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European Monetary Union and National Labour Markets

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1. Introduction

When a nation joins EMU it relinquishes monetary policy tools and its economy becomes more and more exposed to international competition. This has provoked (sometimes quite opposing) fears concerning the future of "Euroland". With respect to the labour markets of the EMU-zone some authors expect a catching-up of wages irrespectively of differences in productivity while others are suspicious of a process of competitive underbidding. Before addressing this controversy in chapter 4, the changes will be described that are relevant for the labour markets' participants and that have been brought about by the start of EMU.
Since the beginning of this year the member states of the European Monetary Union no longer have at their disposal the instruments of monetary policy or the ability to adjust exchange rates. Further, the *Stability and Growth Pact* restrains their fiscal autonomy. The second chapter of this paper contains some general considerations of the consequences that may result from this fundamental change in the conduct of economic policy.
At the same time, EMU probably will intensify the process of transnational economic integration and, thus, may further diminish the manoeuvrability of the member states. In the third chapter we will look at the effects of this development on the national labour markets in some detail.
It is certainly not clear how the participants in the labour markets will respond to the important changes in the environment in which they operate. Some of the alternatives that have been discussed particularly in Germany, will be presented in the fourth chapter.

2. Trends in Factors Influencing the Labour Markets

2.1 Policy Changes

The EMU-zone consists of eleven countries that confront different economic forces and are subjected to different economic shocks. These realities could support the view that such an extended area needs a nationally differentiated counter-cyclical monetary and fiscal policy to preserve stability. However, looking at the effectiveness of an active countercyclical stabilization policy one has to take into account some qualifications to this argument (De Grauwe 1994, section I.1.2 and I.2.3). Above all, the real effects of monetary policy are unreliable, except in the short-run. At least, this is the prevailing view with respect to the effectiveness of an activist monetary policy. In theoretical analysis this view is reflected by the concept of a vertical Phillips curve in the long-run and a falling one in the short-run.
Even if monetary policy is ineffective in the fight against unemployment in the long run, politicians might be tempted to use it in the short-run. By pursuing expansionary policies the politicians can hope to increase employment for some time and thus gain the votes of the electors while accepting a rise in inflation and a fall in employment some time later. When some authorities repeatedly pursue these activist policies that lead to price increases but other authorities do not, inflation rates will diverge between different countries. Countries with relatively high inflation rates have to devalue in order to avoid a loss in competitiveness. According to this view, the need for exchange rate adjustments as a tool of macroeconomic management is primarily the consequence of the preceding misuse of monetary policy by short-sighted politicians. Therefore, it would not be disadvantageous for the members of a monetary union to have relinquished national monetary policy and the exchange rate instrument.
Of course, some qualifications to this conclusion have to be made (Paqué 1998, 8-9). First, the policy of the central bank in the monetary union, aimed to preserve price stability, must be credible. Secondly, those countries that have been negatively affected by country-specific demand shocks no longer can use devaluations of their currencies as an adjustment

mechanism. Instead, they may have to adjust with wage cuts. Probably, it will require some pressure of unemployment to start the process of wage cuts. Thus, to adjust with wage cuts may be more costly (in terms of unemployment) rather than to use the exchange rate mechanism. Therefore, the member states of a monetary union should have some national tools at their disposal in order to avoid a painful recession. The first candidate for this task will be national fiscal policy.
The conduct of national budget policy is restricted in EMU. The Treaty on European Union imposes on member states of EMU an obligation to avoid excessive deficits. Each member is committed to keep its general government budget deficit within the limit of the reference value (3 per cent of GDP). However, a deficit over the 3 per cent value is considered exceptional (and therefore not excessive) when resulting from an unusual event. In the case of an excessive deficit, Article (EC) 104c (11) imposes sanctions. Although this excessive-deficit procedure has been speeded up and clarified by the Stability and Growth Pact, doubts about the effectiveness of sanctions remain. Thus, at the moment, one has to take into account some uncertainty about the degree of national autonomy in fiscal policy that will be preserved in EMU. In any case, one cannot expect that in the near future the central budget at the level of EMU will rise adequately to compensate for possible restrictions at the national level.
In summary, it seems questionable whether the abandonment of national monetary and exchange rate policy should be counted unequivocally as a disadvantage connected with the building-up of the monetary union. On the other side there is obviously some need for fiscal autonomy on national level in the case of negative country-specific demand shocks. It is not at all sure whether this autonomy is maintained to a degree sufficient to prevent tensions among the member states of EMU.

