

# Real Wages and Unemployment: There is No Trade-Off

## Neoclassical Employment Theory Fails to Explain the Different Labor Market Developments in the United States and Europe

by

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In the last few years a number of countries have been able to achieve great progress in fighting unemployment. These countries include economies as diverse as the United States, Great Britain, France, the Netherlands, Sweden, and Spain. One can even claim that full employment has been attained in some industrialized countries, which is rather amazing if we look back at the expectations which the majority of experts from various schools of thought had a while ago. Back then it seemed that the goal of full employment would have to be abandoned forever. The explanation for this phenomenon is still controversial. However, in discussions on both the national and international level, one explanation seems to have found the greatest resonance: that swift changes in a country's employment situation and attainment of full employment has, above all, to do with the level of wage restraint in the economy. At the beginning of 1999, the IMF, for instance, explicitly made such a claim in its comparison of labor market developments in Europe and the United States.<sup>2</sup>

According to this neoclassical train of thought, unemployment emerges in a market economy only if real wages (or the total real costs of labor) rise "too quickly" relative to developments in productivity. Consequently, unemployment can only be eliminated if real wages do not keep pace with developments in productivity for a sufficiently long period of time.<sup>3</sup> According to this theory, labor has its market price just like any other good and this market price is the mechanism which brings supply and demand into equilibrium. Unemployment which goes beyond temporary frictional unemployment means that the price on the labor market, the real wage, is not flexible enough to achieve equilibrium.<sup>4</sup> If real wages rise "too quickly", companies cut back on labor and substitute relatively inexpensive capital for labor, which has become too expensive. Unemployment is the result. If real wages decrease, then the demand for labor increases while the demand for capital falls and full employment becomes possible once again.

This theory stands out because of its clear message. It is surely macroeconomic analysis, because it makes claims about macroeconomic aggregates like the level of unemployment and wages. The rigorous character of the neoclassical theory is therefore incompatible with popular but untenable propositions such as: the wage level is less significant than, for instance, the

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<sup>1</sup> This is a shorter version of a study which was commissioned by the Hans-Böckler-Stiftung and the Federation of German Trade Unions. The unabbreviated version can be found at [www.flassbeck.de](http://www.flassbeck.de).

<sup>2</sup> The International Monetary Fund (IMF) addresses the issue of European unemployment in the World Economic Outlook, p. 40.

<sup>3</sup> The most prominent proponent of this theory is the German Council of Economic Advisors, which has supported this theory since the 1970s. See German Council of Economic Advisors (1999), starting at Section 332.

<sup>4</sup> See also Flassbeck/Spiecker (1998), pp. 5-21, and Flassbeck (1998). This paper is in many respects an update of the empirical results of those studies.

“structure” of wages in the emergence of unemployment<sup>5</sup>. Such a claim is impossible within the neoclassical realm of thought, because as long as the level of wages is appropriate, the "wrong" structure of wages can be used to explain structural unemployment, but it does not account for the overall *level* of unemployment. If the overall wage level in an economy is correct and wages in one part of the economy are too high, then wages in another part would have to be too low. It would be possible for unemployment to be too high in a specific region or among certain groups, but it could never be too high in the economy as a whole.

Can the different changes in unemployment levels in a variety of economies, in particular the United States and Europe, be explained by differences in developments in the wage level (including non-wage labor costs)? The rigorous nature of neoclassical theory might be able to help us here, too, because if it is correct, then we should be able to identify and empirically confirm the incidence of different stages as unemployment increases and decreases. This applies to productivity developments in particular. If neoclassical theory is dominant in explaining unemployment, then it should be possible to confirm that restraint in real wages has a positive influence on the labor market via a slow-down in productivity. It would have to be possible to observe that countries achieve success in labor market developments if firms see no need for capital intensive production either due to the low level of wage pressure or wage reductions.

Figure 1 shows that Europe experienced rising unemployment in the 1970s, although the level was below that of the United States. The picture changed dramatically after that: the United States was relatively successful in reducing unemployment and has even managed to record a lower level of unemployment today than at the start of the 1970s. In contrast, Europe has not been able to keep up since the start of the 1980s. Germany maintained its excellent standing until the start of the 1990s, but has since fallen far behind.

## **I. Neoclassical Evidence in the Comparisons of the United States and Europe**

The IMF describes what it refers to as "conventional wisdom" with regards to the major elements and factors surrounding European unemployment and claims that there is "broad agreement" on this point among researchers and at international organizations, especially at the OECD. The IMF views a combination of labor market rigidity and a series of negative supply shocks as the major reason for the poorer performance of continental European countries compared to the United States.<sup>6</sup> These shocks included a general decline in productivity, worsening terms of trade after increases in oil prices, and rising interest rates since the start of the 1980s. All these factors contributed to a reduction in the potential scope of real wage increases, a situation which the United States accepted, but Europeans attempted to ignore.

According to the IMF, labor market reactions have been very different in the United States and Europe at least since the second oil crisis in 1979:

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<sup>5</sup> The majority of the institutes involved in the working group for the Evaluation of the Economic Situation evaded the facts in their special section on the international comparison of developments in unemployment. See Institutes (1997).

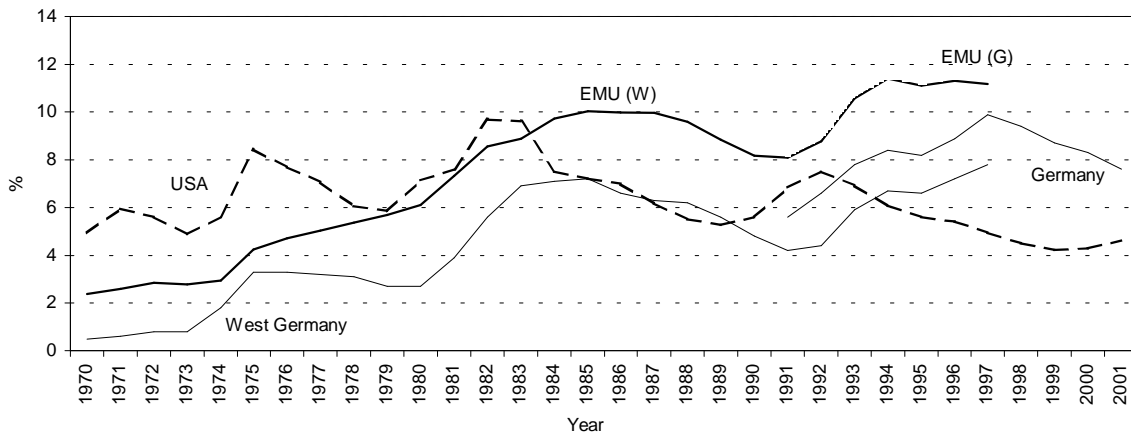
<sup>6</sup> The IMF does point out that the "structural rigidities" in the European labor market are not solely responsible for the persistence of high unemployment levels, because these rigidities were already in place in the 1960s when the European labor market situation was far better than in the United States (see IMF 1999, p. 44).

**Figure 1**

## Unemployment\*

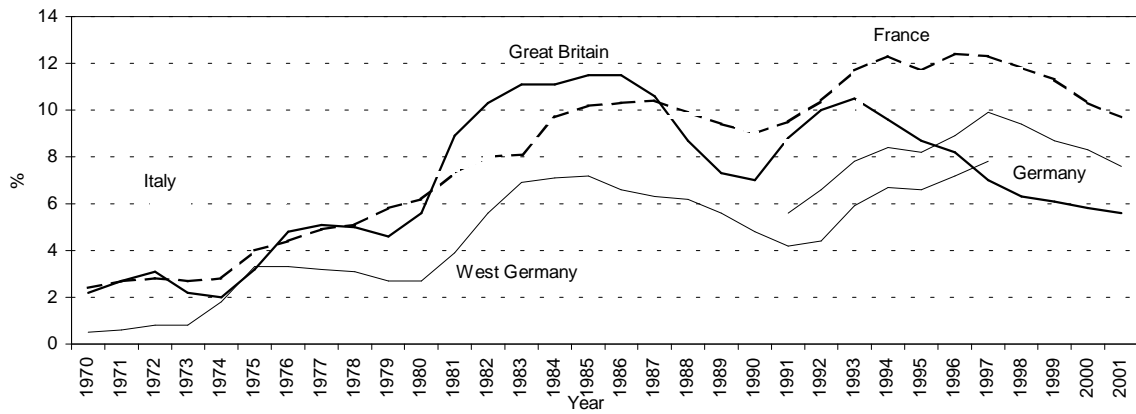
**a**

In Europe and the United States



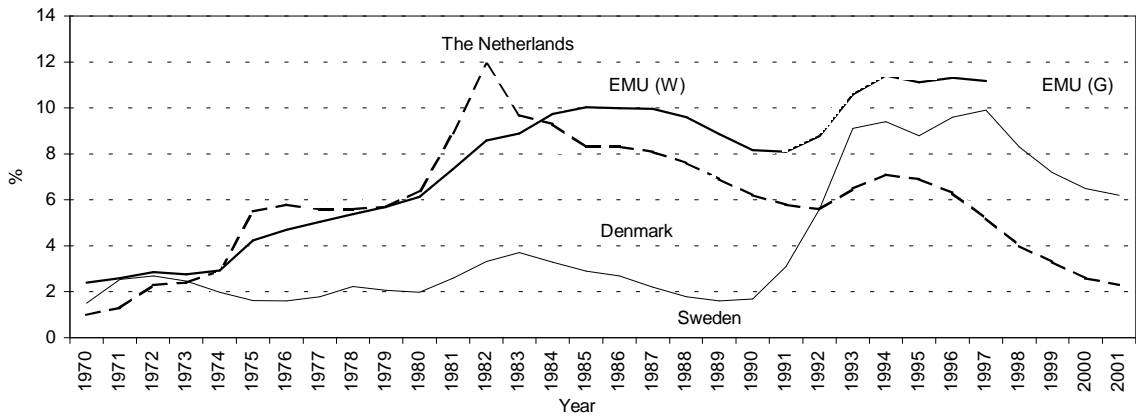
**b**

In the larger European countries



**c**

In the smaller European countries



\* Unemployment rate (unemployed persons as a percentage of the total economically active population), definition according to Eurostat. EMU (W): EMU with West Germany, EMU (G): EMU with Germany.  
Source: EU Commission, AMECO Database; forecasts of the EU Commission starting in 2000.

