Macroeconomic policies, wage developments, and Germany's stagnation*

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Abstract

The paper fundamentally challenges the institutional sclerosis explanation of the present German economic stagnation. Instead, we present a macroeconomic explanation focusing on the combined effects of too restrictive monetary policies, too restrictive and sometimes pro-cyclical fiscal policies and overly moderate wage policies in Germany since the mid 1990s. This view is broadly consistent with modern macroeconomics and with empirical data. From this perspective we finally argue that Germany urgently needs more expansive fiscal and monetary policies in the short run, and that in the medium run the conditions for nominal wage growth in Germany according to the sum of long run national productivity growth and the ECB's inflation target have to be improved. Further pursuing a policy of structural reforms with respect to the labour market and the social benefit system in combination with a restrictive macroeconomic policy mix, however, will prolong Germany's economic stagnation and will considerably increase the risk of deflation.

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1. Introduction

From 2001 until present the German economy has been facing its most serious stagnation in post-war history: After the upswing in 1999/2000 real GDP growth more or less stagnated from 2001 to 2003. 2004 has seen a weak recovery with a growth rate of 1.6 percent, but in 2005 growth will again decelerate according to the most recent forecasts.[1] Unemployment has been rising again and has now reached its post war maximum. The budget deficit, though not excessively high in international comparison, has been rising despite strong consolidation efforts since 2001. In 2004 it has 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. And in 2005 Germany will also not manage to keep within the 3 percent limit according to the recent European Commission's spring forecast (European Commission 2005a).

Of course, also the other European countries are currently facing economic problems and the European Monetary Union (EMU) as a whole has been doing worse than the US,[2] but in comparison to the other EMU countries Germany has been hit much harder by the recent economic slowdown (Table 1). During the period 2001-2004 average annual GDP growth in Germany has amounted to only half of the meagre growth in the EMU (including Germany). In contrast to the EMU as a whole, Germany's growth is completely driven by export surpluses; the contribution of domestic demand to GDP growth has been negative on average over this period. Unemployment has climbed to the EMU average and inflation is considerably below EMU average. The former key currency country of the European Monetary System (EMS) has indeed become 'Europe's sick man'.

Table 1: Real GDP growth, unemployment and inflation rate in Germany and the EMU, 2001-2004, annual averages in percent

	Germany	EMU
Real GDP growth	0.6	1.3
Growth contribution of domestic demand	-0.4	1.1
Growth contribution of net foreign balances	1.0	0.2
Rate of unemployment	8.5	8.5
Inflation rate (HICP)	1.5	2.2
Sources: European Commission (2005), OECD (2004), authors' calculations		

[1] According to the Eureopean Commission's spring forecast, Germany's growth rate will be 0.8 percent in 2005 (European Commission 2005b).

[2] See Hein/Niechoj (2005) for a comparison of economic performance of the EMU with the US since the mid 1980s.

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 have called and still call for far reaching structural reforms, radical deregulation of the labour market and radical dismantling of the welfare state.[3] 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: After some reluctance during the first term of the red-green administration (1998-2002) chancellor Schroeder's 'Agenda 2010' presented in March 2003 has been the turning point towards the implementation of far reaching structural reforms to overcome the (perceived) institutional sclerosis (Schroeder 2003).

In the present paper we fundamentally challenge the institutional sclerosis explanation of the German crisis. Instead, we will present a macroeconomic explanation for Germany's falling behind which is indeed not a short-run phenomenon but has set in almost ten years ago. Our macroeconomic story will focus on the combined effects of too restrictive monetary policies, too restrictive and sometimes pro-cyclical fiscal policies and too moderate wage policies in Germany since the mid 1990s. This view is broadly consistent with modern macroeconomics and with empirical data. From this perspective we will finally argue that instead of further 'structural reforms' Germany urgently needs more expansive fiscal and monetary policies in the short run. In the medium run the economic and institutional conditions for nominal wage growth in Germany according to the sum of long run national productivity growth and the ECB's inflation target have to be improved. Further pursuing a policy of structural reforms with respect to the labour market and the social benefit system in combination with a restrictive macroeconomic policy mix, however, will prolong Germany's economic stagnation and will considerably increase the risk of deflation.

In this paper we will not explicitly address the problem of German unification and its effects on German stagnation.[4] 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 have exceeded those of East Germany since the

[3] See for instance the annual reports of the German council of economic experts (SVR 2003, 2004), the majority view in the semi-annual joint reports of the leading economic research institutes in Germany (Institute 2003, 2004) and, in particular, an economic policy paper by the German central bank (Deutsche Bundesbank 2003).