2.2 Increasing Degree of Economic Integration

While the process of economic integration is taking place globally (Feenstra 1998), the Single Market program in the European Union, which is intended to remove administrative barriers at the national borders, is intensifying the process of economic integration within the European Union. EMU also encourages greater economic integration. Within EMU, exchange-rate volatility is absent and cross-border transaction costs are reduced. The comparison of prices is facilitated by the use of a common currency. Therefore, in the EMU-zone product markets (*at least for tradables*) will become more and more integrated and national borders will progressively lose their importance for locational decisions of enterprises. These developments will expose the labour markets of the members of EMU to increased competition even if workers' inter-country mobility will be restricted in the foreseeable future by differences in language and in culture, or by resistant administrative impediments at the borders. These effects have to be contrasted with the weakening of national autonomy in stabilization policies in the absence of a substantial central budget.

3. Consequences for the Labour Markets

In the first two sections of this chapter we will discuss the consequences of stiffer competition in product markets. Two effects will be taken into consideration. First, a tendency of decreasing differences in costs should be expected. Secondly, the degree of monopoly power that firms exert in product markets might change.

3.1 Diminishing Differences in Unit Labour Costs

Increased competition in product markets will reduce the price differences among the national markets. Thus, high-cost firms producing tradable goods will find it more and more difficcult to charge comparatively high prices. Instead, they have to adjust their costs to the lower level of their competitors. If they fail to do so, they cannot survive in the long-run. Thus, with the

probably increased competition in the emerging EMU, one can expect a tendency towards price and cost equalization. Substantial differences in unit labour costs can only be maintained as long as corresponding differences exist in the other components of costs (for instance costs for raw materials, intermediate products or of financing the required capital). But these differences also will be removed by the intensification of competition. Thus, there shall be a tendency of diminishing differences in unit labour costs as well. The same argument will hold with respect to business locational choice at least to the extent that unit labour costs are important for such a decision. Thus, it seems safe to conclude that EMU will bring about an approximation of unit labour costs between the member states. As a consequence, differences in wages can survive in EMU only as far as they are backed by corresponding differences in productivity.

In judging the prospective development of productivity in the EMU-zone, one has to take into account that enterprises that build new factories can use the same technology in all member states of EMU. Furthermore, the EU is exerting considerable effort to bring infrastructures to a comparable standard in all its member states. On the other hand, one has to recognize that differences in the stock of human capital will persist for a long time. Thus, for a while at least, differences in labour productivity will be diminished but will not be completely removed. These considerations support the conjecture that there will be some progress of equalizing productivity at least at the marginal level of (new) investment.

Looking at the emprical evidence, these considerations have to be qualified to some degree. The prices of tradable goods in different countries seem to converge to a common level very slowly (Rodrik 1998, 4; see also Rogoff 1996, 652-653). With respect to productivity there is evidence of convergence, at least among EU countries but this process, too, seems to be very slow (Cornwell/Waechter 1999, 2, 12). Furthermore, there are doubts whether the gap in wages has decreased during the eighties within the European Community (Erickson/Kuruvilla 1995).

In summary, one can expect the differences in prices of tradable goods and the gaps in average productivity that exist at the moment between member states to decrease within EMU, but not to be eliminated in a foreseeable span of time. Thus, there will be some room for equalizing wages without disturbing competition through provoking substantial differences in unit labour costs. However, in the next future full equalization of wages, presumably would lead to biases in the competitiveness of enterprises established in different member states.

3.2 Labour Demand and Intensified Competition in Product Markets

A firm with some degree of monopoly power in the product market faces a downward-sloping demand curve for its product. Marginal revenue, therefore, is lower than the product price. The quantity produced and sold at the market is less than for a firm with the same cost curve, but trading in a perfectly competitive market. Consequently, the quantity of labour demanded will not be one that equates the real wage with labour's marginal physical product (as in the case of perfect competition) but is restricted to a lower quantity (Kohler 1982, 386).

The effects on the labour market are demonstrated in Figure 1, where y_n reflects the marginal physical product of labour and N_d labour demanded by a firm facing a downward-sloping demand curve for its product. The distance between the y_n- and the N_d- curve is determined by the elasticity of product demand: The lower this elasticity is (in absolute terms) the lower is the position of N_d compared to y_n (see Box 1 for a formal analysis). Thus, it seems obvious to conclude that the intensification of competition within EMU shall raise firms' elasticity of demand in product markets, their demand for labour, and finally real wages. But this result may be offset if establishing EMU will induce a process of concentration among sellers. This would, contrary to the foregoing argument, increase the monopoly power of sellers in the

product market, lessen in this market the individual demand-elasticity that is relevant to sellers' decisions, and diminish both labour demand and real wages.
In summary, integration of product markets may affect labour demand and real wages in two opposite directions either by inducing concentration among sellers and thereby lowering labour demand and real wages or by intensifying competition thus raising labour demand and real wages.

