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The Role of Macroeconomic Policy in Overcoming Slow Economic Growth - International Comparisons and Policy Perspectives*

1. Economic Growth and Labour Markets in Europe

A fundamental point of this paper is, that - given existing structures (!) - the persistent problem of high unemployment in Europe cannot be attributed to tendencies in "jobless-growth" but is mainly caused by the fact that GDP-growth has been - and is still too low. This argument is first based on the pronounced cyclical reagibility of employment and unemployment. A first glance at Figure 1 immediately reveals this cyclical reagibility of European labour-markets - which is, however combined with "hysteresis-effects", thus creating a tendency of increasing long-term unemployment. In the next section the question as to why growth-rates in the 80s and 90s were much lower than compared to the 60s and 70s will be studied. The connections between employment and economic growth will be discussed in more detail in section 3 of this paper.

2. The Growth Perspective - the Central Role of Interest-Rates

Economic growth is, of course, the result of many factors. From a macroeconomic perspective the following factors can be seen as relevant to the low economic growth of the last decade:

- Exchange rate developments:
  The successful stabilisation of exchange rates from 1979 to 1992 was followed by a period of more or less flexible exchange rates in Europe. Due to increased uncertainty for investors and corresponding high risk premiums this resulted in substantial GDP-losses. According to estimates by the EU-Commission (1996) the exchange rate turbulences in 1995 lowered EU-GDP by about 1/2 percentage point (Germany 1 percentage point). Avoiding these exchange rate instabilities will create one of the major growth effects of EMU.

- Overvaluation:
  For many European currencies, especially those of the DM-bloc, there was a substantial overvaluation against the US-Dollar for a long period of the 80s and 90s. The reversal of this trend had an immediate impact on European export performance. This has been the major single factor for higher European growth rates in recent years.
- Fiscal policy:

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The recession of 93 and the fiscal impact of high interest rates resulted in budgetary deficits that in many European countries clearly were not sustainable. The provisions of the Maastricht Treaty thus only underlined an already existing need for fiscal consolidation. The dampening effect on European aggregate demand was however substantially increased by the simultaneous occurrence of restrictive fiscal policy in practically all European countries and by the high speed of fiscal consolidation. In 1995 net-lending of the public sector in EU-states was about 5% in average. Reaching the 3% goal meant - certeris paribus - a dampening effect on GDP of about 3% to 4% in two years (M. Marterbauer, 1996, p.8).

When considering macroeconomic relationships between economic growth and fiscal policy it is important to pay special attention to flow-of-funds-effects - which unfortunately are often neglected in supply-side oriented analyses. As will be later shown, a policy of high interest rates will lead to a decrease in investment-rates and thus to a reduction in net-lending of the enterprise sector of an economy. Given stable (or in some European economies even increasing) rates of private savings and constant (or due to revaluation effects) declining external balances the lower net-lending of the enterprise sector "automatically" has to be balanced by higher net-lending of the public sector. The higher net-lending of the public sector thus essentially was - via automatic stabiliser effects - the effect and not the cause of the slow growth of European GDP.

Seen the other way round this means that a permanent and substantial fiscal consolidation in Europe will only be possible if sufficiently high rates of economic growth will be achieved again over a longer period. The American experience is a good illustration of this point.

It may be argued that lower public deficits enable central banks - and the markets - to lower interest rates, thus contributing to higher growth as well as helping with fiscal consolidation. The latter is obviously true. Given an average public debt stock of 73,2% of GDP (EU-15, 1996) an interest rate reduction of two percentage points results in lower public expenditures and lower net-lending by about 1% of GDP. The basic assumption of a causality chain lower deficits - lower interest rates - higher growth is however problematic from the point of view of flow-of-funds-analysis. If lower deficits ceteris paribus via lower aggregate demand lead to lower growth this will eventually result in lower interest rates - but the path for adjustment will be long and costly in terms of employment losses.

These costs can only be avoided if the negative demand effects of the public sector are compensated by positive effects in other sectors of the economy. This e.g. was the case in the Netherlands, where higher economic growth was achieved via increased external balance surpluses, based on a devaluation of the real (not the nominal) exchange rate, which in turn was achieved by substantially lower wage increases relative to important foreign-trade partners (especially Germany)[1]. It is obvious that this kind of strategy would result in a "beggar-my-neighbour"-policy if it were followed by all EU-members. A growth-creating effect for all EU-countries is only to be expected by an increase in foreign-trade balances vis-à-vis third countries.

[1] From 1987 (1992) to 1995 the Dutch current account surplus increased from HFL 6.4 bill (13,8) to 24.5 bill. For total EU the current account deficit of 62.4 bill. US $ in 1992 turned into a surplus of US $ 82 bill in 1996 (Statistisches Monatsheft der Oesterreichischen Nationalbank 11/1997).

This happened recently due to the devaluation of most European currencies vis-à-vis the US-Dollar. As the events in South-East-Asia have shown, relying on external surpluses however cannot be a stable policy-strategy on a global scale and cannot be a permanent substitute for internal demand management.

- Monetary policy:
  There are two basic neo-classical propositions which are largely reflected in practical policy statements by (European) central-banks:
  - Central banks have only direct influence on short-run nominalinterest rates. Long-run real interest rates can only be influenced in an indirect way by lowering inflationary expectations.
  - Real investment decisions are based on long-run interest rates. Central-banks thus have no direct influence (and responsibility) with regard to the real sector of the economy. This view is e.g. reflected in the provisions of the European Central Bank where price-stability is stipulated as the sole policy objective.