[4] See Bibow (2003, 2005) for an extensive discussion of the effects of German unification and the macroeconomic reactions by the Bundesbank and by German fiscal policies in the course of the 1990s.

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 roughly three times higher than those in West Germany. This situation causes eminent fiscal transfers from West to East in the dimension of 3-4 percent of German GDP.

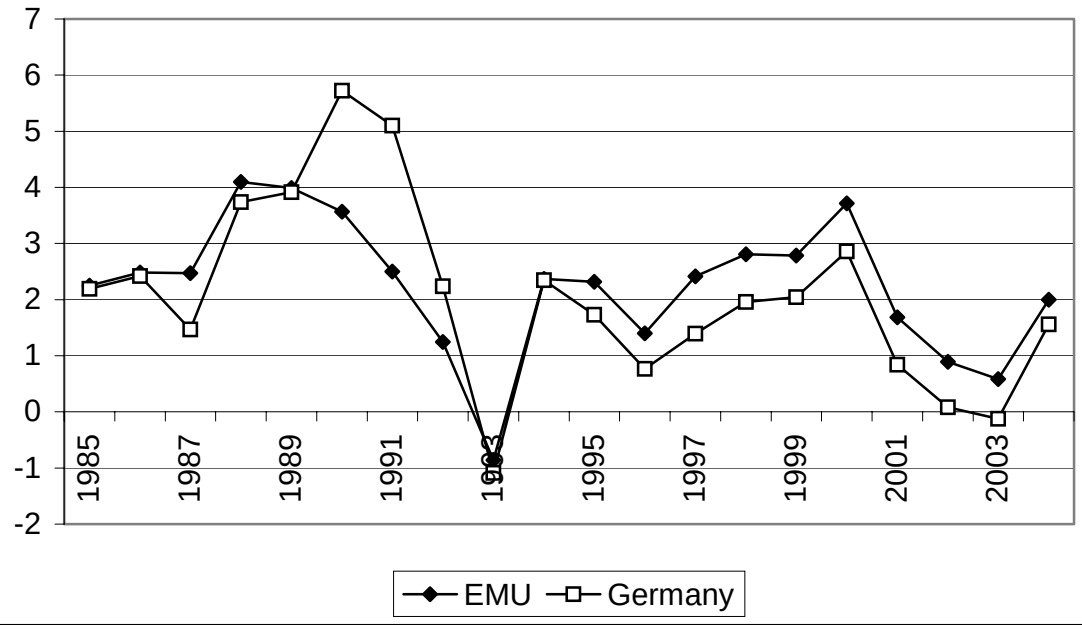
The paper is organised as follows. Section 2 draws a short picture of Germany's long-term economic problems with respect to growth, unemployment and inflation. Section 3 briefly deals with the institutional sclerosis view. Section 4 presents the alternative macroeconomic policy explanation of German stagnation. Section 5 deals with the development of wage bargaining in particular, and Section 6 concludes with the fundamental problems economic policies in Germany and Europe will have to solve in order to escape stagnation and deflation.

2. Macroeconomic performance since the mid 1990s

A closer look at the annual German GDP growth rates from 1985 to 2004 in comparison with the EMU average growth rates (including Germany) reveals that there is not only a short-term growth problem starting with the recent recession, but that Germany has faced a long-term absolute and relative growth problem since the mid 1990s (Figure 1).

Figure 1: Real GDP growth rate in Germany and in the EMU, 1985 - 2004, in percent

Source: European Commission (2005), OECD (2004), authors' calculations



Since 1995 the German GDP growth rate has been systematically lower than the EMU average. In what follows we will therefore compare macroeconomic development and its determinants in Germany and in the EMU as a whole for two different time periods: the ten years period starting with 1995 and the ten years period before 1995 (Table 2). Both periods include a recession and cover a full business cycle. Average values can therefore be compared without being affected too much by cyclical fluctuations.