*“However the long-term labor market repercussions differed drastically between Europe and the United States: while real wage growth lagged behind labor productivity increases in the United States – as required to maintain full employment in the face of adverse supply shocks and the growth of the labor force – the real cost of labor in Europe continued to increase in line with labor productivity. In other words, the positive effect on aggregate labor demand from rising labor efficiency was “used” in Europe to raise real wages (with little growth in employment), while in the United States it translated primarily into rising employment, with only a modest increase in the real wage.” (IMF 1999, p. 45)*

To carry on with the IMF's reasoning, European workers' lack of willingness to accept lower increases in real wages led to more capital intensive production and lower returns to capital in Europe. When having to “choose” between using productivity gains for raising wages or increasing the number of jobs, Europe decided for the former while the United States opted for the latter. The European “choice” had to do with the existence of strong unions (which, according to the interpretation we use here, had only responsibility for insiders) and the high level of labor market regulation. According to the IMF, empirical support of this “trade-off” is unequivocal: if developments in real wages<sup>7</sup> and employment are compared for the period from 1970 to the end of the 1990s, large increases in real wages and a decline in employment occurred in Europe while the exact opposite was true for developments in the United States (Figure 2).

## **II. Real Wages**

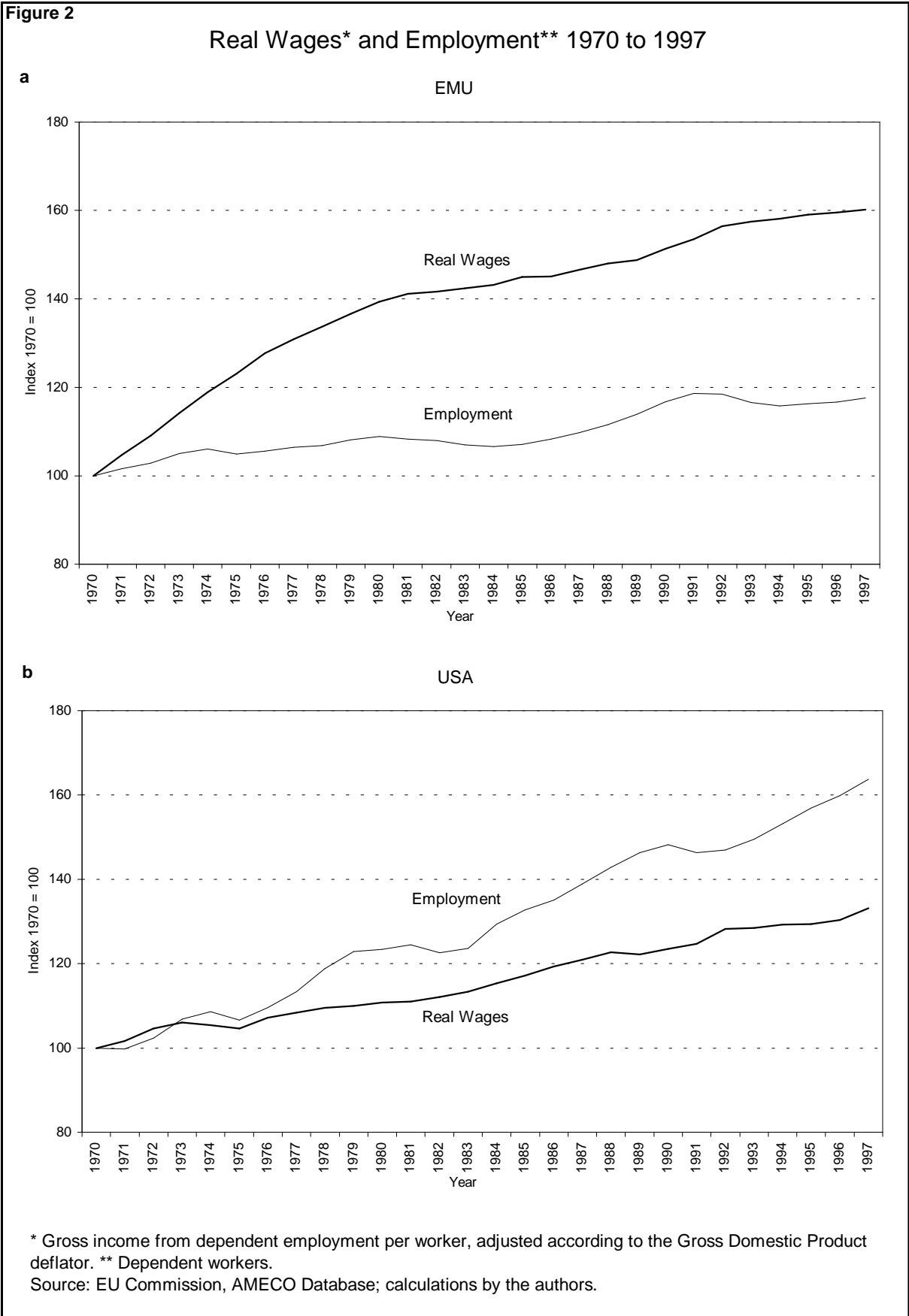
Surprisingly, empirical "proof" of the "conventional wisdom" is based on real wages alone, which means that it does not take productivity into account at all, although this plays a central role in the theory. But even if we disregard this flagrant weakness for a moment, this proof is of no value. Real wages (adjusted according to the GDP deflator and with an index starting in 1970) did, in fact, rise more quickly in the EMU countries than in the United States during the period under investigation, but this is largely due to developments in the first half of the 1970s. Real wages in Europe rose by more than 20% between 1970 and 1976, while they increased by only 7% in the United States in the same period. Even with view to real wages alone, the IMF's conclusion that Europe's reaction to the effects of the second oil crisis was less appropriate than that of the United States is questionable, because the largest increase in real wages in Europe occurred before the first explosion of oil prices. If calculations like those of the IMF's are carried through to the current day, real wages in the United States have risen significantly more than is mentioned by the IMF, even with 1970 as base year. Specifically, the tempo of real wage increases in the United States accelerated greatly in the second half of the 1990s.

Starting at 1980 (Figure 3) renders a completely different picture: real wages in the United States rose faster than in continental Europe, even in the first decade of the period under investigation. In the second decade, the increase in real wages in the United States broke away from developments in the EMU countries. While real wage increases in Europe almost came to a standstill following the recession of 1991/1992, the United States experienced an outright surge in wages. Growth in real wages in the United States was more than 15% higher than in

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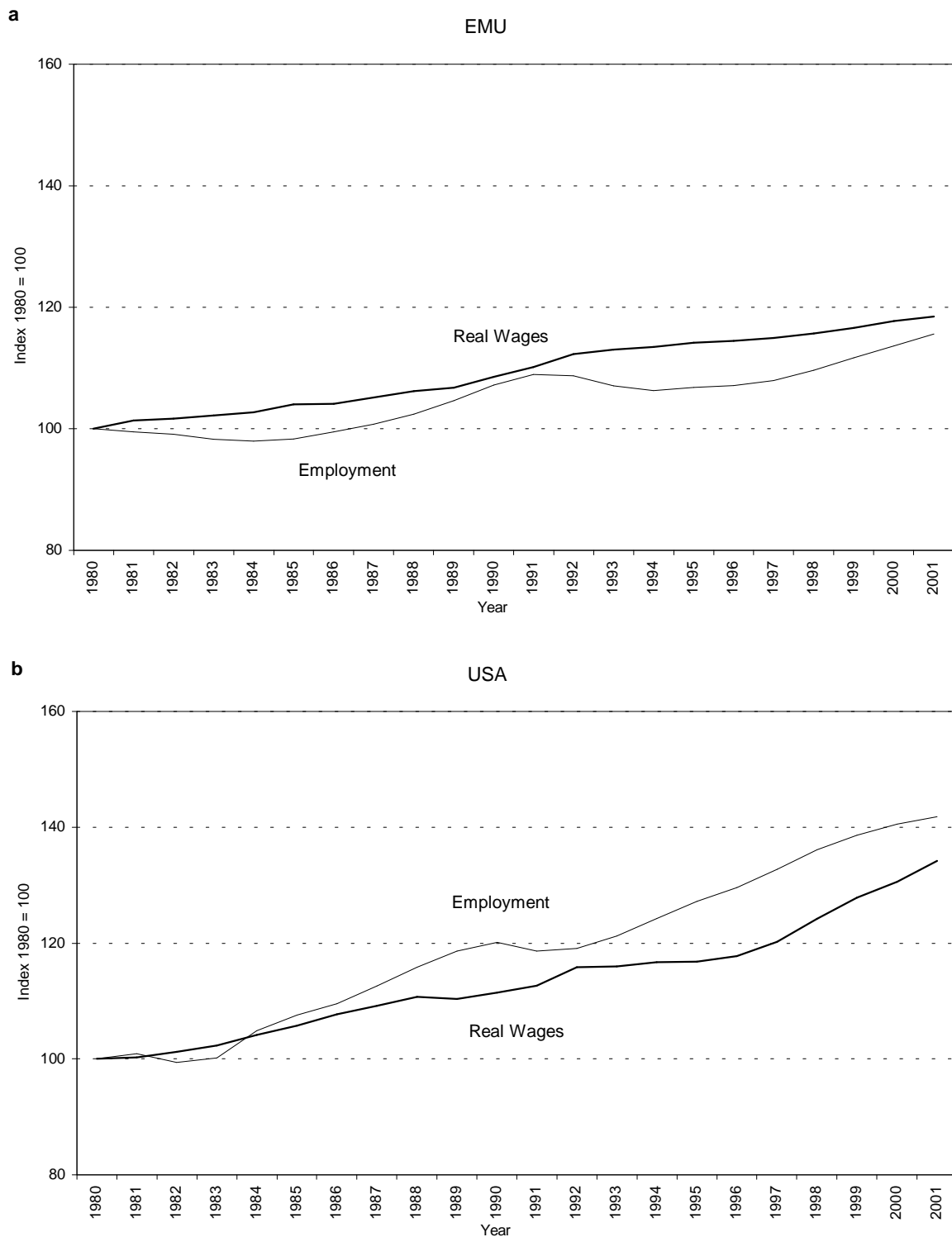
<sup>7</sup> This is defined as the "total compensation per employee in the non-government sector, divided by the GDP-deflator" (IMF 1999, p. 47)

Europe. West Germany remained at the lower end of the spectrum throughout, while France was more or less in the middle. Developments in Great Britain, however, greatly exceeded



**Figure 3**

### Real Wages\* and Employment\*\* 1980 to 2001



\* Gross income from dependent employment per worker, adjusted according to the Gross Domestic Product deflator. \*\* Dependent workers.