  Although widely accepted in the field of practical monetary policy this neo-classical position is not undisputed in economic theory discussions. In this paper I would like to refer to a systematic, empirically tested counter-position in the tradition of " Keynesian" aggregate demand analysis[2]. The main points of this position can be summarised in the following way:

- The largest part of financial liabilities of the enterprise sector of an economy consists of bank-credits with variable (!) interest rates[3]. These interest rates (e.g. the "prime rate") show much larger variations as compared to the typical long-run interest-rate on government bonds. Via the refinancing costs of the banking sector these enterprise-related interest rates are directly linked with central-bank monetary policy.

  As can be seen from Figures 2 and 3 there is a strong - although not always direct - connection between short-run and long-run[4] interest rates. Comparing German and US data the dramatic extent of the German "interest-rate shock" of 1990 also becomes visible, as well as the generally more stable trend of US monetary policy.

- Variations of the variable "prime rate" not only influence the costs of new investments but have a direct effect on the total financing costs of the accumulated (credit-financed) debt of the enterprise sector. Total financing costs are thus subject to the effects of an "interest-rate accelerator". If, for instance, all financial liabilities of an enterprise consist of bank credits with flexible interest rates, an increase in the interest rate from 5% to 6.5% means an increase in interest payments of 30%. This means that a larger share of the

[2] These reflections are largely based on several studies by the Austrian economist Stephan Schulmeister (1996).
[3] In Germany (and Japan) about 85% of total financial liabilities of the enterprise sector consist of bank-credits and "other liabilities" (trade obligations), in the US this percentage is about 70% (Schulmeister, 1996, p. 46). Although the role of capital market - financing and increased profit shares have recently reduced the role of bank credits in financing the enterprise sector, bank credits still remains by far the most important form of external financing in Germany.
[4] For long-run interest rates long-run treasury bill rates are used. For direct use of "prime-rates" see S. Schulmeister (1996).

operating surplus will have to be used for interest payments, resulting in a profit squeeze of the enterprise sector of the economy.

- Enterprises cannot react immediately to changes in their cost - and financing - structures. Empirically after about two years higher interest rates will result in lower investment and employment. In a following recession the flow-of-funds deficit of the enterprise-sector would decline (due to lower investments). As has been shown before automatic stabiliser effects, ceteris paribus, will lead to increasing budgetary deficits[5]. Again an increase in interest rates has to be seen not as the result but as the cause of public deficits.

- Eventually the recession would also induce monetary authorities to follow a more expansionary policy which would be reflected in lower interest rates. With strong fluctuations in credit interest rates the rate of return on real investment, however becomes more uncertain, causing increasing risk-premiums and in general leading to higher attractiveness of financial investments as compared to real investments. Thus also in a climate of low credit-interest rates and - due to the credit accelerator - fast rising profits, it may take quite a long time for a substantial increase in private investments to occur.

- For a medium and long term perspective the dynamic budget constraints for stabilising the debt/income relationship are essential. Here the relationship between interest rates and rates of GNP-growth has a decisive effect. If the rate of interest lies above the rate of growth, enterprises - as well as the government-sector - will have to run primary surpluses for stabilising their debt/income-relationship. Their net-deficits (net debt-increase) have to be smaller than the amount of interest payments on the total debt (Blanchard et al, 1990).

One of the most important reasons for the slow economic growth of the last decade can be seen in the structural changes with regard to the interest-growth-differential. This interest-growth-differential was negative in the 50s and 60s and has been positive since the late 70s. Although in the 90s in particular there was a sharp rise in profits, this did not lead to an increase in real investments. Enterprises rather used this for a reduction in their net-borrowing. The changing interest-growth differential also made financial investments more attractive, resulting in a fast growth of the financial assets of the "non-financial business-sector of the economy. All this contributed to the substantial (and continuing!) reduction in enterprise net-lending as is demonstrated for Germany in Table 1. As has been discussed above, this "automatically" had to be balanced by higher net-lending shares of the public sector.

In the context of the preparation for EMU over the last number of years a substantial harmonisation - both of short-run and long-run European interest rates has been observed. Combined with the lowering of interest-rates which mainly reflects the effects of Europe's severe recession, this tendency may offer the opportunity that an EMU-regime of monetary policy may be able to reach a more favourable interest growth-differential. In general, a large relatively closed economy (such as the US or the EMU), where exchange-rates are of no major policy-concern, offers better chances for growth-oriented monetary policy as compared to small open

[5] This, of course, also works the other way round as can be observed at present in the USA.

economies. Also the deflationary tendencies connected with the recent Asian crises in this context may be a blessing-in-disguise, as it will allow the future ECB to engage in a policy of low interest-rates without risking "reputation-dangers" for the new European currency.

These monetary policy perspectives are in agreement with proposals, for instance by W. Filc (1998), to take interest rates as the relevant (intermediate) policy target of a future European monetary policy. Technically this refers to short-run interest rates, which according to Filc (1998, p. 32) should only be slightly above the rate of inflation. As has been discussed above international experience demonstrates that such a policy has positive effects on economic growth without risking inflation. Obviously a policy of lower interest rates can and will be no cure for all aspects of low European growth-rates. But interest-rate policy is indeed a very powerful tool because it effects four strategic fields of economic policy. Thus lower interest rates would help with regard to the following:

- higher real capital investment,
- preventing an overvaluation of the Euro,
- lowering public expenditure on interest payments and thus leading to a reduction of public net-lending without negative demand - and thus labour- market effects,
- lower macroeconomic (employment) costs of securing price-stability. Higher degrees of capacity-utilisation and the lower direct cost effects of interest payments mean decreasing average costs in production. Given the competition-effects of the Single European market this will be translated directly into lower price-increases. It has to be added that this perspective has to be complemented by a stability (i.e. productivity-) oriented wage policy on the macroeconomic level, as will be discussed later.