Table 2: Real GDP growth, unemployment and inflation in the Germany and the EMU, 1985-1994 and 1995-2004, annual averages in percent

	***1985-1994*[1)]**		***1995-2004***	
	Germany	**EMU**	**Germany**	**EMU**
Real GDP growth	2.8	2.4	1.3	2.1
Growth contribution of domestic demand	2.6	2.4	0.8	1.9
Growth contribution of net foreign balances	0.2	0.0	0.5	0.1
Rate of unemployment	6.1	8.8	8.3	9.4
Inflation rate (HCPI)	2.5	4.1	1.3	2.0

Notes: [1)] 1985 until 1991: West Germany and EMU including only West Germany

Sources: European Commission (2005), OECD (2004), authors' calculations

Comparing the 1995-2004 period with the 1985-1994 period, Germany's average real GDP growth rate has decreased remarkably. Whereas it exceeded the EMU average in the former period it is considerably below this average - which has also slightly fallen - in the latter period. EMU GDP growth has been driven almost exclusively by domestic demand in both periods. In Germany, however, the growth contribution of net foreign demand has increased significantly whereas the growth contribution of domestic demand has dramatically decreased. Germany's economy has performed very well on international markets and has gained considerable export surpluses in the period 1995-2004, but has suffered from weak domestic demand in this period.

Germany's growth problems have caused rising unemployment. Although average unemployment in the period 1995-2004 is still below the EMU average, the increase in Germany's unemployment rate from the first to the second period exceeds the increase in the EMU rate. Since 2003 Germany's unemployment rate has been even higher than the EMU rate. With the exception of 1992 and 1993 Germany's inflation rate has been consistently

below the EMU rate. The rate of inflation has halved comparing the second with the first period in Germany as well as in the EMU as a whole.

3. Institutional sclerosis as the cause of Germany's stagnation?

For most of the German economics profession the answer to the German growth and employment problems is clear and simple: Institutional sclerosis, i.e. rigid and over-regulated labour markets and too generous welfare state institutions have driven Germany into crisis. This institutional sclerosis view is based on simple neoclassical labour market theory. With a complete and perfect neoclassical labour market as standard of reference unemployment can only arise because of market imperfections preventing a market clearing real wage at full employment (Siebert 1997).[5] Institutions of collective wage bargaining (unions and employers' associations on the regional, sectoral or national level), labour market regulation (e.g. employment protection legislation, minimum wages) and the welfare state (unemployment benefits, social benefits and the 'tax wedge') are seen as market imperfections and therefore creators of unemployment.

But can the institutional sclerosis view really explain the systematic lagging behind of German growth rates in comparison with the EMU average since the mid 1990s? In order to render a good explanation for the German crisis, the institutional sclerosis view would have to obey to three conditions: First, it would have to be based on a consistent and realistic economic theory. Second, the derived theoretical relationship between labour market regulation and welfare state institutions, on the one hand, and unemployment, on the other hand, should have been confirmed by empirical studies. Third, in order to be applicable to the German case it would have to 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. However, the institutional sclerosis view does not convincingly obey to any of the three conditions.[6]

First, with respect to theory, the institutional sclerosis view runs into serious problems, as soon as 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. With modern theoretical foundations it becomes difficult to derive unambiguous implications concerning the employment effects of labour market regulation and welfare state institutions. As soon as asymmetric information between employers and employees, incomplete contracts

[5] Note that in this approach it is unemployment which lowers the growth rate and not low growth which is responsible for rising unemployment.

[6] For a more detailed discussion see Hein/Truger (2005).

and active price-setting are taken into account, there are good reasons to question the institutional sclerosis view and its economic policy implications.[7]

Second, with respect to empirical research, the results from the literature are rather mixed and far from being as clear as the proponents of deregulation like to claim. Since the fundamental work by Layard/Nickell/Jackman (1991) there have been many complex econometric studies examining the influence of institutional rigidities on economic performance and the unemployment rate.[8] Among the standard institutional variables usually covered are indices of employment protection, the benefit replacement rate, benefit duration, union density, bargaining coordination and the tax wedge. All in all, the empirical work does 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.

Third, the development of Germany's labour market and welfare state institutions in international comparison simply does not correspond to Germany's economic development over time. In order to show this, we use the set of indicators compiled by Baker et al. (2004). Table 3 lists the six institutional indicators (index of employment protection, benefit replacement rate, benefit duration, union density, bargaining coordination and tax wedge) for Germany 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.

[7] See for instance Nickell (1997), Nickell/Layard (1999) and in particular Schettkat (2003, 2003a).

[8] Baker et al. (2004) provide an excellent overview of the more recent econometric studies and demonstrate the lack of robustness of their results. See Hein/Truger (2005) for more details.