Source: EU Commission, AMECO Database; forecasts of the EU Commission starting in 2000; calculations by the authors.

those in the larger regions. In both the 1980s and 1990s real wages there increased faster than in all the other industrialized nations except for the United States, where real wages increased even more in the second half of the last decade. These developments went hand in hand with, at best, average labor market performance in Britain in the first half of the 1980s. Except for a temporary lapse during the recession at the beginning of the 1990s, labor market developments in Britain have been largely positive since 1987. Great Britain currently has one of the lowest unemployment rates of large industrialized countries.

All in all, a correlation between real wages (without consideration of productivity) and employment cannot be documented. Real wages have in fact risen faster in countries where either employment increased greatly (like the United States) and/or unemployment declined greatly (like the United States and Great Britain) than in countries with poorer labor market performance, like Germany and France or the EMU countries in general. The empirical basis for the IMF's claims and "conventional wisdom" is, at best, misleading. One could even claim that the neoclassical argument has been refuted.

### **III. Productivity**

Supporters of neoclassical thought in Germany have, however, introduced yet another argument. The group of scholars known as the "Kieler Schule" as well as the German Council of Economic Experts<sup>8</sup> have been arguing for quite some time that empirically observed increases in real wages, as such, say nothing about the pressure from wages which leads to exaggerated and detrimental increases in productivity. Wage pressure forces companies to introduce rationalization measures beyond the extent dictated by technical progress. The result is "excessive productivity". This argument<sup>9</sup> seems to attack the empirical basis of the evidence mentioned above. If involuntary productivity growth and unwanted increases in real wages (from the companies' perspective) do take place, empirical observation of an increase in productivity or real wages cannot be used as proof of whether or not unions' nominal wage demands are appropriate.

A rise in wages would have to be put into proper perspective if, for example, trends in productivity are very different in the countries being compared. If, for instance, a country exhibits a trend of strong productivity growth and poor labor market performance while wage increases are at about the international average, then the theory of excessive productivity could still be salvaged. Wage pressure in such a country could lead to increased productivity which in turn prevents the country from expanding beyond its "employment threshold" and creating jobs. However, such an argument only makes sense if the trend in productivity has clearly been on the rise over time. If, for example, wages rise more rapidly in a country which has been experiencing a trend of weak productivity, then simply stating the fact that wage increases remain moderate in international comparison says nothing specific about the influence of wage developments on the labor market.

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<sup>8</sup> See the German Council of Economic Advisors (1999), section 337.

<sup>9</sup> Flassbeck (2000A).

If we take a look at developments in productivity since the start of the 1970s, then the idea behind “excessive productivity” becomes absurd. The countries which experienced by far the weakest productivity developments in the 1970s, the United States and Great Britain namely, are the same ones in which wages rose the most. However, trends in productivity turned around completely in the 1980s. The United States caught up with the pace of productivity in continental Europe, and Great Britain even managed to surpass it. The two Anglo-Saxon regions led – together with Germany – in productivity in the 1990s, but they also lead in the pace of wage increases. At the same time, their labor market indicators are better than just about anywhere else. And that is the exact opposite of what the German proponents of neo-classical thought would have us believe according to their theory of “excessive productivity”. The countries in which real wages rose the most following a period of weak productivity in the 1970s – that is, where “wage pressure” was the greatest both for nominal and real wages – exhibit the best labor market and employment developments. This theory and the entire neo-classical theory of unemployment have thereby proved to be unfounded.

These findings also cast severe doubt on other popular theories. Conjectures have often been made that the widespread expansion of the service sector has been responsible for the creation of many new jobs, above all in the United States, due to the sector’s low capital-labor ratio in production. But the significance of this service sector effect can hardly be very large. The economy as whole has, according to productivity developments, experienced a tempo of rationalization which in the end surpasses that of countries with less successful labor markets. The related general theory that more and more jobs fall victim to “rationalization” in the course of economic development – thereby rendering full employment no longer possible – also turns out to be wrong: countries with the highest increases in productivity have also created the most jobs<sup>10</sup>.

The associated belief that the “employment threshold” (the productivity trend) has been particularly low in the United States and should therefore also be reduced here in Germany is no longer tenable. Even the more moderate version of this theory, according to which this threshold has risen and has therefore become more difficult to overcome, appears to have no basis in international comparison. The evidence gives the exact opposite picture: countries in which this threshold has risen the most seem to have had the least difficulty in overcoming it<sup>11</sup>.

#### **IV. Increases in Real Wages Minus Productivity Growth: The Real Wage Position<sup>12</sup>**

The IMF's message above is clear: "...while real wage growth lagged behind labor productivity increases in the United States – as required to maintain full employment in the face of adverse supply shocks and the growth of the labor force – the real cost of labor in Europe con-

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<sup>10</sup> The theory of "rationalization of jobs" has always been incorrect in historical analysis, because periods of great progress in productivity have also been periods of job creation even in the past. Productivity per hour in Germany rose, for example, with a growth rate of about 7% in the 1950, a little more than 5% in the 1960s, and at a lower rate after that. Developments on the labor market were the exact opposite of what neoclassical thought would lead us to believe: unemployment increased with decreasing growth rates of productivity.

<sup>11</sup> For an interpretation of Say's Law which supports this argument, see Flassbeck (2000A), p. 85.

<sup>12</sup> The real wage position is defined as the rate of growth in real wages minus the growth rate of labor productivity and is reported as a cumulative rate of change. It can also be interpreted as a rough measure of distribution (share of labor or wages in national income) relative to a base year.



tinued to increase in line with labor productivity..." (IMF 1999, p. 45). According to this, growth in wages is in itself not decisive for the effects on employment from wage increases. Rather, real wages should not keep pace with productivity in order to allow for increased employment. The German Council of Economic Experts also recommends a decline in wages *only relative* to productivity, not an absolute decrease in real wages. As a result, all the statements of the first three sections of this paper have been a mere introduction, one which was necessary to show that the supporters of "wage restraint" exercise a certain degree of arbitrariness in their empirical evidence, as the example of the IMF indicates<sup>13</sup>.

Empirical support for the real wage position – as the measurement of wage restraint will be called here (in line with the tradition of the Germany Council of Economic Advisors in the 1970s) – is very clear-cut. Due to the fact that the continental European countries placed special emphasis on wage restraint following greater progress in productivity in the 1970s, the real wage position dropped from the start of the 1980s up to the current day (Figure 4). Real wages lagged behind the progress in productivity for almost all the years, which means that they fulfilled the IMF's "criterion" for successful labor market development. That also repudiates the statement above – labor markets simply did not respond positively – although the IMF makes no mention of this at all. The situation was completely different in the United States, where real wages have also lagged behind productivity since 1980, but to a much lesser degree than in continental Europe. The facts clearly contradict the claims of the IMF and "conventional wisdom". The flexibility in wage formation demanded by prevailing opinion was present in continental Europe, not in the United States.<sup>14</sup>

This assertion can also be backed by developments in Great Britain. The claim can be made that a redistribution in favor of labor income took place in continental Europe during the 1970s (a development which was turned around in the 1980s) while the distribution changed little in the United States during the same period. However, nothing remotely similar was documented in Great Britain. Real wages there did outpace productivity at least as much as in continental Europe, but lagged only slightly behind in the 1980s and exhibited almost the same developments as the United States in the 1990s. Great Britain can definitely be considered one of the most successful countries today. Unemployment has dropped from 10.5% in 1992 to less than 6% this year, although sustained and extensive restraint in real wages never took place.

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<sup>13</sup> The German Council of Economic Advisors no longer makes an attempt to supply empirical support for its views. They have simply used the theory of "excessive productivity" to immune themselves. They did point out the distributional changes in favor of companies in the Netherlands as support for their position in their most recent report (section 337). They did so, however, without mentioning that the same change have also taken place in Germany.