3. Economic Growth and Employment

3.1 General View

A basic proposition of this paper is, that there is a strong connection between the dynamics of employment/unemployment and macroeconomic growth. In addition to Figure 1 this is also demonstrated in Table 2. This basic connection is however modified by a large number of additional macroeconomic as well as structural factors. In the context of this paper only some macroeconomic aspects will be looked at.

As can be seen from Table 2 there are very few European countries which have managed to retain a relatively low rate of unemployment or even reduce it. Countries, where one can observe a very strong and pronounced link between economic growth and unemployment dynamics are - on the positive side - Norway, Ireland, Portugal and - to a certain extent - Great Britain. Examples for substantial increases in unemployment combined with low rates of growth of GDP are for instance Italy and Sweden. There are however also countries, where this relationship between economic growth and unemployment is modified by a higher "employment intensity" of economic growth rates. This does not only refer to the well-known example of the US, but for instance also to the Netherlands, Denmark and to a certain extent also Austria. It is therefore of

interest to discuss these "special cases". A first explanation may refer to the specific role of supply - side measures on the labour-markets in each of these countries. In the Netherlands this took the form of a vast increase in part-time work, in Denmark a reduction of labour-supply was achieved by the introduction of special forms of "sabbaticals" for professional training and for child-care. The case of Austria will be examined later.

3.2. Wage Shares, Wage Flexibility and Employment

In addition also to the general picture given above a specific marcroeconomic aspect may be of interest. This refers to the connection between wage flexibility and employment - a connection which is central to proposals from the side of the OECD (1994) and the EU. The relevant question here are the macroeconomic aspects of wage flexibility - not the structural effects of wage policy, e.g. with respect to wage differentials. To reduce unemployment economists recommend (real) wage increases that are below the increase of labour-productivity. This would induce forms of technological substitution between capital and labour, thus directly creating increased labour demand. Indirectly lower rates of labour-productivity-growth would increase the "employment-intensity" of economic growth.

This kind of policy has in fact been followed in Germany and also in Austria, as can be seen from the declining wage-shares of GNP (Figure 3). But although there is a permanent tendency of declining wage-shares since the 1980s this has not prevented a substantial rise in unemployment. Rather the decline in the growth of real wages has led to an increase in the profit share of GNP. A macroeconomic policy of restricted wage-increases thus has not inducedhigher demand for labour, nor has it resulted in higher real investments (at least not in Germany or Austria). This development has, of course, to be seen in connection with the tendency of rising interest-rates discussed above. This tendency contributed to a shift from real to financial investments. The structural effects of the opening of Eastern Europe, globalisation, etc. also have to be taken into account.

It is of interest to compare these developments with the experience of the USA. Compared with Germany and Austria the US wage share is not only higher but also much more stable. As there also have been substantial decreases in the rate of growth of real wages (especially!) in the US, the constant wage-share means that in this case wage-restriction has in fact led to an increase in employment and also to a decrease in the rate of growth of labour-productivity.

There are many factors to explain this phenomenon (comp. e.g. R.B. Freeman, 1997, H. Walther, 1997). One institutional aspect will be discussed in the next section of this paper. Other factors may be insider-outsider effects, different qualification structures etc,. In this paragraph one factor of special macroeconomic interest will be discussed. This is the aspect of macroeconomic flexibility of real wages.

Table 3 gives an overview of estimations for the direct impact of unemployment on wage increases and of the long-run elasticity of real wages[6]. It can be seen that both indicators show substantially higher values for Germany and most European countries than compared to the US - with Austria showing by far the most flexible wage-policy. When seen in a macroeconomic context this result may give rise to several interesting considerations: In periods of low growth there is no clear and direct connection between macroeconomic wage flexibility and employment performance. For small open economies such as Austria and the Netherlands downward wage flexibility may serve as a way to devaluing the real exchange rate - as long as this is not neutralised by exchange-rate effects of rising interest-rates. For the whole EU such a policy would only result in beggar-my-neighbour-effects.

There is, also, however an interesting second aspect with regard to international differences in wage-flexibility. This aspect refers to the reaction of wage increases in periods of an economic upswing. A high "upward mobility" of wages means that inflationary pressures and "preemtive measures" by central banks will occur at a much earlier stage of an economic upswing, thus contributing to a higher "structural" base of unemployment. This may (partially) explain the different attitudes especially of the US and the German central bank.[7]

The present US discussion about "New Age-Economics" is basically about the question as to whether the observable low "inflation propensity" of the present strong US economy is only a matter of delays or indicates a new structural phenomenon. Analytically this means that "old", well-established (short-run) Phillips-curve relationships, on which central-bank policies were oriented[8], may have changed.[9] This proposition has to be seen however against the background of the already relatively low extent of US macroeconomic wage-flexibility, as demonstrated in Table 3. From a policy point of view a tendency of decreasing "upward" wage flexibility in Europe, too, would allow the European Central Bank to engage in a more expansionary policy as compared towards former national central banks. Such a tendency can in fact be expected by larger and thus in real terms more flexible European markets for labour and products.