Table 3: Indicators of labour market institutions and the welfare state: Germany in international comparison, 1960-1999[1)]

Indicators for Germany[8)]

Period	Employment protection [2)]	Benefit replacement rate[3)]	Benefit duration [4)]	Union density[5)]	Bargaining coordination [6)]	Tax wedge[7)]
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

German indicators minus average indicators for 20 OECD countries [9)]

Period	Employment protection [2)]	Benefit replacement rate[3)]	Benefit duration [4)]	Union density[5)]	Bargaining coordination [6)]	Tax wedge[7)]
1960-64 [11)]	-0.34	17.1	0.22	-4.9	0.29	6.3[12)]
1965-69 [11)]	-0.05	13.0	0.22	-6.7	0.29	1.7[13)]
1970-74 [11)]	0.55	7.0	0.19	-8.9	0.26	1.5[13)]
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[14)]
1995-99	0.34	-11.1	0.09	-12.0	0.58	1.8[14)]

German indicators minus average indicators for 13 EU countries [9)]

Period	Employment protection [2)]	Benefit replacement rate[3)]	Benefit duration [4)]	Union density[5)]	Bargaining coordination [6)]	Tax wedge[7)]
1960-64 [11)]	-0.31	17.3	0.20	-5.9	0.23	4.0
1965-69 [11)]	-0.08	12.2	0.22	-8.5	0.21	-0.8
1970-74 [11)]	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

Total indicator of institutional sclerosis[15)]

	Germany	Average of 20 OECD countries	Average of 13 EU countries
1995-1999	**52**	**47**	**52**

Notes
1) An exact definition and a documentation of the origin of the data is given by Nickell et. al. (2002) and Baker et. al. (2004).
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. (2004); 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. 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, we have calculated an aggregate indicator for total institutional sclerosis 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 1990s is a little above the OECD-20 average and exactly equal to the EU-13 average. 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.

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

4.1 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.[9] 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,[10] better even at the international level, in particular in currency areas with a common monetary policy. In the Post-Keynesian approach the development of aggregate demand determines growth and employment in the short as well as in the long run.[11] 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

[9] See Snowdon/Vane/Wynarczyk (1994: 286-330, 367-380) for textbook reviews of the two approaches.

[10] 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 (Fritsche et al. 2005, Hein/Niechoj 2005, Palley 1998, Solow 2000).

[11] See Davidson (1994), Heine/Herr (1999) and Lavoie (1992) for textbook presentations of the Post-Keynesian approach and Arestis (1996) for a survey.

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 assumed to adjust rather slowly to their long-run equilibrium values.[12] 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 3. 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: 101-4 and 431-2).[13]

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: 113-33). 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

[12] See Auerbach/Kotlikoff (1998), Blanchard (2003), Mankiw (2002) and Stiglitz (1997) for textbook presentations in the New Keynesian vain and Truger (2003) for a survey of macroeconomic policy implications.

[13] 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: 283).

NAIRU in the long run.[14] 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 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 Restrictive and ill-coordinated macroeconomic policies in Germany

In order to provide a macroeconomic policy explanation for German stagnation, 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 as compared to the 10-year period from 1985-1994 (Table 4).[15]

[14] For a critique of the New Keynesian NAIRU approach from a Post-Keynesian perspective see Sawyer (2001, 2002) and Hein (2004).

[15] 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, 2005a, 2005b, Hein/Niechoj 2005). Unfortunately German macroeconomic policies have even been worse.

Table 4: Macroeconomic policy indicators for Germany and the EMU, 1985-1994 and 1995-2004, annual average values				
	1985 – 1994[1)]		***1995 – 2004***	
	Germany	**EMU**	**Germany**	**EMU**
Monetary policy				
Short term real interest rate (percent)	4.0	5.1	2.1	1.9
Short term real interest rate minus real GDP growth rate (percentage-points)	1.2	2.7	0.8	-0.1
Fiscal policy				
Number of years with pro-cyclical fiscal policy of which during economic slowdown	7 3	8 3	6 4	5 2
Real total government expenditure, growth rate (percent)	3.5	3.1	0.7	1.3
Real government investment, growth rate (percent)	1.2	2.1	-3.7	1.1
Ratio of real government investment to real GDP (percent)	2.7	3.0	2.0	2.6
Wage policy				
Compensation per employee, growth rate (percent)	4.6	4.7	1.3	2.3
Unit labour cost, growth rate (percent)	2.4	3.4	0.5	1.4
Labour income share (percent of GDP at factor cost)	68.6	70.3	67.1	67.4
Change in labour income share to previous year (percentage points)	-0.1	-0.4	-0.3	-0.3
Notes: [1)] 1985 – 1991: West Germany and EMU including West Germany Source: OECD (2004); European Commission (2005); authors' calculations.				

