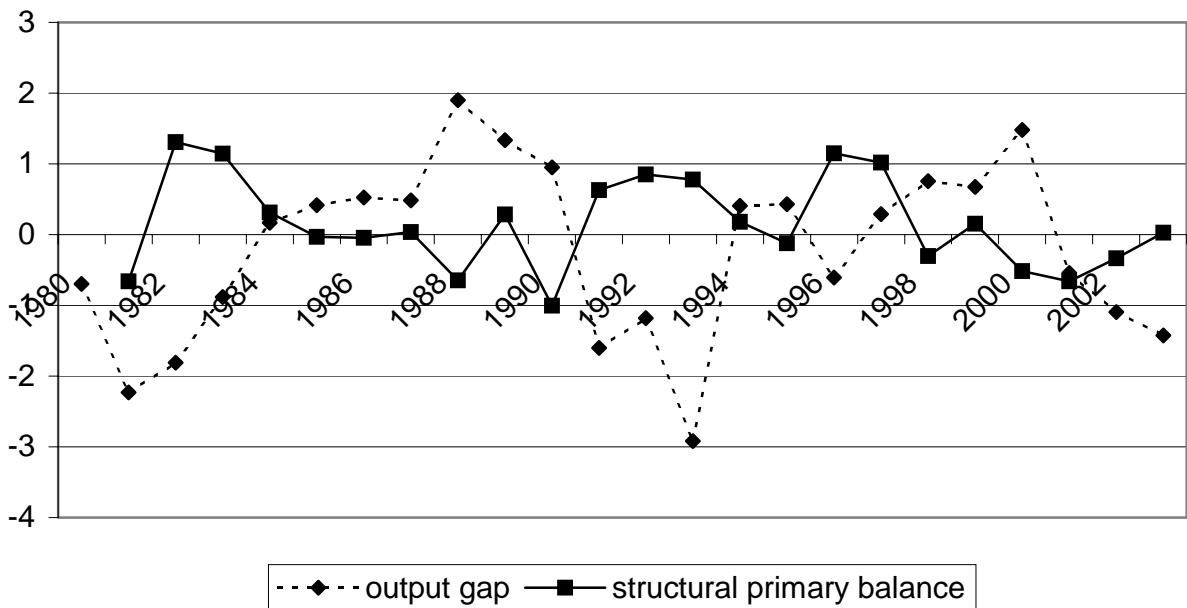
<sup>25</sup> The European Commission (2003) defines the labour income share as "compensation per employee as percentage of GDP at factor cost per person employed".

<sup>26</sup> As is well known, labour income shares tend to increase in economic downswing and to decrease in upswings due to pro-cyclical productivity growth and time-lags in nominal wage setting.

has been restrictive in three years (positive change in the PDR) in face of a slowdown in economic activity (negative change in the output gap): In 1996, 1997 and 2003 fiscal policies pro-cyclically worsened the crisis. For the EMU average, this has happened once in 1996 and also slightly in 2003.

**Figure 10: Change in structural primary balance and in the output gap in % of pot. GDP in the EMU, (1980-2003)**

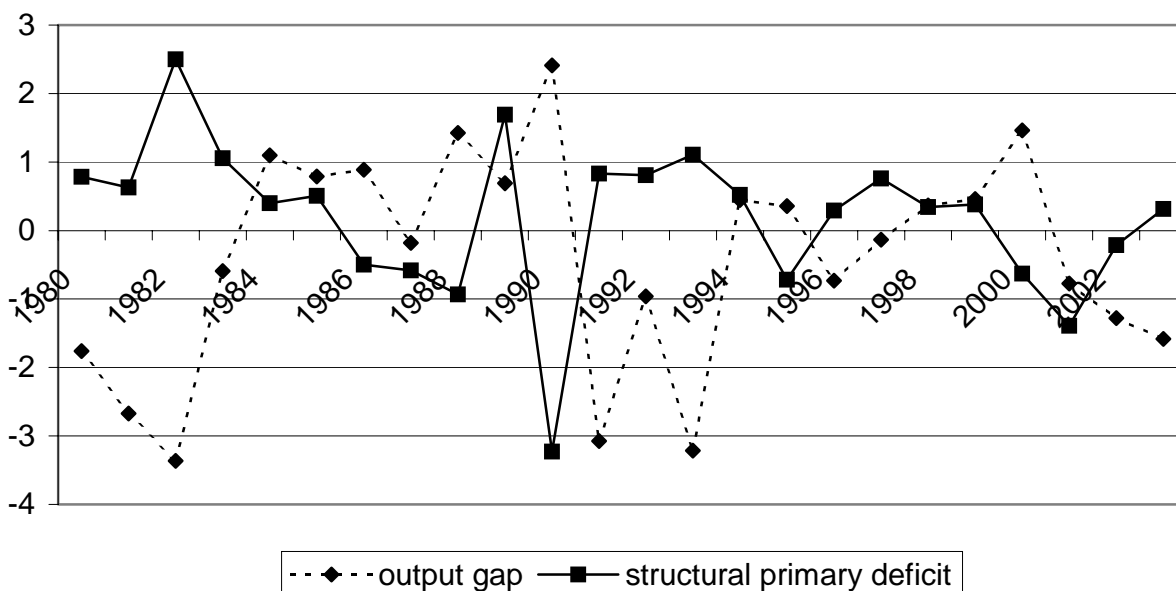
Source: OECD (2003)