3.3 Productivity and the Service Sector

As has been indicated above there are a number of structural aspects connecting macroeconomic growth, labour productivity and employment. In this section one institutional aspect will be studied which is of special importance for explaining the fact why high wage flexibility has so little employment effects in Europe. This refers to the role of the service sector in an economy. In contrast to the industrial sector the service sector may be characterised by a substantially higher wage-elasticity of labour demand. The small employment-effect of

[6] The parameters in Table 3 are obtained from the QUEST II-Model of the EU-Commission. See also Institut für Höhere Studien (1998).
[7] According to H. Walther (1997, p. 125) in Germany in the period of 1961-1965 already an employment increase of more than 0.5% led to an increase of real per-unit labour costs in the next year. For the US this employment increase had to be 2%.
[8] See e.g. A.S. Blinder (1997, p. 39).
[9] For a critical discussion of the "Nirvana perspective" see A.S. Lown, R.W. Rich (1997).

wage flexibility, especially in Germany and Austria, has thus to be seen in connection with the share of the service sector in these countries - as compared to the US, the Netherlands and the UK (compare Table 4). To a large extent this reflects differences in economic structures (compare e.g. the different employment shares of finance and business services!). To a certain extent these differences however indicate different institutional policy options - with very direct employment effects.

In the US, community, social and personal services (such as e.g. education and health care) are organised in a private or semi-private way, whereas in European welfare states, such as in Germany and Austria, they are provided by different levels of government. The way of provision has different allocative and distributive effects which will not be discussed here. It is however obvious, that these kinds of services are subject to increasing demand and - due to their low productivity - show a large growth potential for employment. The realisation of this services-related growth potential contributed in a big way to the positive US employment performance. For the European welfare-states however this growth potential could not be realised due to institutional - political rigidities. As these services - to a large extent with good distributional reasons - are publicly financed in Europe an expansion of this sector and thus of public expenditure would lead to higher shares in public revenues. In fact, however, in most European countries the share of real public expenditure declined due to budgetary restrictions. The alternative to public provision would be to allow for private suppliers of relevant social services. Many European countries have however chosen a third way with negative employment effects: For political reasons no private supply of these services was allowed, but on the other hand it proved also politically not possible to provide public financing for an expansion of these services. Being unable to take one of these options meant the loss of vast opportunities for economic growth and for new employment.

4. The Austrian Experience - Macroeconomic Perspectives

In the final section of this paper Austria will be brievy discussed as a case-study of a small open economy that has managed to keep unemployment-rates remarkably low for a long period of time (see Table 5). With the exception of the last few years employment figures have also been more dynamic when compared to the rest of Europe, participation rates are relatively high and rising.[10] A major cause for the differences between European, particularly also the German labour-market performance and the results for Austria can be seen in structural differences (e.g. the higher employment share of the service-sector in comparison with Germany). Such structural differences both on the supply and the demand side of labour markets are also to be observed among the different regions of large countries. These kinds of differences may be the prime explanation for the large - and rather stable - regional variation of unemployment rates for instance in Germany.

Considering the case of Austria it can be expected however that macroeconomic factors are also of relevance for the explanation of differences in labour market dynamics. Without attempting a general analyses[11] special

[10] Participation rates (labour force as percentage of total population between 15-65 years) 1995; Austria 59.4%, Germany 57.7%, EU 15 55.2%.
[11] For more general discussions see e.g. E. Walterskirchen (1997), E. Nowotny (1997).

attention will be given to the connection between cyclical volatility of unemployment and the levels of unemployment because in this respect Austria is indeed a special case in Europe.

For a number of theoretical reasons (e.g. when assuming a non-linear short run Phillips-Curve) it can be expected that a lower cyclical volatility of unemployment ceteris paribus will be connected with lower levels of unemployment. In a comparison of various European small open economies (Table 6) for the period 1970-1996 Austria in fact shows the lowest average rate of unemployment and by far the lowest variability of unemployment rates.

It has to be noted that the differences in the variability of unemployment rates are much more pronounced than the differences in output-variability. The lower cyclical volatility of unemployment in Austria thus cannot be explained by lower cyclical variations of GNP. At first sight this is in contradiction to the position stressed in section 1 of this paper, that unemployment dynamics basically is determined by the dynamics of GNP-growth. It has to be noted however that one has to distinguish between the basic connection between GNP-growth and employment/unemployment and the modifications of this basic connection due to structural and policy influences. This can be seen in more detail looking at the reaction of employment to output deviations from the trend. and the reaction of labour supply to employment deviation from the trend. In the first case Austria shows much lower, in the second case Austria shows much higher values than compared to the other countries, analysed in Table 5.

Lower cyclical reactions of employment to output changes, i.e. procyclical variations of labour-productivity could be the indicator of "labour hoarding" in periods of cyclical downswings and of anticyclical government employment policies (promoting part-time work, employment projects, etc.). In fact in Austria these kinds of strategy played a substantial role in the 70s , using e.g. the (then) nationalised industries and public investment programmes as instruments of employment policy (E. Nowotny, 1982). There have also been however additional factors of cyclical employment stabilisation, such as the higher flexibility of real wages discussed in section 3.2 and the effects of a larger service sector of the economy.

Unemployment dynamics is also affected by the reaction of labour supply to changes in labour market conditions. Procyclical changes in labour supply have a dampening effect on cyclical variations of the rate of unemployment. The strong labour supply elasticity in Austria is due to procyclical reactions concerning labour-immigration (also in Switzerland), but is also due to policy-induced effects concerning the retirement age and female work-force participation (e.g. by creating opportunities for additional maternity-leave). It has to be noted however that participation rates are relatively high in Austria, which indicates that the main long-run effect of these measures was not a permanent reduction in the labour-supply but rather substitutions-effects for instance in favour of youth employment.