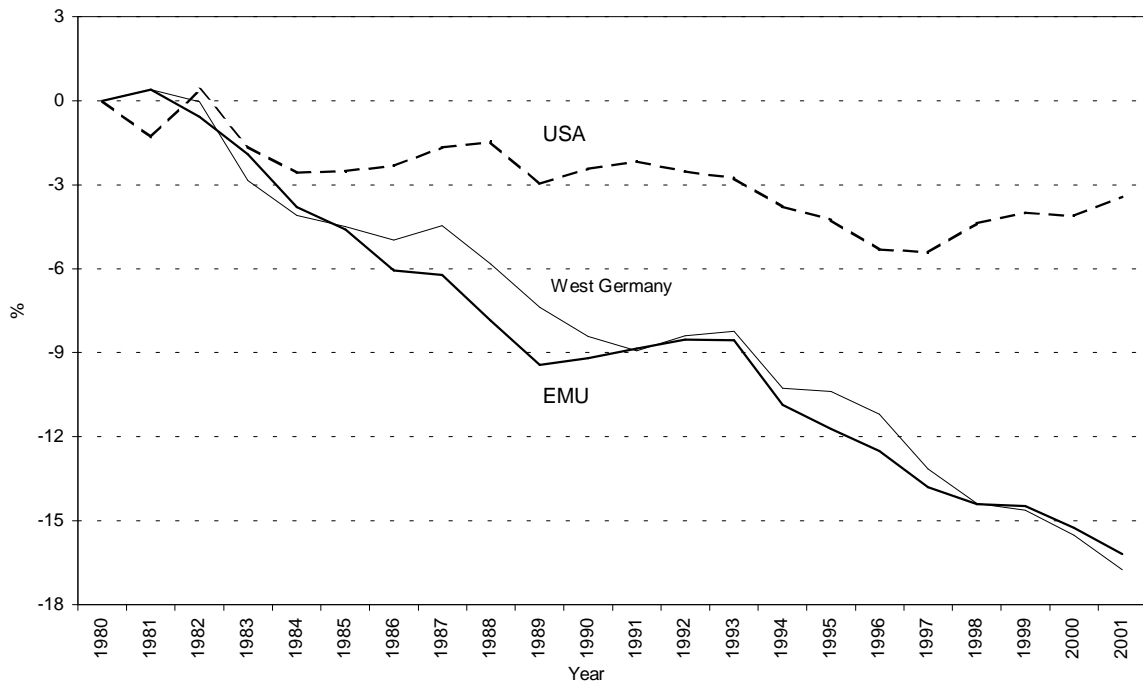
<sup>14</sup> In the Jobs Study from 1994, the OECD only mentions that the wage share has dropped; no mention of the great difference between the United States and Europe is made, OECD (1995).

**Figure 4**

**The Real Wage Position\* in Europe and the United States**

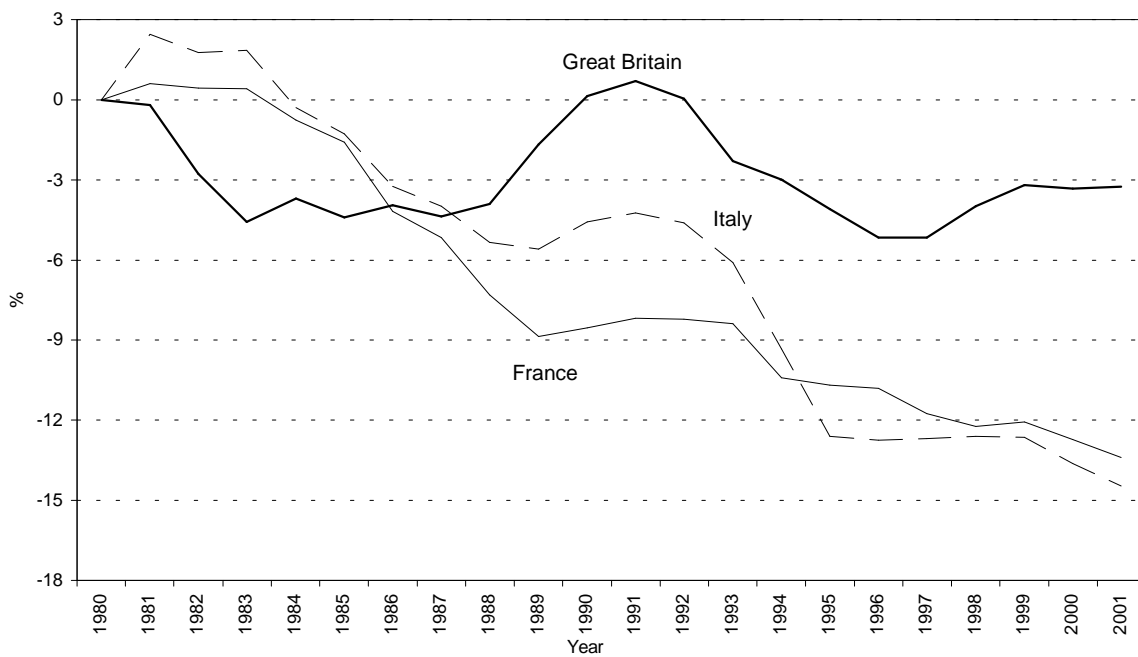
**a**

EMU, USA and West Germany



**b**

France, Italy and Great Britain

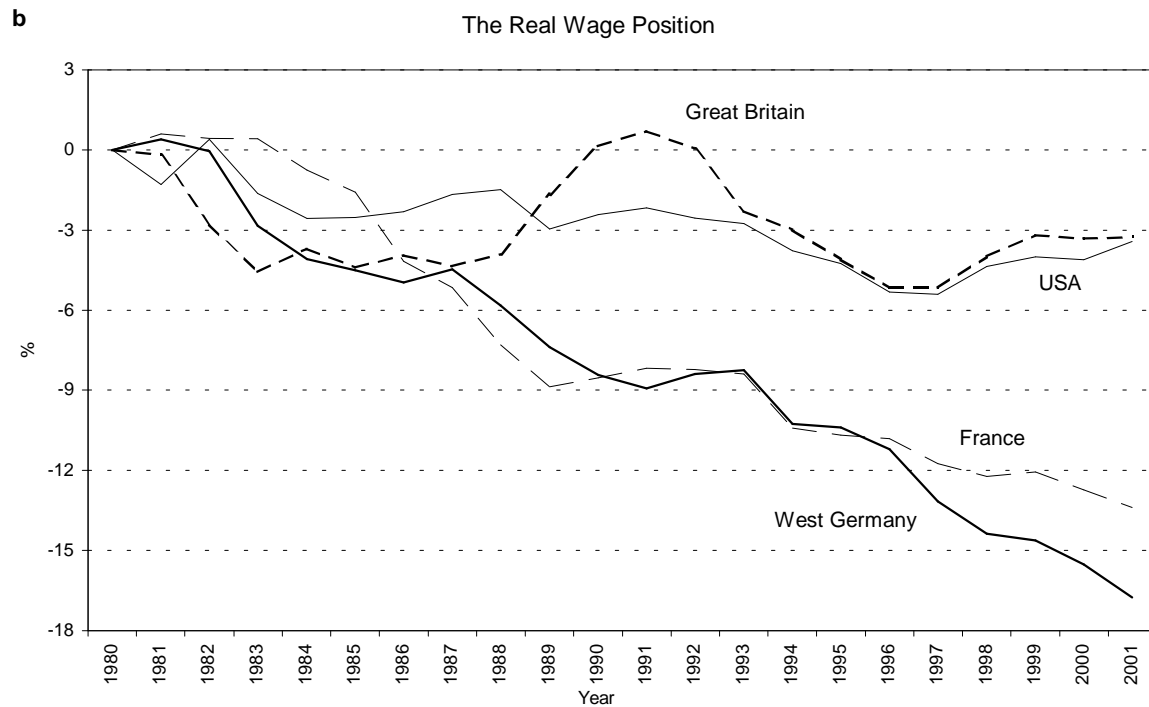
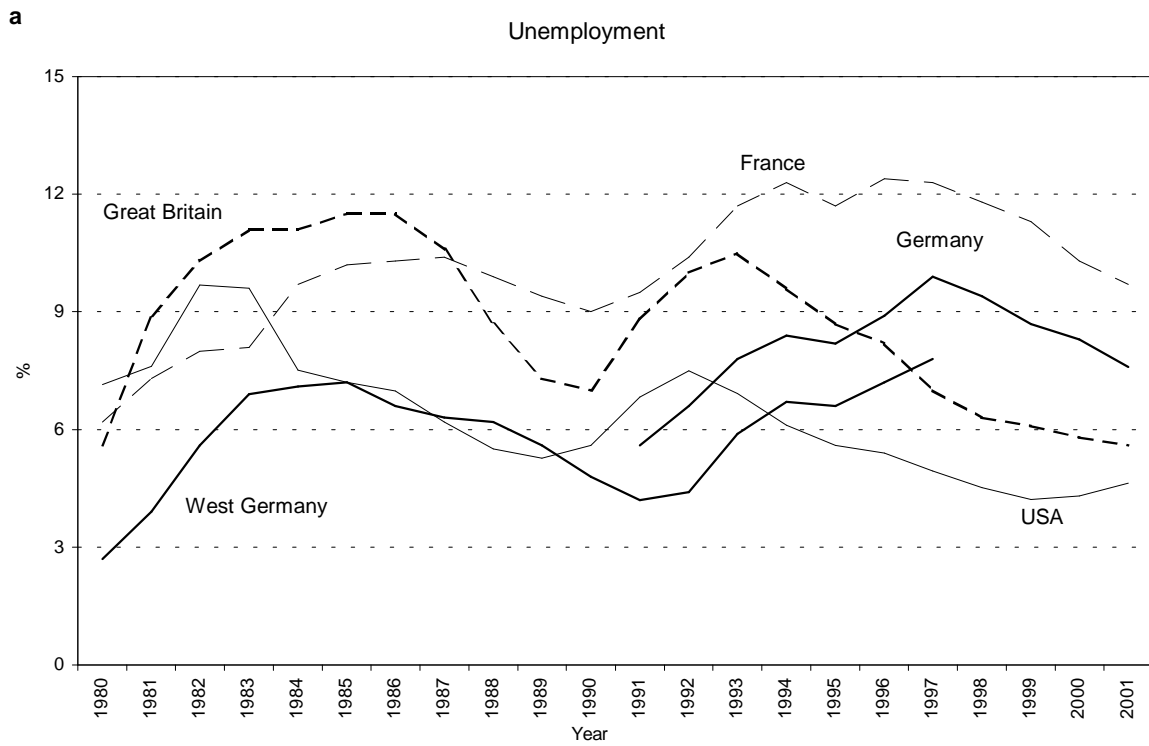


\* Increase in real wages minus growth in labor productivity.

Source: EU Commission, AMECO-Database; forecasts of the EU Commission starting in 2000; calculations by the authors.

