

# Wage Moderation Does Not Work: Unemployment in Europe

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## Abstract

Orthodox economics blames rigid labor markets and, consequently, high wages for high and persistent unemployment in the euro-area. This is at odds with stylized facts. Unemployment has remained high despite the fact that wage shares have fallen substantially since 1980. Wage moderation has proven unable to improve the employment performance of the euro-area for the past twenty-five years. One reason for this is that the demand regime in the euro-area is wage led.

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*Keywords: wages; unemployment; NAIRU; wage moderation; Keynesian economics*

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## 1. Introduction

Since 1981, the unemployment rate in Europe (here used to signify the euro-area) has been greater than (or close to) 8 percent. The orthodox view, represented among others by the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), and the European Commission (EC), holds inflexible labor markets responsible. According to the nonaccelerating inflation rate of unemployment (NAIRU) theory, inflexibilities such as minimum wages, unemployment benefits, and firing restrictions allow insiders, represented by labor unions, to increase wages, which overall translates into unemployment. While not always stated explicitly, the view that wage moderation will help, or is indeed the only way, to reduce unemployment in Europe is shared by the major policy institutions now. This is illustrated by a recent publication of the EC (2006), which argues that “productivity increases, combined with wage moderation, should help to maintain the EU’s competitive position in an increasingly integrated world economy,” and encourages member states to “ensure employment-friendly labour cost developments and wage setting mechanisms” (40). The term “employment-friendly labour costs developments” is not defined in the text, but from the context, it is clear to mean wage moderation.

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This article questions the orthodox view. It is structured as follows. Section 2 reviews the orthodox argument on labor market rigidities, wages, and unemployment. Section 3 confronts this view with stylized facts on wages and unemployment over time and across countries. Section 4 summarizes the results of econometric estimations of the effects of changes in functional income on the components of final demand. Section 5 summarizes and draws some policy conclusions.

## **2. The Mainstream Story: Inflexible Labor Markets**

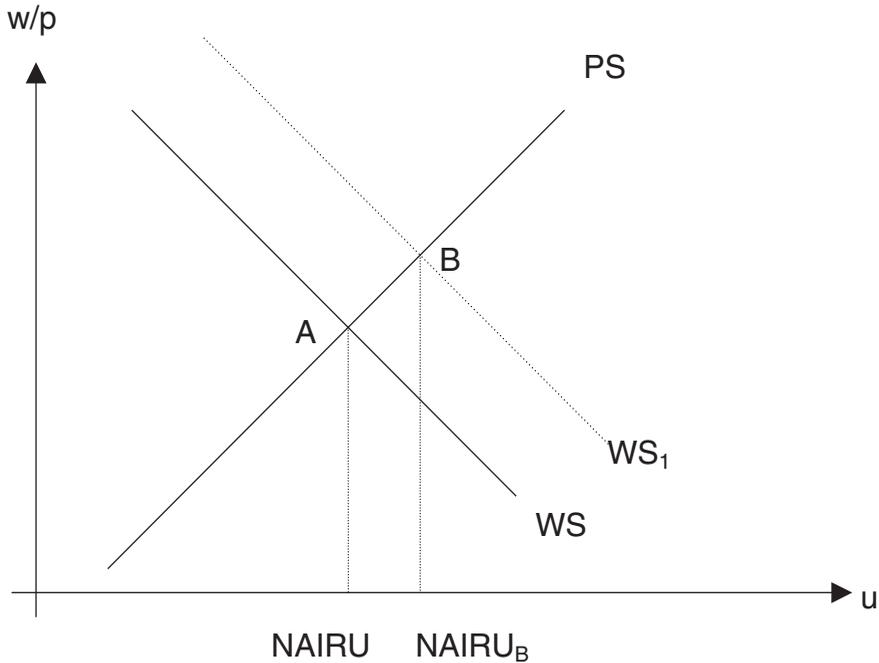
The mainstream explanation of Europe's current economic malaise claims that the problem is excessive regulation of labor markets. The key argument of the IMF-OECD orthodoxy is summarized graphically in Figure 1. The standard labor supply and labor demand curves get replaced by a wage setting curve (WS) depicting the wage agreements from collective bargaining and a price setting curve (PS) that describes the price setting behavior of oligopolistic firms. The intersection of these two curves will give equilibrium unemployment, the NAIRU (point A). If actual unemployment falls below the NAIRU, an inflationary process is ignited that eventually (and by mechanisms that are rarely discussed in depth) increase unemployment until it coincides with the NAIRU. The NAIRU itself is determined only by structural features of the labor market (and in some models by structural features of the goods market), but not by demand conditions.