It is of special interest to observe that in all countries shown in Table 5 there has been a dramatic change between reactions in the 70s and in the 80s and 90s. For 1984-1996 coefficients close to 1 indicate that now

variations of output almost directly translate into cyclical reactions in employment. Next to Sweden[12] Austria exhibits the most dramatic change in employment reactions. This can be interpreted as indicating the end of a specific "Austrian way" of "active" employment policy. This development was brought about by several factors: One was the negative effects of the European steel-crisis on Austria's nationalised industry, leading to (partial) privatisation and intensive restructuring. In a more general way due to increasing debt-ratios and - later - in the process of preparation for EMU-membership public net deficits were reduced rapidly[13]. This did not only weaken general demand but it also had an immediate negative effect on the important role of the public sector as the "direct employer of last resort"[14].

Even if there has been a structural change in Austria's labour-markets, unemployment in the country in recent periods has also been much lower and has been increasing more slowly when compared to other European countries. There has been some increase in the form of "passive" labour market policy (increased rates of early retirement, etc.), but there are two main factors which are also of general relevance:

- The active macroeconomic and structural policies of fighting unemployment already at an early stage of employment problems prevented a high level of "structural unemployment" (and especially long-term "hysteresis"-unemployment). Of course a small open economy is not able to isolate itself permanently from rising European (and for Austria particulary German) unemployment. But it pays "to fight as long as you can". As can be seen from Figure 1 since the 1980s the development of unemployment in Austria closely followed the European pattern - but as can be seen from Table 5 at a much lower level. This means that the specifically employment-oriented active macroeconomic fiscal policy of the 70s could not be followed permanently - but the positive results of this policy did not get lost in later periods. Macroeconomic policies to prevent large economic fluctuations and a rocketing of unemployment in recessions not only have short-run but also positive long-run effects.
- Such an employment-oriented macroeconomic policy has to be based on a close co-operation between fiscal, monetary and incomes policy. This was - and largely still is - the case in Austria. The system of "Social-Partnership" leads to the relatively high real wages flexibility, discussed in section 3. By taking care of aspects of "distributional fairness" the system of "Social-Partnership" also enables a stability oriented fiscal policy without social turmoil. The role of monetary policy is restricted due to the strategy of following a "hard currency" policy of a fixed exchange rate with the DM. But within this context the Austrian Central Bank tries to support an employment-oriented policy by the government and the social-partners. This co-ordination is helped by the fact that the social partners (trade unions and associations of industry, commerce and agriculture) are also (minority) share holders of the Austrian Central Bank and are directly represented in its decision-making body.[15] The experience of Austria thus underlines the benefits of policy co-ordination and the importance of the integration of monetary policy into such a system of policy co-ordination.

[12] The coeeficient of higher than 1 in Sweden can be seen as indicating the "explosion" of an "employment bubble".
[13] Between 1995 and 1998 total public sector net deficits (as % of GDP) were reduced from 5,1% to 2,7%.
[14] From 1987-1996 employment in Austria increased for 210 000 persons, 140 000 of which were added to the public sector workforce (including health and education).
[15] This latter provision had to be changed in the course of Austria's preparations for EMU-membership.