Figure 5

### Unemployment\* and the Real Wage Position\*\*



\* Unemployment Rate (unemployed persons as a percentage of the total economically active population), definition according to Eurostat. \*\* Increase in real wages minus growth in labor productivity.  
 Source: EU Commission, AMECO-Database; forecasts of the EU Commission starting in 2000; calculations by the authors.

If you take a look at the real wage position of the United States and Great Britain on the one side and France and Germany on the other (Figure 5b), two very different types of labor market regimes come to light. While real wages have been flexible in the continental European countries, where wage negotiations are highly centralized and very much under political pressure, they were relatively inflexible in the decentralized markets of the United States and Great Britain. It is however the latter two who have enjoyed labor market success, contrary to neoclassical reasoning<sup>15</sup> (Figure 5a).

In continental Europe, wage policy adopted a strategy of wage restraint pursued in response to high unemployment following the second oil crisis, but it was obviously not constructive. Unions seem to have let themselves be influenced by neoclassical arguments, because they perceived mechanisms at work on the labor market which were similar to those seen by the supporters of neoclassical theory. The idea of solidarity between workers and the unemployed is not far from the idea of a "trade-off" between real income and employment. The justified concerns of workers in certain sectors that their jobs would be abolished by machines and the willingness to do just about anything to prevent this substitution of "inexpensive" machines for "expensive" jobs is just one small step from a theory of substitution of capital for labor.

## V. Smaller Countries as Models?

Aren't there any exceptions to the case that wage restraint in large countries have not brought the desired effects? Examples of more positive labor market developments can also be found in continental Europe. The Netherlands, Denmark, and Sweden have all been far more successful than Germany in combating inflation in the 1990s. The Netherlands have even attained full employment. The crucial question is whether or not these examples, which have in part been clear cases of wage restraint, are relevant for a large country like Germany or even a region like continental Europe as a whole, which is important internationally, but engages only little in trade with other regions.

Let us first have a closer look at the case of the Netherlands. There economic policy was less successful in the second part of the 1970s and seemed to be in jeopardy of falling behind Germany and even smaller countries like Austria. A large redistribution of income in favor of labor had taken place in the 1970s and the unemployment rate was well above the level in West Germany. It was even more than 10% at the start of the 1980s, a time in which unemployment in West Germany was about 5%. All levels of society in the Netherlands joined together in an attempt to turn things around and the model known today as the "Polder-Model" or "Dutch Model" came into being. There is no doubt that the model was successful: unemployment dropped almost continually from its peak in 1982. The current unemployment rate

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<sup>15</sup> Similarly, the theory prevalent among scholars (Calmfors/Drifill 1988) that a hump shape exists for the distribution of successful and unsuccessful wage negotiations is also untenable. This theory consists mainly of the belief that centralized and decentralized negotiation models, located at the two extremes of the scale, are successful, while any type of mixed system with elements of the two is unsuccessful. The theory behind the findings of the authors is based solely on neoclassical ideas, which poses a great problem if neoclassical theory as a whole lacks empirical support. In addition, the situation has changed dramatically. Germany, which was successful with a de facto highly centralized system up until the end of the 1980s, has in the meantime fallen behind, while France with its mixed system, for example, was less successful back then, but has now been much more successful than some centralized systems.

of 3% in the Netherlands can be considered nothing less than full employment. However, it is important to note that developments in unemployment in the Netherlands and West Germany diverged only after the recession at the start of the 1990s. Up until that time, the two curves were for the most part parallel.

If one examines the extent of wage restraint, in the form of the real wage position, in the Netherlands and Germany (Figure 6a), then no explanation can be found for the different developments in unemployment, not even from a purely neoclassical perspective. Wage restraint was greater in the Netherlands than in West Germany at the start of the 1980s and real wages in the Netherlands lagged more than 10% behind productivity until the mid-1980s. Why the Netherlands were only able to reduce unemployment at the start of the 1990s, a period in time in which wage restraint was much greater in West Germany, remains a puzzle for neoclassical thinking.

It is only possible to see through this seemingly confusing muddle of explanations from both neoclassical supporters and others camps if another neglected aspect of the effect of wages on unemployment is taken into account. The international aspect of wages, the effect of wage increases on international competitiveness (in the form of nominal unit labor costs), hardly plays a role in large mostly closed economies with flexible exchange rates like the United States and Europe. That is very different for a country like the Netherlands. The Dutch had fixed their exchange rate to the German mark at the start of the 1980s and did not change it until entry into the European Monetary Union. That means that a single market existed between Germany and Holland long before the start of the EMU. However, separate wage negotiations took place in the two countries. The Netherlands was able to take advantage of this situation to bring about a larger degree of wage restraint, which was in turn used not only to improve the domestic distributional standing of companies, but also to strengthen the competitive position of the entire country relative to Germany. And just that has happened.

Figure 6b illustrates developments in unit labor costs<sup>16</sup> in domestic currency in the Netherlands and West Germany since 1980. Unit labor costs in the Netherlands and West Germany diverged during the period leading up to 1993. They rose much less in the Netherlands than in West Germany. Dutch companies were therefore able to enjoy an ever increasing competitive advantage vis-a-vis Germany<sup>17</sup>. This advantage could not be offset by appreciation in the long run, as would have been the case for countries outside the European currency area. The competitive advantage reached a peak of 20%<sup>18</sup> (attained by means of sustained restraint in unit labor costs in the presence of a fixed exchange rate). For a country like the Netherlands, with a very open economy and a very high share of exports in GDP, such a constellation provides a huge stimulus for growth.

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<sup>16</sup> Unit labor costs are defined as gross income from dependent employment divided by real gross domestic product. It represents the major income components of an economy, because labor is the only input factor not produced in the production process, meaning that all goods and all intermediate products in an economy are produced with (domestic or non-domestic) labor.

<sup>17</sup> The competitive advantage emerged vis-à-vis France (starting in 1987), Belgium, and Austria as well.

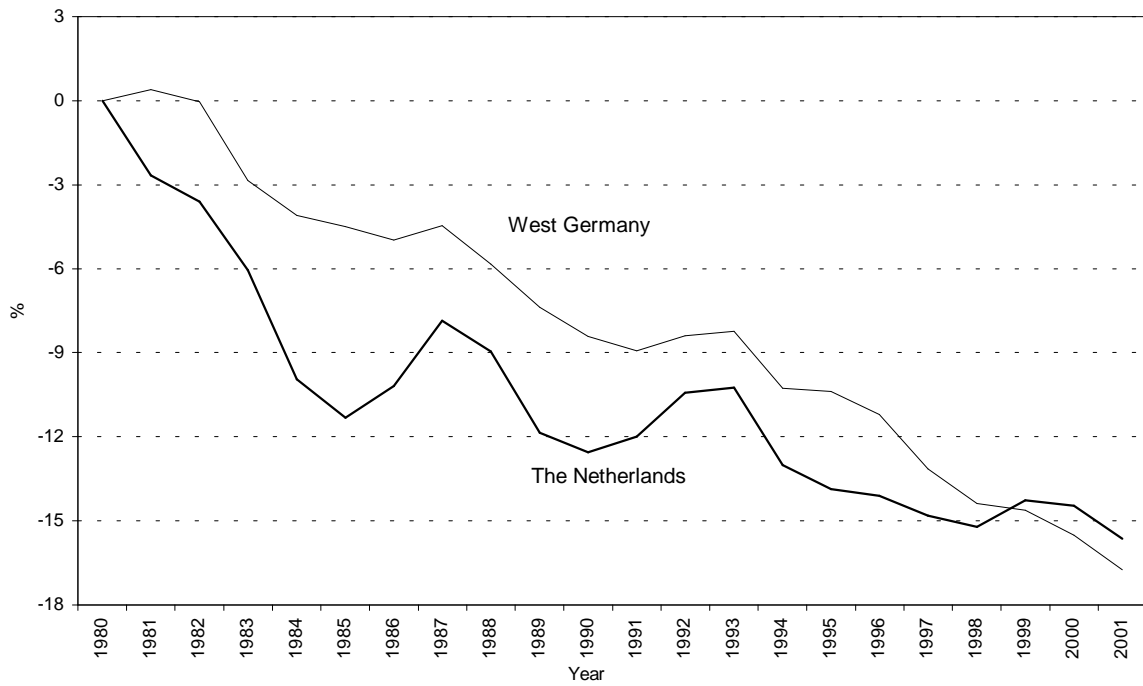
<sup>18</sup> Investigation into whether the Netherlands had a previous competitive disadvantage which was simply compensated for by the competitive advantage described above cannot be made here. Developments in trade following real depreciation in the 1980s and 1990s lends support to the belief that a significant competitive disadvantage did not exist earlier.