**Figure 11: Change in the structural primary balance and in the output gap in % of pot. GDP in Germany (1980-2003)**

Source: OECD (2003)

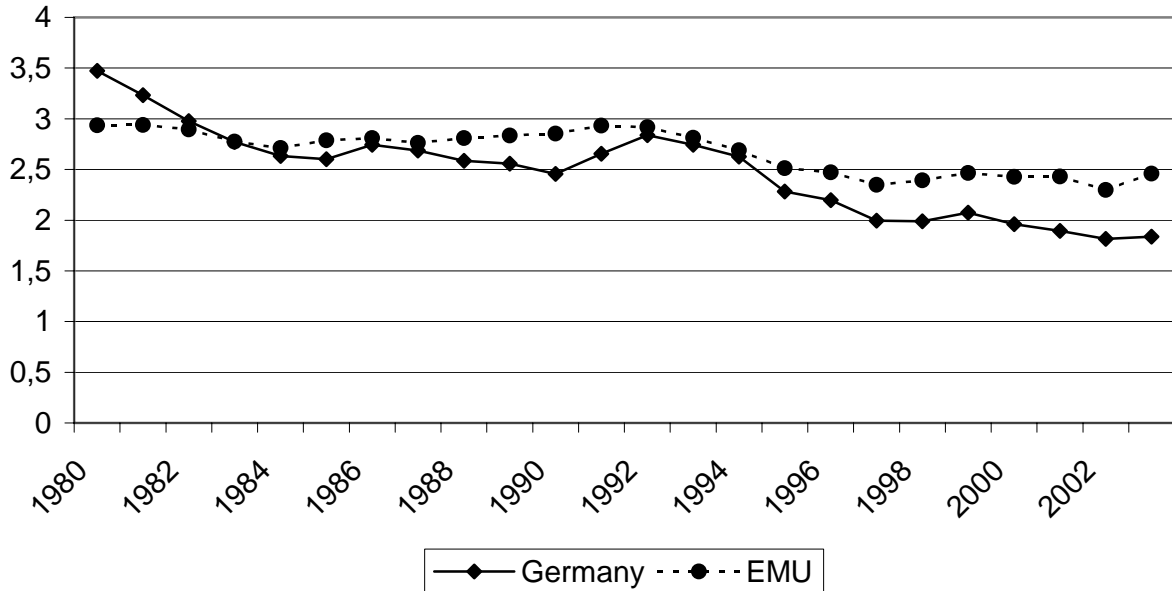


The restrictive stance of German fiscal policies becomes much clearer if one considers the growth rates of real public investment as the key component of government expenditure with respect to economic growth.<sup>27</sup> Since the mid 1990s German public investment growth rate is below the EMU average. The decline in public investment has led to a share of real public investment in real GDP which is very low, both in absolute terms and in comparison with the EMU average (Figure 12): After almost reaching the EMU level of about 2.8 per cent of GDP during the early 1990s it has continually decreased to only about 1.8 per cent compared to 2.5 per cent in the EMU as a whole in 2003.

<sup>27</sup> Also the growth rates of primary government expenditure have been below the EMU average since 1997. The same is even true for the growth rates of real social benefits.

**Figure 12: Ratio of real government investment to real GDP in Germany and the EMU, in % (1980-2003)**

Source: OECD (2003)



To summarise the empirical comparison: Macroeconomic policy variables have indeed been less favourable in Germany than in the EMU since the mid 1990s. Macroeconomic mismanagement, therefore, can be considered to be the main cause of Germany's slump.

## 5. Summary and economic policy implications

The economic policy implications from the analysis in this paper are quite straightforward: As institutional sclerosis, i.e. rigid labour markets and generous welfare state institutions, can neither from a theoretical nor from an empirical perspective be made responsible for Germany's economic crisis since the 1990s, the claims for radical deregulation of the labour market and dismantling the welfare state in order to decrease unemployment are deeply misguided.<sup>28</sup> To further pursue and intensify this strategy would risk getting a negative payoff in terms of employment and growth at the cost of a substantial weakening of employees'

<sup>28</sup> This is not to say that there is no need for reforms or no scope for improving the existing institutions. For example ageing societies certainly pose a challenge for the welfare state that has to be addressed. However, this has nothing to do with the current crisis and is far from implying that deregulating the labour market, dismantling the welfare state or other supply side measures are automatically the best answers to these challenges.

rights and a substantially more uneven income distribution. As long as the macroeconomic causes of the German economic crisis are not recognized and addressed accordingly, the situation will not improve at all - or it might only slightly improve by accident due to favourable external circumstances like a strong recovery of the world economy. In order to improve its macroeconomic performance, the German economy needs a more expansive monetary policy at the euro area level, less moderate wage setting exhausting the scope for distribution and more active and expansive fiscal policies. This, however, requires major changes in particular in the European economic policy framework, i.e. a change in the ECB's monetary strategy, a reform of the SGP and more favourable conditions for wage policy co-ordination across the euro area.<sup>29</sup>

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<sup>29</sup> See Hein/Truger (2004, 2004a) for a more explicit discussion on this.

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