Monetary policies

Monetary policy will be assessed by the development of the short-term real interest rate. Of course, modern central banks use the short-term nominal interest rate as an economic policy instrument. But if central banks target inflation they will set nominal interest rates with an eye to the ensuing real rate. In order to take into account the underlying economic situation, we additionally consult the difference between the short-term real interest rate and real GDP-growth. We expect a negative influence of real interest rates on economic growth working through different transmission channels (money, credit, asset prices, exchange rates) (Bernanke/Gertler 1995, Cecchetti 1995).

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. Since the German inflation rate has been 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. Whereas Germany had an average short term real interest rate advantage of 1.1 percentage points relative to the EMU average in the period 1985-1994, this constellation completely reversed in the period 1995-2004 when the EMU gained an average short term real interest rate advantage of 0.2 percentage points. The relation between the short-term real interest rate and the real GDP growth rate in Germany only decreased slightly from 1.2 percentage points in the first period to 0.8 percentage points in the second, whereas in the EMU as a whole this relation decreased considerably from 2.7 to -0.1 percentage points. From this it follows, that Germany in particular has suffered from European monetary integration and the ECB's 'anti-growth bias' whereas the other countries have gained from monetary integration. The ECB's ‚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 (ECB 2003: 89) - and an asymmetric response to the expected deviation of actual from target inflation.[16] Germany's weak performance, however, is only partly due to the ECB's monetary strategy. It is also due to the fact that within the monetary union, the ECB can only address average inflation and cannot take into account Germany's special economic situation with both a higher output gap and lower inflation than the EMU average. This is where the role of fiscal and wage policies have to be considered as well.

Fiscal policies

In order to capture the effects of fiscal policies on macroeconomic performance we focus on two measures. First, the extent to which fiscal policy exerts a stabilising or destabilising influence on the business cycle can be assessed by comparing changes in the output gap and the primary budget balance-potential GDP ratio (PBR). The output gap serves as an indicator of the current state of economic activity. If it is positive, then capacity is outstripped, if it is negative, this means that capacity is not fully utilised. Consequently, a positive change in the output gap indicates a cyclical upturn whereas a negative change points to a cyclical

[16] The ECB has tended to tighten whenever inflation increased above the target without relaxing when inflation expectations came down. For a general critique of the ECB's "anti-growth bias" see Bibow (2002) and Hein (2002).

downturn. While the overall budget balance is the result of the macroeconomic process and cannot be controlled by fiscal policy, the cyclically adjusted primary budget balance, the PBR, can be seen as a fiscal policy instrument.[17] If there is a negative change in the PBR, then structural deficits rise or structural surpluses fall, and fiscal policy provides an expansive stimulus to aggregate demand. If there is a positive change in the PBR, then structural deficits fall or structural surpluses rise, and fiscal policy provides a restrictive stimulus to demand. If the PBR remains constant when there is a change in the output gap, then fiscal policy is neither expansive nor restrictive and the automatic stabilisers are simply left to take effect.

Second, we take a look at the development of real government expenditure, in particular at 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 growth in the long run. We assume a positive relationship between its growth rate and GDP growth.[18]

Considering fiscal policies, the Maastricht Treaty and especially the Stability and Growth Pact (SGP) have enforced budget consolidation and restrictive policies on (potential) EMU member countries at least since the mid 1990s. Since then German fiscal policies have been restrictive in four years (positive change in the PBR) in face of a slowdown in economic activity (negative change in the output gap), pro-cyclically worsening the crisis. For the EMU average, this has happened only twice. The restrictive stance of German fiscal policies becomes even more obvious if one considers the growth rates of real public expenditure and of real public investment, in particular. The growth rate of real total public expenditures has decreased dramatically from an annual average of 3.5 percent in the first period to only 0.7 percent in the second period.[19] There has been a substantial decrease in the EMU rate as well, however, with an annual 1.3 percent it is still almost twice as high as its German equivalent. Even more dramatic is the development of German public investment since the mid 1990s. Real public investment expenditure declined with an annual rate of -3.7 percent, whereas the EMU as a whole managed to have an average annual increase of 1.1 percent. The German 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: After almost reaching the EMU level of about 3.0 percent of GDP during the first period it has continually

[17] Using primary deficits puts into focus those components of public debt directly connected to effective demand.
[18] At least for Germany long-term positive growth effects of public infrastructure investment should be uncontroversial. See Kitterer (1998) and Pfähler et al. (1996).
[19] 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.

decreased to only about 2.0 percent as compared to 2.6 percent in the EMU as a whole in the second period.