Figure 6

Small Countries - Large Countries: The Netherlands and West Germany

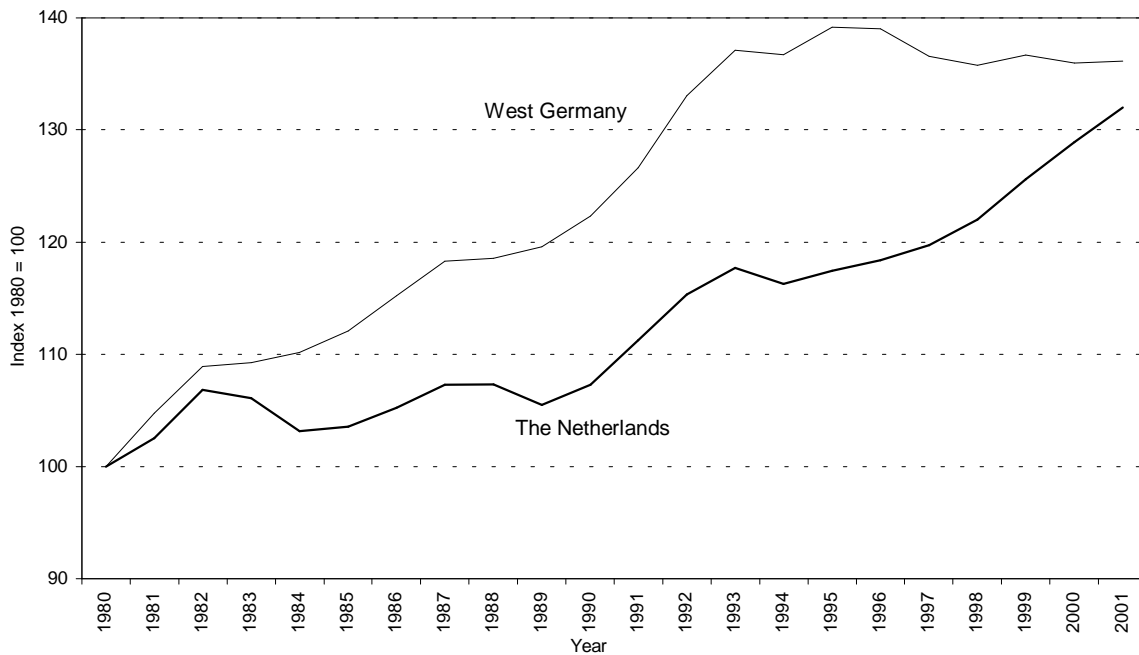
a

Domestic Perspective: Real Wage Position



b

International Perspective: Unit Labor Costs with a Fixed Exchange Rate\*\*



\* Increase in real wages minus growth in labor productivity.

\*\* Gross income from dependent work divided by real Gross Domestic Product in the domestic currency.

Source: EU Commission, AMECO-Database; forecasts of the EU Commission starting in 2000; calculations by the authors.

In 1994, the increase in the unit labor costs in the Netherlands and West Germany started to converge and growth in unit labor costs in the Netherlands eventually outstripped increases in West Germany. According to the forecast from the European Commission, the two curves will have more or less come into line by 2001. This implies that the Dutch competitive advantage in the form of low costs from the previous 12 years will be undone, but it does not mean that the market shares acquired from other countries during that time will be lost. Up until the actual convergence of the two curves, Dutch companies will maintain a better position than their German counterparts in terms of overall costs both in the domestic market and in third countries<sup>19</sup>. Only part of the competitive advantage achieved has been lost in recent years. According to the logic of these curves, a country which has fallen behind its partner at one point in time after starting from a position of equal costs will have to then outstrip the other country to the same extent in order to return to its initial share of the market. The Netherlands are, however, still far from such a point. The country is profiting from a long period of depreciation relative to West Germany, because it has acquired and held on to a larger share of the market.

But why did developments in unemployment in the Netherlands and West Germany diverge at the start of the 1990s? The Netherlands obviously succeeded at that time in combining their good competitive position with great improvement in the overall domestic economic situation. They first managed to increase the existing high surplus in the current account from just over 2% of GDP in 1992 to an amazing 7.5% of GDP in 1997, and the domestic economic situation also finally took off. Employment rose first, in the wake of the boom in exports. Since 1997 wages have risen greatly and real wages have increased much faster than in West Germany. Private consumption in the Netherlands has also increased in real terms with annual rates of approximately 4% since 1996, while private consumption in West Germany has largely stagnated.

In addition, private households in the Netherlands have reduced their propensity to savings rate drastically in the 1990s. This was, with 12%, approximately equal to the level in West Germany in 1990, but has dropped almost continually since that time and will reach a low of less than 3% this year. The savings rate in Germany has also decreased in the 1990s, but, at 9%, is still relatively high. The combination of a rising surplus in the current account and a falling savings rate among private households creates an enormous stimulus for growth. The extent to which the Netherlands have been able to outstrip Germany in growth during this time is therefore not at all surprising (Figure 8).

The Dutch example is in many ways representative for the success of small countries, although such an explanation cannot be applied in all cases. Large real depreciation, with or without changes in the exchange rate, have been experienced in Finland, Sweden, and Ireland also. Increases in consumption due to a decline in the savings rate have also taken place in Denmark, Finland, and Sweden. A decline in the savings rate has also had its effects in such large countries as Great Britain, Canada, and especially the United States. The main difference between small and large countries is that small countries can improve their situation without provoking reactions from large countries. A German depreciation strategy of reducing unit labor costs relative to other European countries would reach its limits much more quickly than is the case for the Dutch. Due to the sheer size of Germany, other European countries would

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<sup>19</sup> At least at the point in which a sort of balance exists with regards to company costs in the two countries in the base year used here.

be forced to follow in German footsteps much more rapidly, thereby offsetting any stimulating effect.

## VI. Wage Reductions in a Large Closed Economy

It is however more important to note that the negative effects of wage restraint far outweigh the positive export effects in a large closed economy. When no changes in the exchange rate take place, a country can without difficulty improve its cost situation relative to foreign countries which represent a "constant" or, in other words, do not retaliate. But do constants even exist if wages for a large closed economy are reduced? Neoclassical scholars construct a "production function" that acts like a constant, because they assume from the start that a constant exists in the form of a given level of output, but simply assuming what is supposed to be shown doesn't help us very much. If company revenue is not given (and we wouldn't need companies if it were!), then a reduction in wages is by no means good for the economy as a whole.

If wages fall or increase to a lesser extent, company costs do go down, but profits do not necessarily rise, at least not as is described by neoclassical theory. Aside from the completely unrealistic neoclassical case of companies increasing the capital intensity of their production methods due to the decline in wages<sup>20</sup>, two more realistic cases exist which give a picture of the continuum of possible constellations. In the first case, real wages decrease to the same extent as nominal wages, because prices stay the same. Purchasing power and workers' demand fall just like real wages if companies do not immediately hire new workers whose purchasing power and demand make up for the losses incurred by those already employed<sup>21</sup>. Finding out whether or not such a situation does occur is an empirical question. At the crucial point in German developments, when wage increases were cut in half over an extended period of time in the 1990s, the number of employed actually dropped. Company costs do fall in such a situation, but revenue, too. The "profit theory" of wages, as proposed by the German Council of Economic Advisors, turns out to be wrong<sup>22</sup>. The distribution of real income does change in favor of companies, but an incentive for increasing the number of workers does not result, because the returns to capital do not rise.

In the second case, nominal wages do fall, but real wages remain the same, because the prices on the market for goods follow the path of wage developments. If all companies have to pass the decline in costs on to a decrease in prices of their products, then the price level in the economy has gone down, but nothing has happened in real terms<sup>23</sup>. That can be convincingly backed up by other evidence, such as developments in the rates of increase of inflation and unit labor costs over an extended period of time (Figure 7).

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<sup>20</sup> See Flassbeck/Spiecker (1998), p. 9-16.

<sup>21</sup> Only one small addition is needed to make this logic completely compelling: workers' propensity to save has to remain constant.

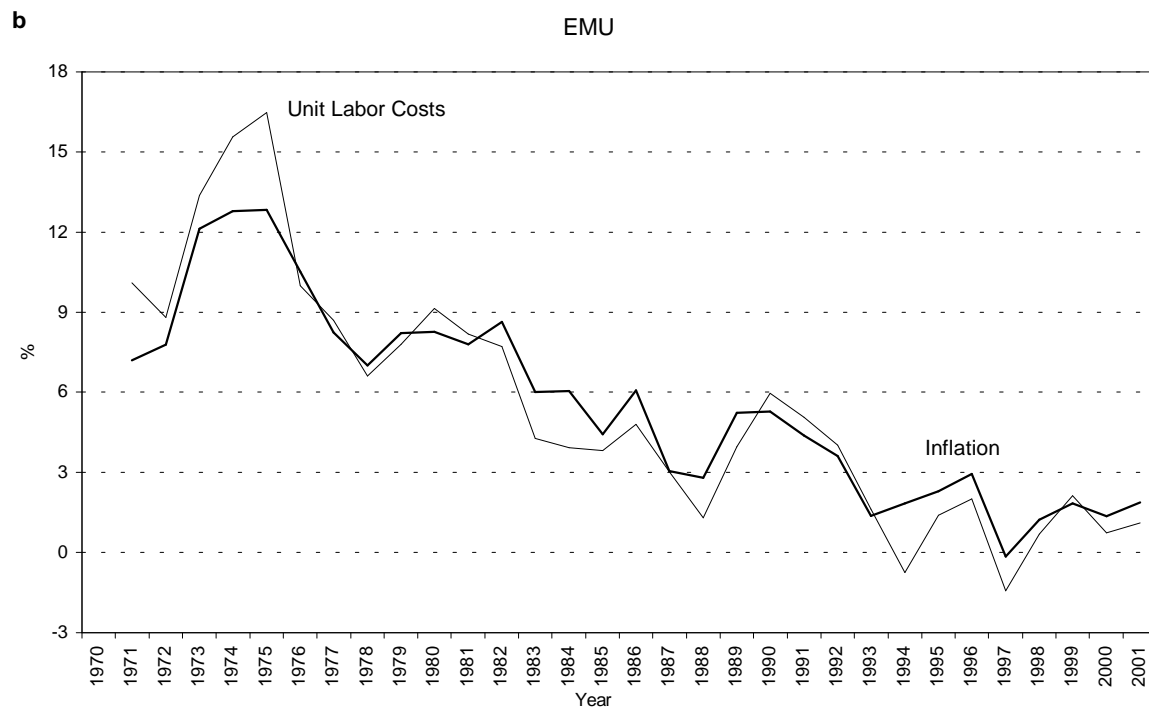
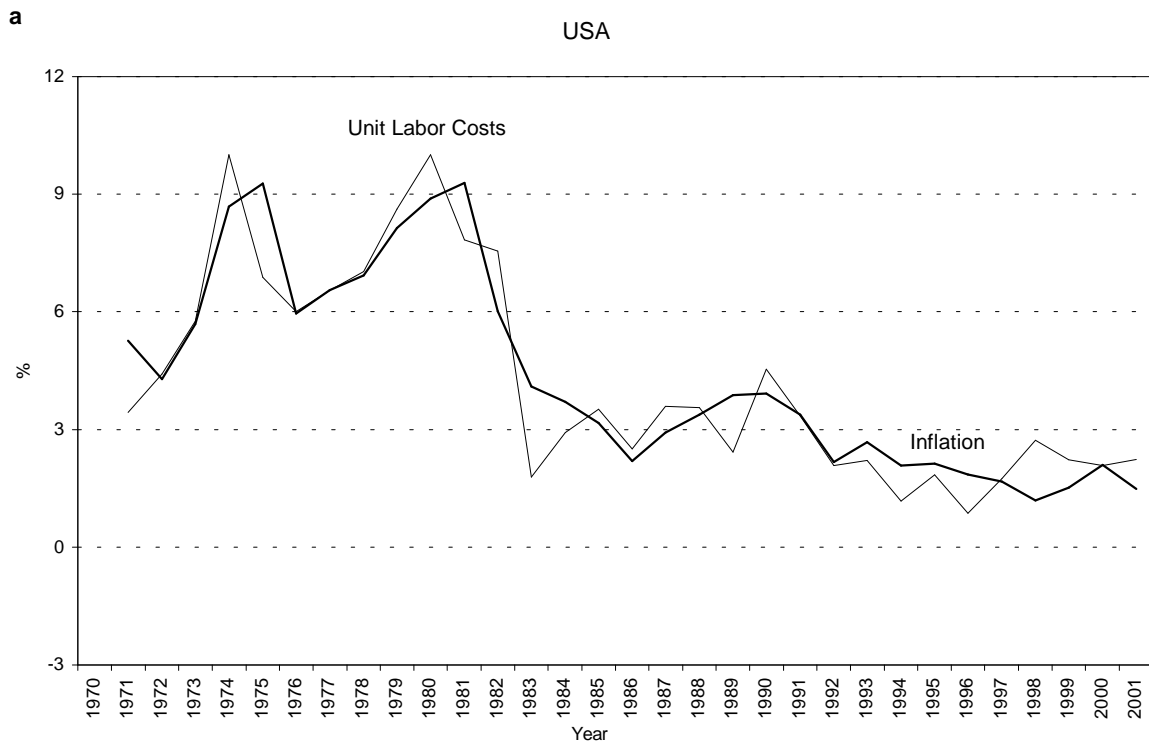
<sup>22</sup> Flassbeck (2000A).