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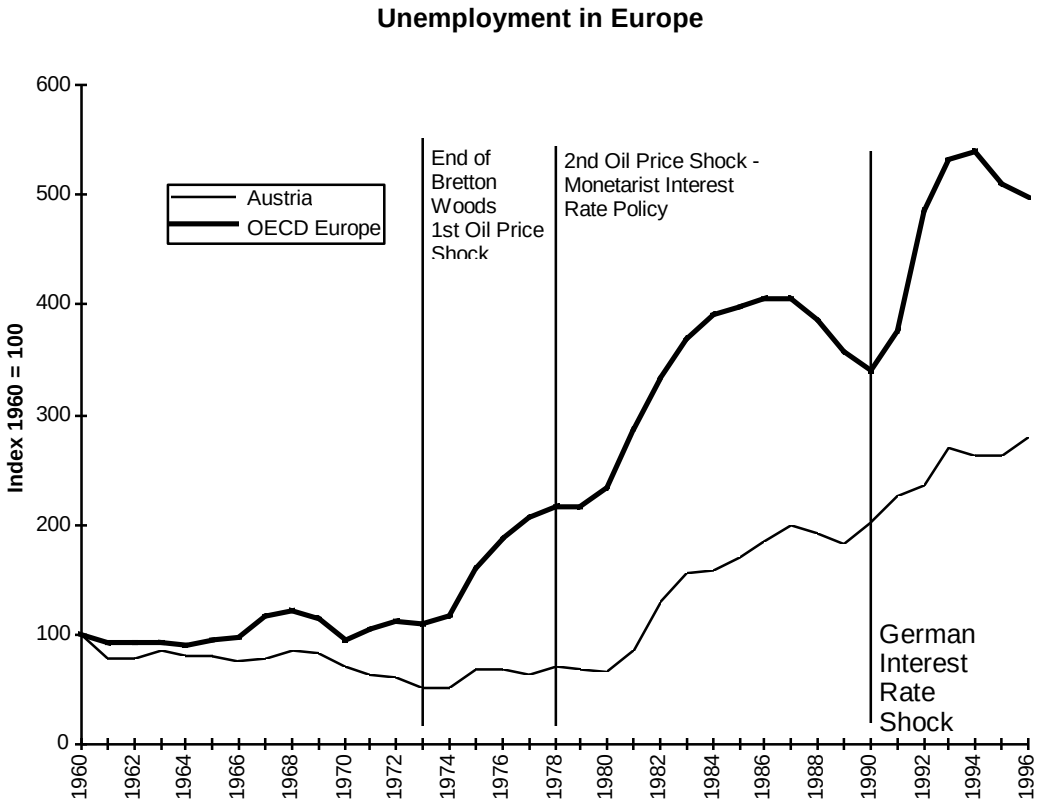
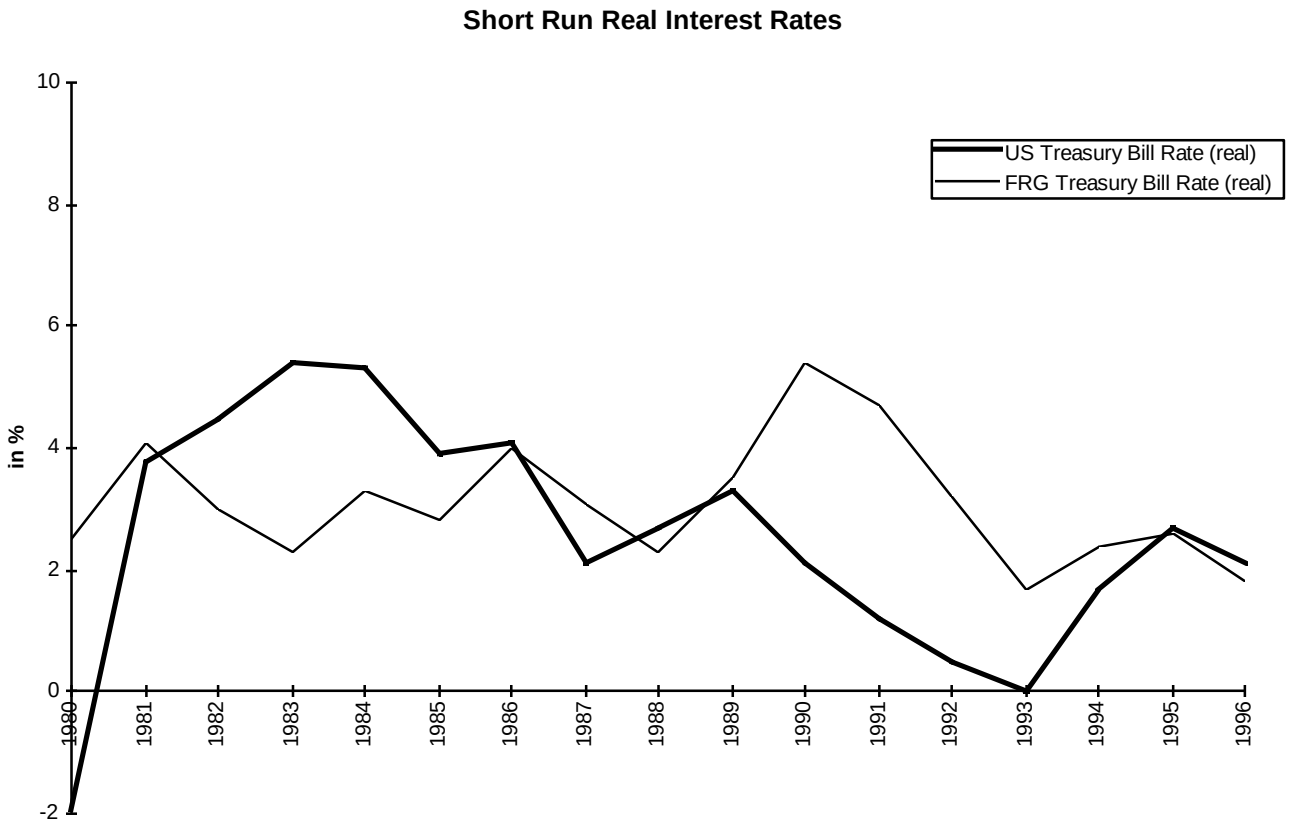
Figures and Tables