Wage policies

Wage policies can be assessed by nominal wage growth (compensation per employee), unit labour cost growth and the labour income share. Nominal wage setting affects unit labour cost growth and inflation. If nominal wages increase at a faster pace than productivity plus the price level do, unit labour cost growth and inflation will speed up.[20] 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, unit labour cost growth will slow down and cause disinflation. Finally, deflation may be the consequence. Deflation causes increasing real interest rates and rising real debts with negative effects on investment and growth. If deflationary processes have started, monetary policies 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. Empirical analysis for Germany and the EMU since the 1960s has shown, that the development of unit labour costs affects the development of output prices (Hein/Schulten/Truger 2005). The adjustment of the inflation rate to nominal unit labour cost growth, however, is incomplete. Therefore, nominal wage moderation is also associated with a tendency of labour income shares to fall. 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. Therefore, nominal wage growth according to the sum of productivity

[20] See Arestis/Sawyer (2003) and Hein (2002, 2004) for models of distribution conflict and inflation.

growth and inflation and hence constant labour income shares should be generally favourable conditions for growth.

Germany's too moderate nominal wage increases are the major cause for the below average inflation rate (Table 4): Nominal wage moderation has been more pronounced in Germany than in the EMU on average during the second period and has also forced unit labour cost growth and inflation considerably below the EMU average. However, slower unit labour cost growth and lower inflation can also be observed in the first period from 1985-1994 when Germany's absolute and relative economic performance had been much better. But during the first period 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 off in terms of lower interest rates.

The overly moderate wage setting in Germany did not only cause below average inflation rates. This wage policy also contributed to the acceleration of a tendency of declining labour income shares which had already started in the first period (Table 4). This decline, however, can also be witnessed in the EMU as a whole. Redistribution at the expense of labour can therefore not add to the explanation of Germany's *relative* performance compared with the EMU. However, this redistribution has contributed to the weak development of domestic demand and hence to Germany's weak *absolute* performance since the mid 1990s.

On the other hand, 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 and 2004. But this extraordinary export performance was insufficient to compensate for the associated deficiencies in domestic demand, as has been shown above.

A restrictive macroeconomic policy mix in Germany

In sum, 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. This is partly due to the integration of a former key currency country into a monetary union and the associated loss of the interest rate advantage, and is insofar inevitable. But it is also caused by the restrictive macroeconomic policy mix

implemented at the EMU level, which is particularly affecting a slowly growing low inflation country like Germany: the too restrictive ECB monetary policy strategy and the Stability and Growth Pact enforcing a restrictive stance on the member countries' fiscal policies. And a major contribution to macroeconomic mismanagement has come from German wage developments. We will take a closer look at the reasons for this in the following section.

5. Why has wage policy in Germany been so moderate?

One of the key problems derived in the previous section is Germany's below EMU average inflation rate, in particular since 1999. Below EMU average inflation has been caused by below EMU average unit labour cost growth which was not (and could not be directly) rewarded by the ECB's monetary policy. Therefore, the German economy has been particularly hit by the too restrictive ECB monetary policy strategy, has suffered from above average real interest rates and has recently faced an increasing risk of deflation.

Also the EMU as a whole has seen a downward trend in inflation and unit labour cost growth since the mid 1990s based on wage moderation (Table 4). Against a background of sustained mass unemployment the collective bargaining power of trade unions was substantially weakened. The most visible indicators of this were falling trade union membership and a significantly lower number of strikes and industrial disputes (Boeri et al. 2001, Schulten 2004). In addition, the 1990s saw the emergence in many European countries of new corporatist competitive structures which, as a result of national social pacts and 'alliances for jobs' led to the trade unions becoming firmly tied into the political agenda and committed to a competitive wages policy (Fajertag/Pochet 2000).

It should be pointed out, however, that wage trends in the individual EMU countries were by no means uniform during the 1990s, and in fact reflected the occasionally major differences in economic growth and employment trends between countries. Wage increases have been distinctly higher than the EMU average in some of the smaller EMU countries that achieved especially dynamic economic growth, such as Ireland, the Netherlands and recently also Spain. This has contributed to higher than average inflation as a result of these countries exceeding the national scopes for distribution (productivity growth plus inflation), in some cases by a considerable margin (Schulten 2002).