<sup>23</sup> The "wealth effect", according to which the real supply of money increases due to declining prices, is an exception; but counting on that in the presence of a very low price level means accepting deflationary effects that could prove to be worse than the positive aspects of the wealth effect.



Figure 7

### Unit Labor Costs\* and Inflation\*\*



\* Rate of change of gross income from dependent work divided by real Gross Domestic Product in the domestic currency. \*\* rate of change in the GDP deflator.

Source: EU Commission, AMECO-Database; forecasts of the EU Commission starting in 2000; calculations by the authors.

It is, of course, a combination of these two effects which takes place in the real world of economics, where the weights of the two may vary from region to region. The description of the real wage position has already given a hint of this, because the real wage position is nothing other than the embodiment of one of the cases presented here or a combination of the two. If the price level does not adjust perfectly to changes in unit labor costs, then the real wage position changes, decreasing in the case of either wage reduction or a decline in wage growth. If, however, adjustment is good because intense competition between companies forces them to translate a reduction in costs into a decrease in prices, then the distribution and real wage position remains the same. The United States represents the case of intense competition, while Europe represents changes in distribution.

## VII. Economic Policy Conclusions

The crucial element for properly addressing unemployment is the relationship between unit labor costs and prices. If it is true that the effect of wage policy via unit labor costs mostly has an effect on the rate of inflation and not employment, then the parties involved in wage negotiations should not and cannot accept that they are given the main responsibility for employment while monetary policy is responsible for stabilizing the rate of inflation<sup>24</sup>. Wage policy is systematically overburdened by any attempt at reducing unemployment by means of wage restraint, because, aside from a direct effect on inflation, wage policy has neither a theoretically nor an empirically relevant effect on employment<sup>25</sup>. The best thing that wage policy can do is bring developments in nominal wages in line with productivity while making explicit reference to the European Central Bank's targets for inflation<sup>26</sup>. If nominal wages rise at the same rate as productivity plus the target rate of inflation, then increases in productivity can be translated into real income and demand with the least amount of friction possible. That is the institutional solution for avoiding any loss of jobs by technical improvements on the one hand and keeping the dangers to price stability from wage policy as low as possible on the other.

The task of creating additional jobs in the case of underemployment would then become the responsibility of other policy areas, in particular monetary policy. That is precisely the economic policy assignment which has been so successful in the United States in the 1990s. It was not flexibility in wages or some form of flexibility in labor market structures which was responsible for the large increase in jobs and decline in unemployment there, but rather the flexibility of monetary policy in interpreting its responsibilities. The American central bank is bound by law to view price stability *and* employment as its goals and there is widespread consensus among both the public and scholars that wage policy like that found in Europe cannot be given any direct responsibility for economic policy. The effect of the labor market on price stability is relied upon, but requires that economic policy promote full employment. That

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<sup>24</sup> Union concerns in German wage policy have changed entirely since the 1970s. At that time, the German unions supported a theory known as the "theory of purchasing power of wages". According to this theory, high wage growth stimulates employment through higher effective demand. The theory, which was still dominant in the 1970s, has been replaced by the "theory of solidarity", which, as described above, closely resembles neoclassical thought. However, unions in Europe have gone too far in their change of thought. The theory of purchasing power is, in fact, untenable, but that does not mean that considerations of purchasing power and demand does not play any role at all. However, the Neoclassical counterpart, the "profit theory of wages" is just as untenable as the theory of purchasing power. See DIW (1998).

<sup>25</sup> See Flassbeck/Horn/Zwiener (1992).

<sup>26</sup> For a microeconomic analysis in support of this, see Flassbeck (2000B).

means de facto that nominal wages are in line with productivity in the United States in the sense described above: developments in real wages largely coincide with the productivity trend while monetary policy works for employment and growth as long as wage policies pose no threat to price stability. That is not the case for Europe at the current time, despite the great efforts made by unions towards stability.

As a result, the differences in employment and labor market developments in Europe and the United States in the 1990s cannot be explained by a situation in which the level of growth in the two areas was the same, but productivity in the United States was lower. The explanation lies instead with the fact that growth was much higher in the United States (Figure 8) while the productivity trend was more or less the same in both areas.

In turn, that also indicates that new thinking is needed in Germany and Europe if economic policy is to be successful in the future. No substitution between labor and capital takes place in the sense proposed by neoclassical thought. Use of the factors of production is not directed by the (relative) prices of these factors. Labor is a factor of production in and of itself.<sup>27</sup> The price of this factor of production determines not only costs, but company profits also. Even if companies wanted to, they could not for an extended period of time pay labor less (in real terms) than dictated by labor productivity, because they would not be able to sell their products. Thus, no reasonable way of increasing labor intensity exists, because it would mean a step back in terms of real income. This would be followed by lower growth, and the number of jobs would not increase<sup>28</sup>. Empirical evidence also leaves no doubt that there is a positive correlation between investment and employment (Figure 9).

That means that companies always decide to invest in labor and capital at the same time and not in either labor or capital, as assumed by neoclassical theory. In good times they invest, in bad times they do not. Good times are when the economy as a whole is flourishing, bad times are characterized by stagnation or decline in economic activity. The 1990s can be characterized as good times for the United States, because the economy has boomed. Real investment in machines, plants, and equipment rose by 150% between 1990 and 2000. In Germany, the level at the end of the decade hardly surpassed that at the start<sup>29</sup>. This culminates in one of the main lessons from the 1930s, one which seems to have been forgotten by Europeans in the midst of all this talk about "fundamental reforms" and "structural deficiencies": economic policy can and should devote itself to many different tasks and solve many different structural problems. But if economic policy forgets to ensure that there are more good times than bad, then all efforts will be condemned to failure. That also implies that the IMF has been taken in by a fundamental misconception. Whoever believes in the neoclassical "trade-off" cannot pro-

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<sup>27</sup> See Flassbeck/Spiecker (1998), p. 5-21.

<sup>28</sup> For this reason, the main thought behind "ecological tax reform" is very perplexing. Making energy more expensive can result in less use of energy, but the thought that increased use of labor can be achieved by means of lower unit labor costs and higher labor intensity of production is a mere illusion. Such an attempt at influencing the use of the inputs of production by means of "relative prices" makes the difference between labor and other factors of production clear: energy doesn't demand goods and services! And even if energy producers do demand goods and services, such demand can decline in the wake of structural changes and be replaced by demand from the producers of other goods. In contrast, demand from workers as a whole cannot be replaced. See also Flassbeck (1996).

<sup>29</sup> The theory that the good employment situation in the United States is due to increases in the number of low wage jobs, which is itself in turn due to the wider range of the wage structure in the United States, is also thereby rendered absurd from the start. If the wage structure was so important then companies would have got along with fewer investments in machines.