Inflexibility in Europe's labor markets allows insiders to increase their wage demands: the original wage setting curve (WS) gets shifted upward to  $WS_1$ , and the new NAIRU at point B will be higher than the old one. Note that the new equilibrium exhibits higher unemployment and higher wages. Thus, a key finding of neoclassical analysis is preserved: unemployment is due to high wages.

In the early 1980s, labor unions were blamed for excessive wage growth. However, labor union power has declined throughout the 1980s and 1990s, rendering the "strong labor unions" version of the story increasingly implausible. Since then, minimum wages, employment protection legislation, and the tax burden have been highlighted as causes. In some countries, labor market regulation has been increased, however, by no means in all of them, and indeed, much of the 1980s and 1990s have witnessed cutbacks in the welfare state rather than its expansion. Much of the recent literature therefore focuses on interactions of variables, although this is usually done in an ad hoc empirical fashion rather than based on theory (Blanchard and Wolfers 2000).

While several studies claim to have found empirical evidence that labor market institutions do lead to unemployment, the empirical balance is far from clear. Various problems are associated with the type of data needed for such investigations, and since such institutions rarely change, the variation in the data is rather small. Most of the studies thus rely on cross-country regressions, most recently in the form of panel regressions (e.g., IMF 2003). However, by now there is also rich evidence that labor market institutions are not able to explain changes in unemployment. One of the most comprehensive studies was recently presented by Baker et al. (2005), who found "no meaningful relationship between [the] OECD measure of labor market deregulation and shifts in the NAIRU" (107).

Earlier studies have found similar results. In a panel analysis, Madsen (1998: 862) concluded, "the Layard and Nickell model seems unable to explain the increase in European



**Figure 1.**

The Non-accelerating Inflation Rate of Unemployment (NAIRU) Story of European Unemployment

*Note:*  $w/p$  = real wage;  $u$  = rate of unemployment; PS = price setting curve; WS = wage setting curve;  $WS_1$  = wage setting curve shifted upward; A = NAIRU; B =  $NAIRU_B$  (with wage setting curve shifted upward).

unemployment.” Ball (1999: 191) investigated monetary policy during recessions and found that “labor market policies are not important causes of the unemployment successes and failures since 1985.” In a time-series analysis covering the large European economies and the United States, Stockhammer (2004) found no evidence that labor market institutions drive unemployment, with the possible exception of the tax wedge, which is not robust.

It is notable that the literature mentioned above is routinely ignored in studies by the OECD, IMF, and EC. Indeed, the OECD pursues its policy recommendations despite the fact that the OECD employment reports usually do not support the far-reaching policy conclusions. No effect of employment protection or minimum wages on aggregate unemployment was found (OECD 1998, 1999). In many cases, the reported regression results are not obviously in line with the policy conclusions drawn. For example, the IMF (2003) found that higher interest rates cause higher unemployment but failed to mention this in its policy conclusions. The EC (2004) argued that labor market institutions are the most important drivers of employment performance, but the simulations with its regression model (reported in Table 38 of EC 2004: 89) indicate that the most important “labor market institution” is openness: a curious labor market institution. The report claims that the model works well despite the fact that “other factors,” that is, unexplained changes in employment, dwarf the effects of labor market institutions in eight of twelve countries. Mainstream studies make no serious attempt to control for demand shocks but assume that demand does not matter.