The situation was somewhat different in the larger EMU countries, i.e. in France, Italy and Germany. While overall wage increases in Italy were slightly higher than the EMU average and slightly lower than the EMU average in France, in Germany they have remained consistently below the EMU average since 1996. Germany has been pursuing the most

moderate wage policy in the EMU since then, and given that it is the largest economy in the EMU, this has also exerted a downward pressure on EMU average wage increases (Table 4). In 2004 wage moderation in Germany has caused a fall in nominal unit labour cost growth which means increasing deflation risks in this country.[21]

Table 5: Wages, productivity and prices in Germany, 1995-2004, annual growth rates in percent

	(1) Collectively agreed hourly wages	(2) Actual earnings per employee hour	(3) Wage drift[1)]	(4) Employee compensation per hour	(5) Labour productivity per hour	(6) Unit labour costs	(7) Prices (HCPI)
1995	4.9	4.5	-0.4	4.9	2.5	2.4	1.7
1996	2.6	3.0	0.4	2.8	2.3	0.5	1.2
1997	1.5	1.0	-0.5	1.6	2.0	-0.4	1.5
1998	1.9	1.4	-0.5	1.5	1.3	0.2	0.6
1999	2.9	2.3	-0.6	2.0	1.5	0.5	0.7
2000	2.0	2.8	0.8	3.3	2.2	1.1	1.4
2001	1.9	2.7	0.8	2.5	1.4	1.1	1.9
2002	2.7	2.1	-0.6	2.1	1.5	0.6	1.3
2003	1.9	1.2	-0.7	1.6	0.7	0.9	1.1
2004	1.3	0.2	-1.1	0.2	1.1	-0.9	1.7

Notes: [1)] (1) minus (2) in percentage points
Sources: Bundesbank (2005), Federal Statistical Office (2005), authors' calculations

The particularly low wage increases in Germany can be attributed to different reasons (Hein/Schulten/Truger 2005):

a) First, there has been a lessening of the trade unions' bargaining power. At the start of the 1990s the trade unions were still able to achieve (too) high collectively agreed wage settlements on the back of the boom following German reunification, contributing to high inflation and to overly restrictive monetary policies by the Bundesbank. But since 1996 trade unions' collective bargaining policy has been plunged into a major crisis and they have been forced to accept collectively agreed wage increases of under 3 percent and on occasion even under 2 percent (Table 5).

b) The crisis of trade unions' collective bargaining policy is shown even more clearly by actual earnings trends. In contrast to most other EMU countries, wage trends in Germany since the mid 1990s have been mainly characterized by a negative wage drift, with actual earnings growing even more slowly than collectively agreed wages. This is also a consequence of fundamental changes in the structure and operation of the German collective

[21] See the IMF (2003) on deflation risks in Germany. For a more extensive discussion of deflation risks in Germany and the EMU see Hein/Schulten/Truger (2005).

bargaining system. One clear indicator of this is the decline in the number of companies and employees covered by collective agreements that has been observed since the mid-1990s (Schnabel 2003).[22] The negative wage drift seems to suggest that wage increases in companies not bound by collective agreements were significantly lower.

c) Furthermore, even within the German collective bargaining system there are numerous indicators which suggest that the binding nature of collective agreements is being eroded, making negotiated collective wage increases harder to implement in practice and consequently favouring a negative wage drift. There is now a significant number of companies that are formally bound by collective agreements but which in practice do not comply with them.[23]

d) In addition to the above, 'hardship' and 'opening-clauses' were introduced into virtually all of the major sectoral collective agreements in the 1990s, allowing companies to deviate from the terms contained in collective agreements under certain circumstances.[24]

e) One final significant cause of the negative wage drift is the reduction of payments that are above the collectively agreed rate. A large number of companies in Germany continue to pay wages that are higher than those established in their collective agreement. Nevertheless, during the course of the 1990s, several companies began to use 'company alliances for jobs' to 'compensate for' the wage increases negotiated in collective agreements by cutting back on payments above the collectively agreed rate. This has led to the emergence of a new form of concession bargaining in which employees agree to give up established benefits in exchange for limited job security, thereby contributing to a substantial reduction in labour costs.

6. The fundamental problems for German (and European) economic policies and wage bargaining

We have argued that the main causes for Germany's stagnation and its below EMU average economic performance can be found in a restrictive macroeconomic policy-mix enforced on the German economy causing serious problems of domestic demand. This is partly due to the

[22] According to the IAB (Institut für Arbeitsmarkt- und Berufsforschung) figures for 2001, only 48 percent of all companies in western Germany and 71 percent of all employees were bound by collective agreements, while in eastern Germany the figures were as low as 28 percent of companies and 56 percent of employees (Bispinck 2003: 395).