Figure 1



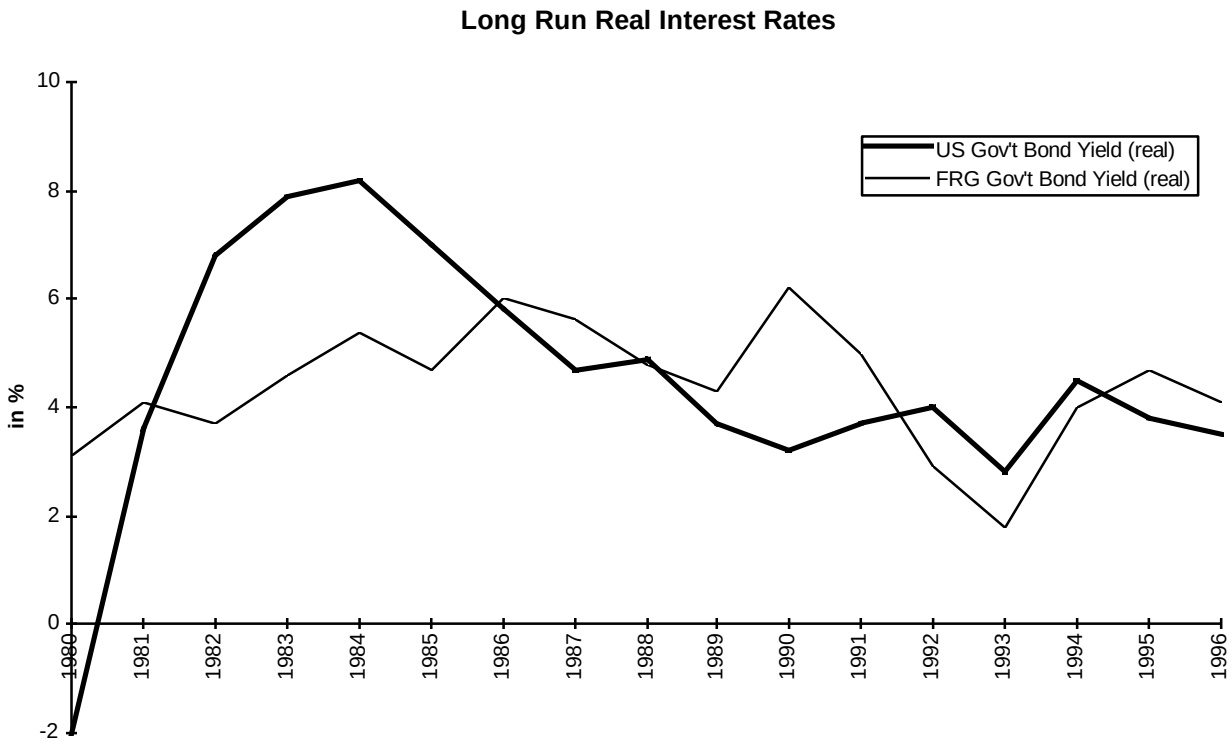
Source: OECD Labour Force Statistics, WIFO Datenbank

Figure 2



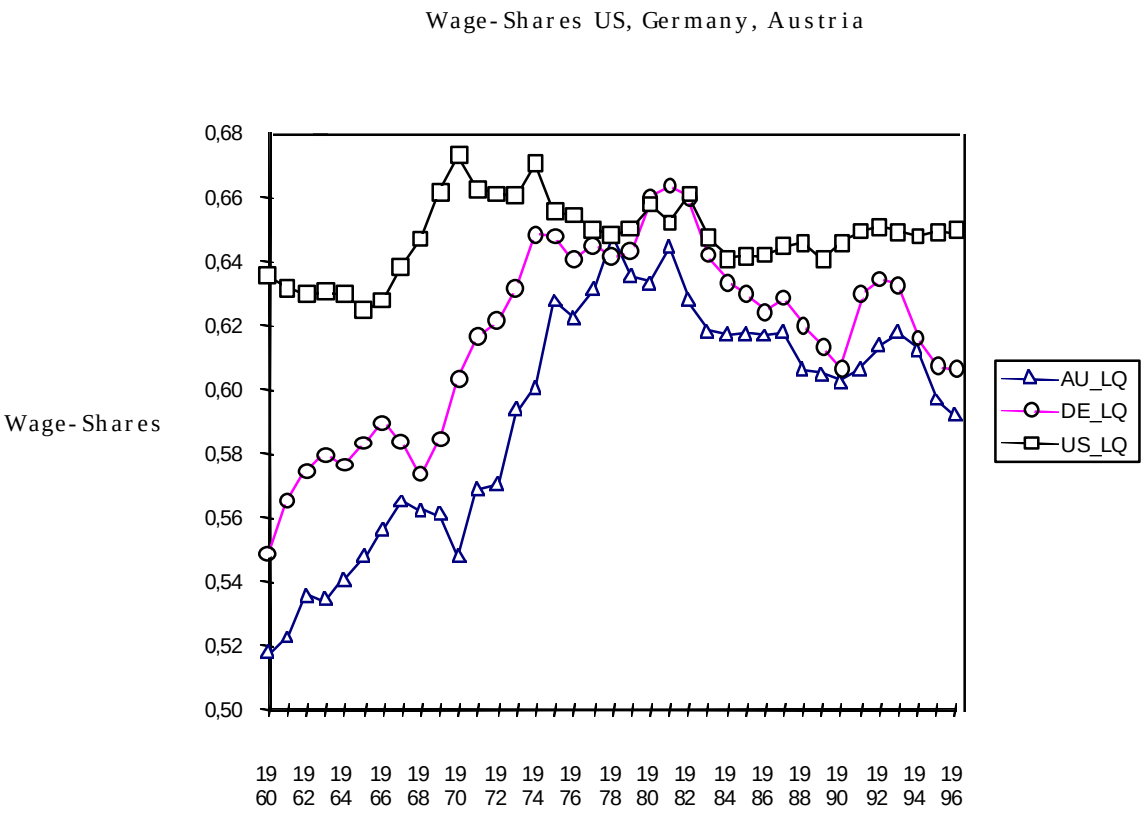
Source: OECD Financial Indicators, Paris 1997

Figure 3



Source: OECD Financial Indicators, Paris 1997

Figure 4



Source: H. Walther (1997, p. 122)

Table 1

Sectoral Financial Balances

Net surplus/net deficit in % of GDP

	1973	1975	1992	1994	1995	1996	1997
Germany							
Private housholds	7,9	9,4	7,0	7,6	7,5	7,6	7,5
Enterprise sector	-7,8	-2,7	-4,0	-6,2	-4,9	-4,4	-4,4
Public sector	1,2	-5,7	-2,3	-2,4	-3,6	-3,8	-3,2
External balance[1)]	-1,3	-1,0	-0,7	1,0	1,0	0,6	0,1
Austria							
Private households	4,7	6,2	7,9	6,3	6,4	5,4	4,9
Enterprise sector	-6,3	-3,8	-5,9	-2,5	-3,2	-3,6	-4,2
Public sector	1,3	-2,5	-2,0	-4,8	-4,9	-3,8	-2,6
External balance[1)]	0,3	0,1	0,1	0,9	1,8	2,1	1,8

[1)]External balance: Current account with reversed sign.