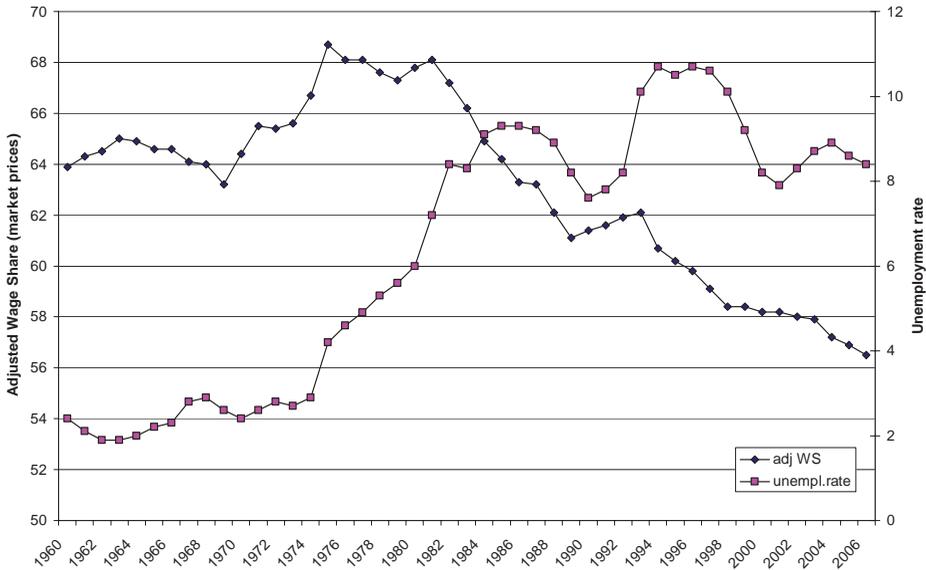
The past year (2006) has witnessed a major modification of the OECD's position. The *OECD Employment Outlook 2006* (OECD 2006) reviews developments in unemployment since the *Jobs Study* and presents a somewhat schizophrenic analysis. On one hand—and this is a major achievement for the OECD—it is acknowledged that various institutional arrangements can give rise to high employment levels. A destruction of the welfare state is thus not necessary to increase employment. The OECD here gives praise to the so-called flexicurity models of the Scandinavian countries, which combine high replacement rates of unemployment benefits with active labor market policies. On the other hand, the employment report reiterates previous findings on the partial effects of next to all relevant labor market institutions. Whether this acknowledgment that the neoliberal strategy has not proved to be the way to salvation also leads the OECD and other institutions like the EC and the European Central Bank to change their policy recommendations remains to be seen.

### 3. Wages and Unemployment in the Euro-area

One implication of the IMF-OECD explanation is that one would expect high unemployment to go hand in hand with high wages. Indeed, unemployment in these models is caused by wages being set too high, thus pushing up the NAIRU. However, this is squarely at odds with the factual development of the European economies. Figure 2a plots the development of the rate of unemployment and the (adjusted) wage share from 1971 to 2004 for the euro-area. The adjusted wage share is equivalent to the real unit labor costs in the business sector.<sup>1</sup> An increase means that wages are growing faster than productivity. The graph illustrates that unemployment has risen and wages have fallen in Europe since 1980. Indeed, the (adjusted) wage share has fallen by approximately 10 percentage points since 1980.