[23] According to the results of the 2002 WSI Works Council Survey, which probably only covers part of the problem, 10 percent of companies occasionally failed to comply with the terms of current collective agreements, and a further 5 percent did so frequently. In the majority of these cases, the non-compliance involved failure to pay the collectively agreed wages (Bispinck/Schulten 2003: 159)

[24] Opening-clauses are now used by more than a third of all companies, although it is true that in the majority of cases these relate to the divergence of working time organization from the collective agreement, and the use of opening-clauses with regard to remuneration is for the time being still not very widespread (Bispinck/ Schulten 2003: 160).

integration of the former key currency country into a monetary union, and it is insofar inevitable. But it is also caused by the restrictive macroeconomic policy mix implemented at the EMU level, which is particularly affecting a slowly growing low inflation country: the too restrictive ECB monetary policy strategy and the SGP enforcing a restrictive stance on fiscal policies.

The stagnation caused by monetary and fiscal policies is aggravated by Germany's excessive wage restraint. Nominal wage growth and unit labour cost growth since the mid 1990s have been significantly lower than the EMU averages, and this is to a large extent responsible for the below EMU average inflation rate and has recently caused serious deflation risks. Consequently, even a monetary policy that might be suitable for the EMU as a whole is too restrictive for a country where growth and inflation are as low as in Germany. Furthermore, the fact that nominal interest rates have converged across the EMU and inflation in Germany is below average means that German consumers and investors are faced with real interest rates that are higher than the EMU average. On top of this, excessive wage restraint has also led to an acceleration in the tendency of the German labour income share to fall, which has in turn further weakened domestic demand.

The combination of a pronounced trend towards stagnation and significant deflation risks in the largest EMU country together with the ECB's overly ambitious inflation target for the EMU as a whole represents a major challenge for macroeconomic policies and in particular for wages policies in Germany and in the EMU:[25]

First, if Germany is to achieve an economic recovery with wage policies providing the nominal anchor, nominal wage growth will have to rise in order to achieve the sum of long-term productivity growth plus the ECB's target inflation rate. However, given the deterioration of the German wage bargaining system and the weak bargaining position of the trade unions, an increase in nominal wage and unit labour cost growth requires improved employment and higher GDP growth as a precondition. But more expansive macroeconomic policies at the national level generating more employment are difficult to achieve given the restrictions by the EMU policy mix.

Second, even if German trade unions managed to increase nominal wage und unit labour cost growth, and if inflation in Germany rose, such a rise would lead to an EMU inflation rate above the ECB's target as long as other EMU countries have inflation rates considerably above that target rate. Restrictive monetary policies will then be unavoidable as long as the

[25] On the interaction of the ECB's monetary policy with wage bargaining in Europe see Hein (2002).

ECB is not prepared to increase its inflation target substantially in order to allow the slowly growing larger economies more room to achieve a recovery.

Third, if the ECB is not prepared to raise its inflation target, it will be necessary to reduce inflation in the other EMU countries in order to allow Germany to have more inflation. It is therefore important for the bargaining parties and in particular the trade unions to intensify their efforts towards European-level effective coordination of wages policy. The aim of this process should be for each country to increase wages on the basis of its long-term domestic productivity growth rates plus the ECB's target inflation rate.[26] There are, however, major obstacles for wage bargaining coordination across Europe arising from the different degrees of coordination within the national bargaining systems, from the overall weakness of trade unions in Europe, from the tendency towards decentralisation of bargaining imposed by labour market policies, etc.. In addition, reducing inflation in the rapidly growing high inflation EMU countries would mean higher real interest rates and lower growth for these countries.

From these consideration it follows first, that wage policies in Germany - although they have contributed significantly to German stagnation - in the short run are rather impotent when it comes to improving German growth and employment. Wage policies in Germany urgently need to be supported by more expansive fiscal policies and particularly monetary policies. Second, in the medium run the conditions for the achievement of nominal wage growth in Germany according to the sum of long run domestic productivity growth and the ECB's inflation target have to be improved. Third, if it proves impossible either to convince the ECB to raise its inflation target or to coordinate wage policies across the EMU countries in the way described above, then in the medium to long run Germany's stagnation and deflation risks are likely to spread increasingly to the other EMU countries. Excessive wage restraint in Germany will not only fuel national economic stagnation but will also put pressure on wage policies in the other EMU countries in the medium term if they lose competitiveness and their current account deteriorates. If wage policies start to be widely used to protect or improve price competitiveness, then further redistribution at the expense of labour, rising effective demand problems and the threat of deflation will spread accordingly. If this happens, then even a more growth-friendly monetary policy by the ECB might be ineffective and in the next cyclical downturn the deflation risks may become actual deflation - in Germany but also in the EMU as a whole.

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26 For more detailed information on the current status and future prospects of the various trade union coordination initiatives, see Schulten (2003, 2004) and Traxler/Mehrmet (2003).

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