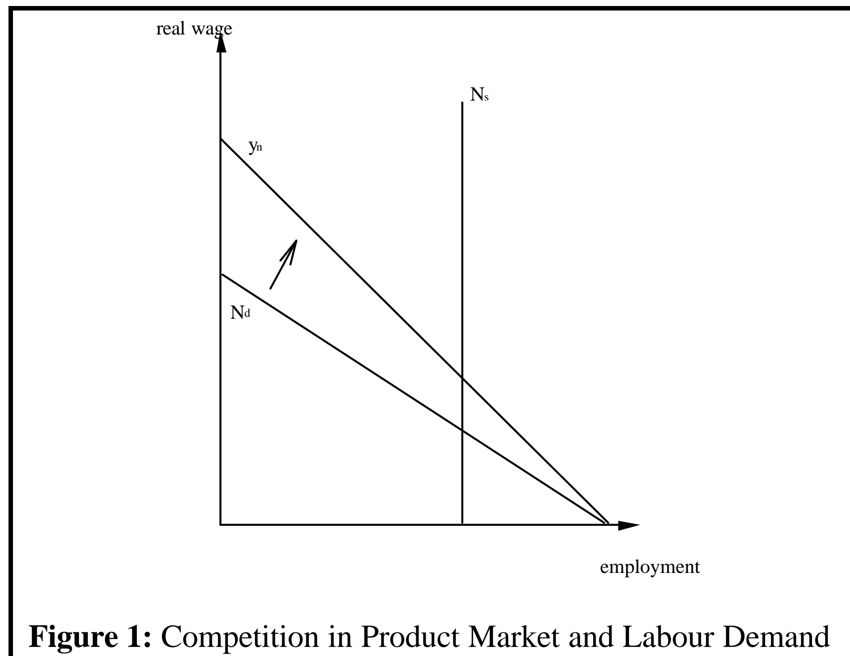

Figure 1: Competition in Product Market and Labour Demand

Box 1: Monopolistic Product Markets and Labour Demand

A firm is confronted with a negatively sloped demand curve for its product (p(y)). It chooses price and production so as to maximize its profits (π). For simplicity it is assumed that labour (n) is the only variable input.Thus, the firm's production function determines the quantity of output as a function of labour input (y(n)).

The total costs of production are given by w n + c

where w is the wage and c the cost of the fixed inputs. Accordingly, the firm has to maximize

(1) $\pi = y\,p(y) - w\,n - c$ with $y = y(n)$.

Setting the derivative equal to zero:

(2) $\pi_n = y_n\,p + y\,p_y\,y_n - w = 0$,

one gets the first-order condititition (Amoroso-Robinson relation):

(3) $y_n\,(1-1/E) = w/p$

where E, the elasticity of demand in the product market, is defined as the absolute value of the rate of relative change of output divided by the rate of relative change of price.

The left-hand side of equation (3) describes the labour demand of a firm that faces monopolistic competition in the product market. According to this equation, the gap between marginal productivity of labour and real wage will diminish with increasing elasticity of demand in product markets.