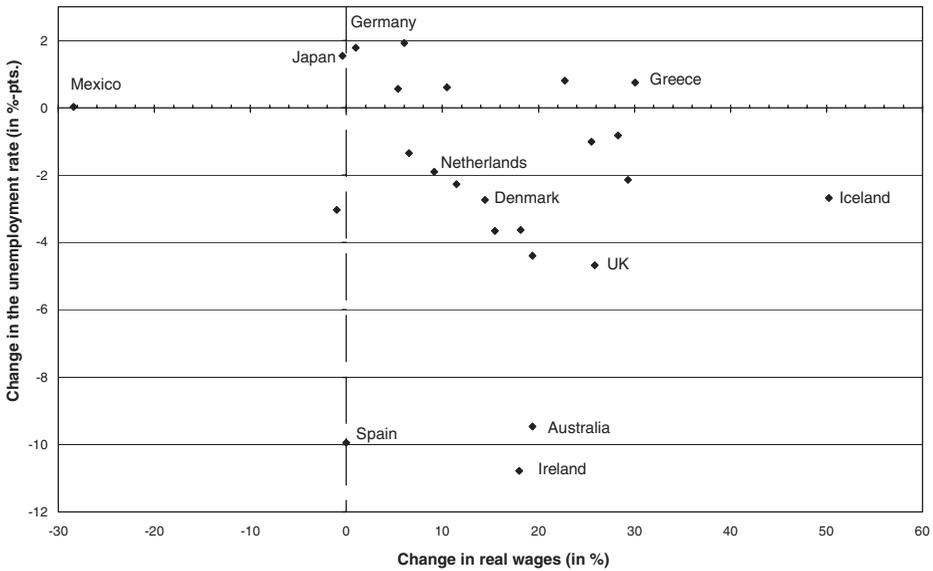
Moreover, there is no evidence that countries that have experienced slow wage growth have had systematically better employment performance. Figure 2b plots the changes in real wages and in unemployment rates from 1995 to 2004 for Western OECD countries. A change during a ten-year period is used to minimize cyclical factors. There is no apparent correlation between wage growth and changes in the unemployment rates. Indeed, some countries have experienced high wage growth and a substantial improvement in their unemployment rate, such as the United Kingdom. Only one country fits well into the mainstream story: Spain, which has had no real wage increases and a substantial reduction in unemployment rates. But Germany and Japan, with virtually the same wage stagnation, have experienced an increase in unemployment. The Netherlands, Denmark, and Ireland, which have had wage pacts that implied moderate wage growth, have all experienced wage growth close to average growth rates. Thus, the stylized facts fail to support the NAIRU story. Neither time-series data nor cross-country data suggest that high wages come with high unemployment.

1. Ignoring differences between the consumer price index and the GDP deflator, the wage share is  $W/Y$ , where  $W$  is the wage sum, and  $Y$  the national income. Real unit labor cost is  $w/x$ , where  $w$  is the wage and  $x$  is productivity per employee. With a given employment structure, the two are identical. However, the wage is wage per dependent employee, whereas productivity is output per employee, which includes self-employed and unpaid working family members.



**Figure 2a.**  
Unemployment Rate and (Adjusted) Wage Share in the Euro-area

Note: adj WS = adjusted wage share.



**Figure 2b.**  
Changes in Real Wages and Unemployment Rates in the OECD Countries, 1995-2004

**Table 1**

Private Excess Demand Effect of a 1 Percentage Point Increase in the Wage Share According to Different Estimations of International Trade

	Effects at mean levels, NX-share regression	Effects in 2005, X, M—regression	Effects at mean levels, X, M—regression
Consumption	0.37	0.43	0.37
Investment	-0.07	-0.07	-0.07
Domestic excess demand	0.30	0.35	0.30
Net exports	-0.13	-0.16	-0.11
Private excess demand	0.17	0.19	0.19

Source: Stockhammer, Onaran, and Ederer (2007, Table 7).

Note: Column “NX-share regression” is based on estimation of net export share as a function of real unit labor costs and other control variables. Columns “X, M—regression” are based on estimation of exports and imports as a function of domestic prices (and other control variables) and of prices as a function of unit labor costs (and import prices). Private excess demand is the sum of the effects of a change in income distribution on consumption, investment, and net exports, given the level of income.

#### 4. Demand and Functional Income Distribution in the EU

In the *General Theory*, Keynes has pointed out that wages are not only a cost in production but also a source of demand. Cutting wages would thus lead to a fall in consumption expenditures. Since Kalecki and Kaldor, it has become standard in post-Keynesian macroeconomics that wage incomes are associated with a higher consumption propensity than profit incomes. In the 1990s, Kaleckian models were reformulated to allow for investment to react positively to profits (Bhaduri and Marglin 1990). In these models, demand can be wage led or profit led, depending on the relative size of the savings differential and the sensitivity of investment with respect to profits. In an open economy, net exports may also respond negatively to an increase in the wage share since this corresponds to an increase in unit labor costs and therefore a loss in competitiveness (Blecker 1999).

In a companion paper, Stockhammer, Onaran, and Ederer (2007) estimate such a post-Kaleckian macromodel for the euro-area. More specifically, they estimate standard aggregate consumption, investment, and export and import functions augmented by variables for functional income distribution. The results are summarized in Table 1. Three different calculation methods for the effect of a change in income distribution on net exports are reported. A 1 percentage point increase in the wage share leads to an increase in private excess demand by a value between, according to the calculation method, 0.17 percentage points and 0.19 percentage points of GDP. Overall, demand is clearly wage led in Europe.