Source: E. Nowotny (1996, p. 602), Österr. Institut f. Wirtschaftsforschung, Germany 1996/97: Gemeinschaftsgutachten der Wirtschaftsforschungsinstitute

Table 2

Unemployment Rates and Economic Growth

	1979-97		1990-97		
	Change in Rates of Unemployment[1]	Growth Rate of GDP[2]	Change in Rates of Unemployment[1]	Growth Rate of GDP[2]	Unemployment Rate (1997)
Australia	2,6	2,9	1,7	2,6	8,7
Austria	4,4	2,1	1,4	1,7	6,1
Belgium	5,1	1,7	3,9	1,2	12,7
Canada	1,7	2,3	1,0	1,6	9,2
Switzerland	5,0	1,4	4,8	0,0	5,3
Germany	8,2	2,4	5,2	2,7	11,4
Denmark	1,7	1,9	-1,7	2,2	7,9
Spain	13,0	2,3	5,3	1,5	21,0
Finland	8,6	2,2	11,1	0,6	14,6
France	6,6	1,8	3,5	1,2	12,4
Great Britain	2,4	1,9	1,0	1,5	6,9
Greece	8,6	1,5	3,5	1,4	10,5
Ireland	3,4	4,2	-2,6	4,9	10,3
Island	3,4	2,4	2,0	1,7	3,8
Italy	6,6	1,8	3,2	1,0	12,3
Japan	1,3	2,8	1,3	1,4	3,4
Korea	-1,3	7,2	0,1	6,3	2,5
Luxembourg	3,0	4,2	2,4	4,2	3,7
Mexico	-0,6	2,4	1,4	2,4	4,1
Netherlands	2,2	2,1	-0,2	2,1	5,8
Norway	2,0	3,0	-1,3	3,4	3,9
New Zealand	4,9	2,1	-1,1	1,9	6,7
Portugal	-1,4	2,5	2,1	1,7	6,8
Sweden	6,0	1,4	6,5	0,7	8,1
Turkey	-2,6	4,1	-1,9	3,7	6,1
USA	-0,8	2,3	-0,6	2,0	5,0

[1] In percentage points
[2] Average annual growth rate of real GDP

Source: OECD Main Economic Indicators

Table 3

Impact of Unemployment on Wage Increases

Country	Direct Effect	Longrun Elasticity of Real Wages
Belgium	-0.90	1.18
Denmark	-0.90	1.11
Germany	-0.65	0.89
Greece	-0.55	1.24
Spain	-0.88	1.86
France	-0.90	1.27
Ireland	-0.48	0.71
Italy	-0.95	1.44
Netherlands	-0.95	1.42
Austria	-1.60	2.53
Portugal	-0.64	1.45
Great Britain	-0.50	0.74
Finland	-0.75	1.28
Sweden	-1.10	1.83
USA	-0.50	0.55
Japan	-2.50	3.47

Source: Roeger, W., in't Veld, J. (1997)

Table 4

Role and Structure of the Service Sector, 1994
(Contribution to Employment in % of Total Employment)

	Total Service Sector	Producers of Government Services	Community, Social and Personal Services
Germany	59,1	15,9	n.a.
Austria	63,2	21,8	5,5
Netherlands	70,4	12,7	17,1
France	69,7	28,0	7,2
Sweden	69,9	32,0	8,2
U.K.	70,2	19,4	11,8
U.S.	73,1	14,5	17,5

Source, OECD in Figures, Paris 1997

Table 5

Austria: Economic Growth, Employment and Unemployment

	1970/80	1980/90	1990/95	1995/98[3]
Real GDP-growth[1)]				
Austria	3,4	2,3	2,1	2,1
OECD-Europe	3,0	2,5	1,8	2,7
Employment[1)]				
Austria	0,7	0,2	0,6	0,1
OECD-Europe	0,5	0,7	-0,3	0,7
Unemployment[2)]				
Austria	1,9	4,4	6,2	7,0[4)](4,25)[5)]
OECD-Europe	4,0	8,2	9,4	6,1

[1)] Average annual percentage changes
[2)] absolute percentage
[3)] forcast
[4)] national definition
[5)] OECD-definition

Source: ÖSTAT/WIFO DB

Table 6

Cyclical Volatility of Employment and Unemployment

	A	Dk	Nl	S	CH
Average rate of unemployment 1970-1996	4,90	7,70	7,70	4,30	1,50
Variability of unemploment-rates 1979-1996	0,35	1,10	1,02	0,84	0,47
Variability of output[1]	1,79	1,92	1,55	1,73	2,57
Employment-reaction[2]					
1979-1996	0,47	0,62	0,52	0,77	0,67
1979-1983	0,33	0,81	0,49	0,40	0,70
1984-1996	0,87	1,20	1,00	1,40	0,93
Labour-supply reaction[3]					
1979-1996	0,83	0,26	0,12	0,51	0,85
1979-1983	0,55	0,25	0,03	0,49	0,94
1984-1996	0.93	0,26	0,20	0,51	0,66

[1] Standarddeviation of first differences
[2] Coefficient b in a regression connecting 'employment deviation from trend' and 'output deviation from trend'
[3] Coefficient b in a regression connecting 'labour supply deviation from trend' and 'employment deviation from trend'

Source: IHS (1998, p. 32)