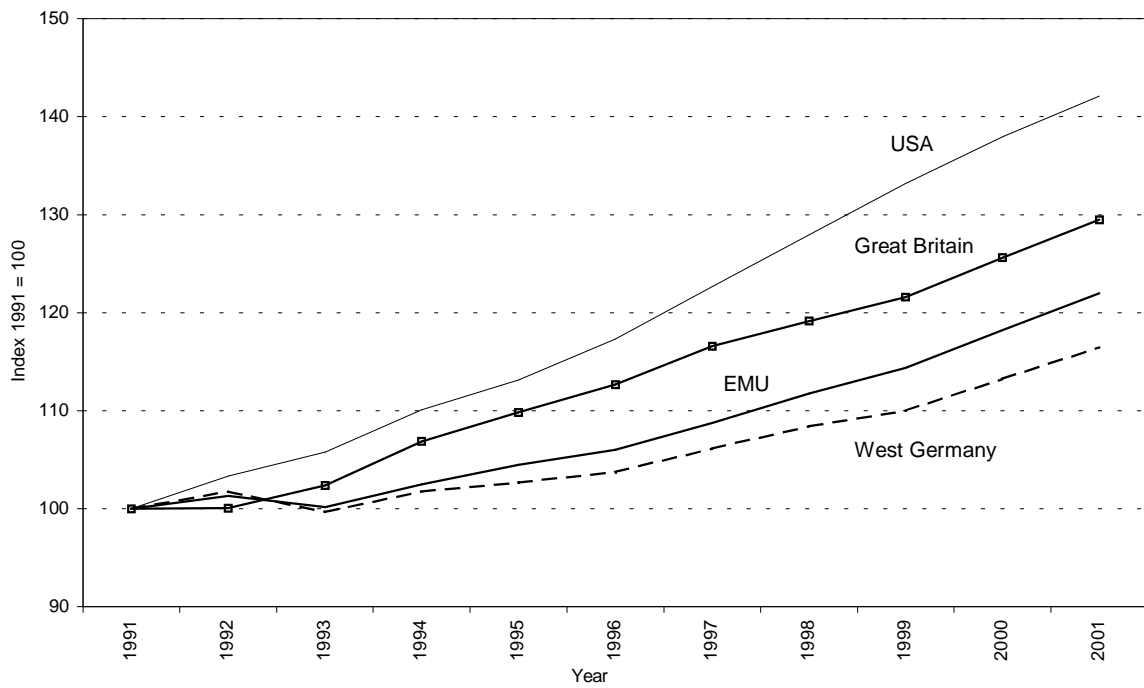
vide any decent advice on economic policy, neither to developing countries nor to industrialized ones.

Figure 8

### Growth in Europe and the United States

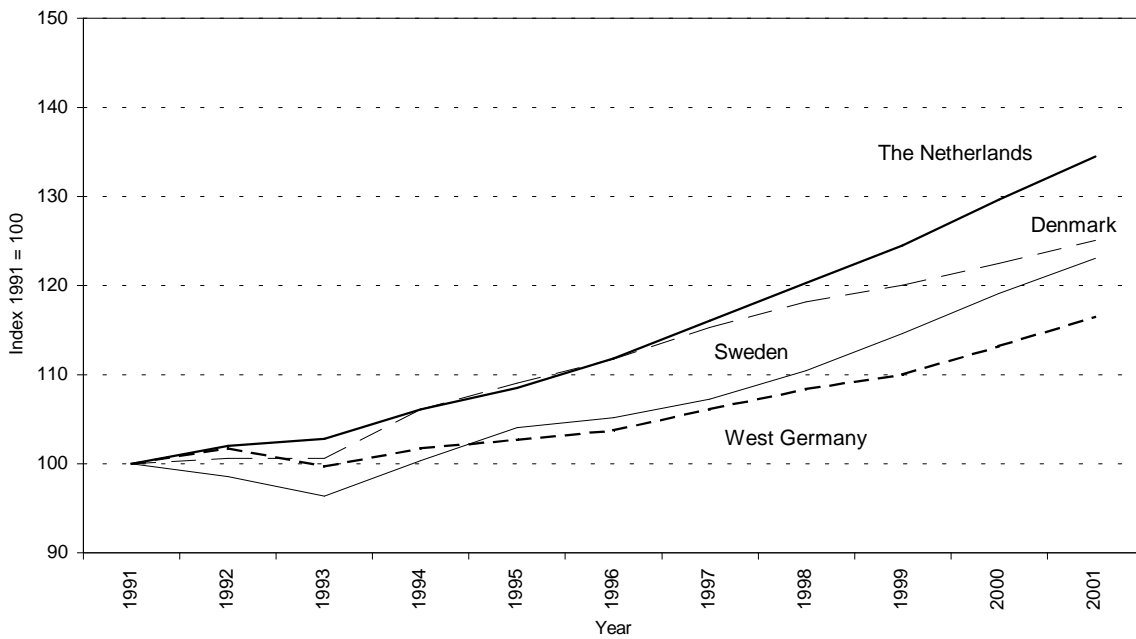
a

Real Gross Domestic Product\* in the large industrialized countries



b

Real Gross Domestic Product\* in small European countries

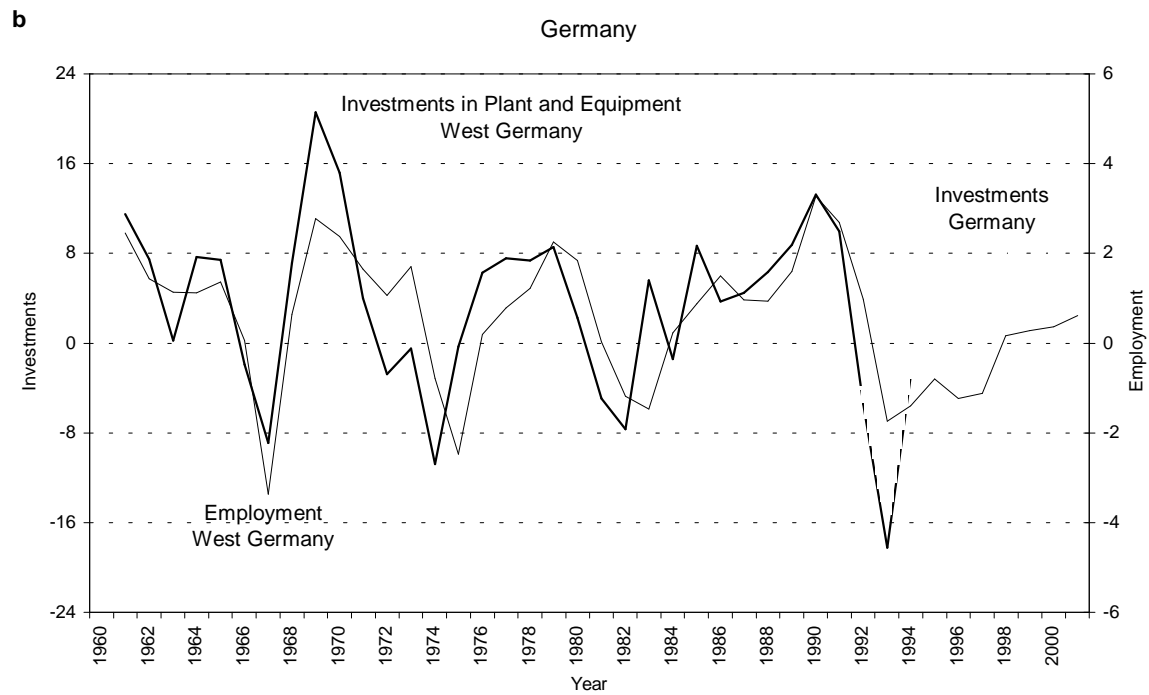
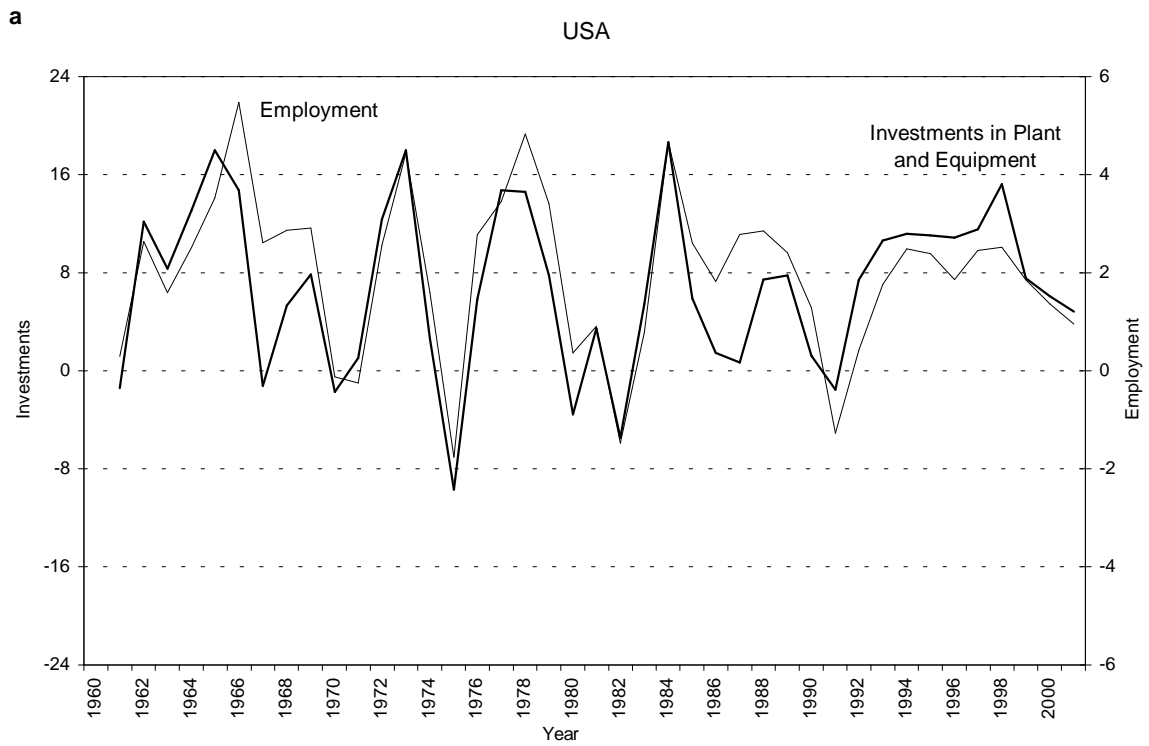


\* In prices from 1995, in domestic currency.

Source: EU Commission, AMECO-Database; forecasts of the EU Commission starting in 2000; calculations by the authors.

Figure 9

Investments in Plant and Equipment\* and Employment\*\*



\* In prices from 1995, in domestic currency, annual rate of change in %. \*\* Workers in dependent employment, annual rate of change in %.

Source: EU Commission, AMECO-Database; forecasts of the EU Commission starting in 2000; calculations by the authors.

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