Wage moderation in the euro-area will have a contractionary effect on demand. As a consequence, employment is likely to fall. However, the results do not extend directly to individual countries in the euro-area. The euro-area is a relatively closed economy, with exports being less than 15 percent of GDP. Individual countries, however, have substantially higher exposure to international trade (with most of the trade being intra-euro-area). Indeed, the estimates summarized above imply that with given parameters, economies would switch to profit-led demand regimes with export and import shares between 35 and 45 percent of GDP. Many euro-member states will therefore individually be profit led due to foreign trade.

## 5. Conclusion

The orthodox claim that unemployment is due to inflexible labor markets, which allow insiders to push for excessive wage increases, lacks empirical foundation. This view is at odds with the stylized facts. Wages have been lagging behind productivity growth in Europe for two and a half decades—without any substantial improvement in unemployment. Moreover, there is no correlation (medium-run averages of) wage increases and changes in unemployment across countries. While wage moderation does improve competitiveness (and presumably net exports), it does not follow that Europe can export its way out of unemployment: wage moderation will also have negative effects on consumption expenditures. Stockhammer, Onaran, and Ederer (2007) have shown empirically that the overall effect of an increase in the wage share in the euro-area is expansionary. The wage moderation of the neoliberal era has thus contributed to a decline in demand and therefore increased unemployment. Wage moderation is neither a necessary nor a sufficient condition for employment growth in Europe. Rather, productivity-oriented wage growth and euro-area-wide wage coordination should form part of a demand-stabilizing policy package. It is time to realize that more of the same medicine that has not worked in the past is unlikely to work in the future. Lower wages at best lead to higher profits, but not to higher employment.

## References

- Baker, D., A. Glyn, D. Howell, and J. Schmitt. 2005. Labor market institutions and unemployment: A critical assessment of the cross-country evidence. In *Fighting unemployment: The limits for free market orthodoxy*, ed. H. Howell. Oxford, UK: Oxford University Press.
- Ball, L. 1999. Aggregate demand and long-run unemployment. *Brookings Papers on Economic Activity* 2: 189–236.
- Bhaduri, A., and S. Marglin. 1990. Unemployment and the real wage: The economic basis for contesting political ideologies. *Cambridge Journal of Economics* 14: 375–93.
- Blanchard, O., and J. Wolfers. 2000. The role of shocks and institutions in the rise of European unemployment: The aggregate evidence. *Economic Journal* 110: 1–33.
- Blecker, R. 1999. Kaleckian macromodels for open economies. In *Foundations of international economics: Post Keynesian perspectives*, ed. J. Deprez and J. T. Harvey. London: Routledge.
- European Commission (EC). 2006. Time to move up a gear. The new partnership for jobs and growth. [http://ec.europa.eu/growthandjobs/pdf/illustrated-version\\_en.pdf](http://ec.europa.eu/growthandjobs/pdf/illustrated-version_en.pdf).
- European Commission, DG Employment and Social Affairs. 2004. *Employment in Europe 2004*. Luxembourg: Office for Official Publications of the European Communities.
- International Monetary Fund (IMF). 2003. Unemployment and labor market institutions: Why reforms pay off. In *World economic outlook*. Washington, DC: International Monetary Fund.
- Madsen, J. 1998. General equilibrium macroeconomic models of unemployment: Can they explain the unemployment path in the OECD? *Economic Journal* 108: 850–67.
- Organisation for Economic Co-operation and Development (OECD). 1998. Making the most of the minimum: Statutory minimum wages, employment and poverty. In *OECD employment outlook 1998*. Paris: OECD.
- . 1999. Employment protection and labour market performance. In *OECD employment outlook 1999*. Paris: OECD.
- . 2006. *OECD employment outlook 2006*. Paris: OECD.
- Stockhammer, E. 2004. Explaining European unemployment: Testing the NAIRU hypothesis and a Keynesian approach. *International Review of Applied Economics* 18 (1): 3–24.
- Stockhammer, E., Ö. Onaran, and S. Ederer. 2007. Functional income distribution and effective demand in the euro-area. Vienna University of Economics and Business Administration, Department of Economics, working paper 102.