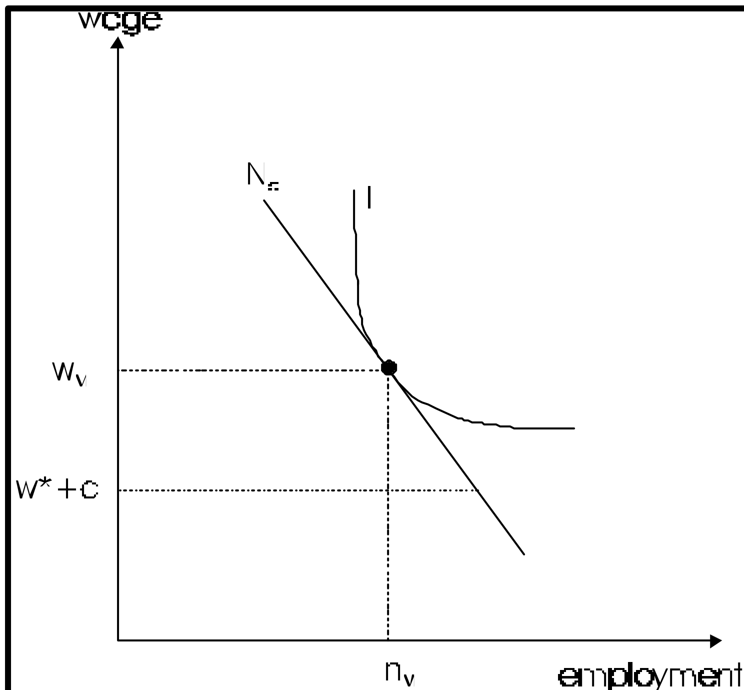

Figure 2: Wages and Employment in Unionized Labour Markets

3.3 Increasing Capital Mobility and the Bargaining Positions in Labour Markets

In its World Labour Report 1997-98 the International Labour Office (ILO) expects "that the liberalization of investment regimes and the ability of firms to raise and spend money anywhere in the world increases the locational freedom of firms and thereby shift the balance of power away from labour to capital" (ILO 1997, 70). If this conjecture is valid with respect to world-wide economic integration, it becomes even more valid in the context of EMU where the process of economic integration shall be further strengthened. Due to their high mobility, when compared to states and to the workforce, firms now can exert power in pre-investment bargaining with states and unions (ILO 1997, 74-77). The importance of this shift in the bargaining position is not limited to countries that compete for new factories but extends also to those which shall be affected by the threat of losses in employment. Thus, exit potential of firms influences bargaining on wages and work conditions in both countries. Generally, to exert the exit option will produce turnover costs comparable to those that result from the replacement of insiders by outsiders. The level of these costs depend upon the decision to be made. The costs will be lowest in case of a multinational enterprise (MNE) that has already factories in more than one country and can shift production without the need to set up new factories or to train workers intensively. For instance, car manufacturers like Volkswagen invite affiliates to an intra-company competition before they decide at what location they will produce a new model (IW 1999, 11). Therefore, particularly the MNEs' bargaining power will grow within EMU the more these companies become vertically integrated across the various member states.

To start the analysis, once more a firm will be considered which is confronted with a negatively sloped demand curve for its product. The shift in bargaining power as a consequence of vertical integration is analysed in Figure 2. N_d reflects the demand decision of the firm provided that production is restricted to the home country (for simplicity, N_s, the aggregate individual labour-supply curve, is omitted in Figure 2). The monopoly union is most likely concerned about employment and wages. The indifference curve I is the outcome of these preferences. Consider first the extreme case that the firm is restricted with respect to its locational choice to the home country. Then, N_d is the relevant labour demand curve. The best the union can do in this case, is to set wages at w_M. The firm chooses the employment level n_M and at this point unions realize the maximum level of utility that is attainable to them.

The situation will change when the firm achieves the capability to shift production abroad. In comparing this alternative with maintaining production in the home country, the MNE has to take into account the turnover costs (c) in addition to the wage paid abroad (w^*). The displacement will be advantageous to the firm when the wage paid at home exceeds the sum $w^* + c$. For the union, the utility level connected with w_M will no longer be attainable. The union is induced to agree to restrict the wage to $w^* + c$, i.e. to a level that is sustainable in the long-run. In this way, the exit potential of enterprises might influence bargaining on wages even if the actual change in the location of firms remains an exception.

According to the foregoing remarks, one can expect c to decrease more and more as MNEs pursue a policy of diversifying production with repect to its location. Thus, if in EMU the growing integration of product markets will further this process of horizontal integration of firms, the bargaining position of unions in the nowadays highly industrialized countries may become severely restricted in future.

3.4 Effects of Increasing Capital Mobility on Labour Market Institutions

With firms having greater freedom in locational choice, states face stiffer competition when trying to attract new investments. Empirical studies indicate that multinational enterprises are

sensitive to those labour-market institutions that may restrict their organizational freedom (ILO 1997, 72). For instance, collective bargaining frameworks are quoted as an institution that may hinder the U.S.multinationals to set up affiliates in a country. National authorities have to take this into account. Thus, institutions that are regarded by mobile firms as unfavourable from their point of view, will be put under pressure. Especially in EMU, where competition is intensive, institutions might be abolished even if they advance general welfare by economizing transactions costs.
These arguments lead to the conclusion that there might evolve a tendency to shift from centralized bargaining to bargaining at firms' level within EMU (Dohse/Krieger-Boden 1998, 69). In such a highly decentralized system, wage increases will have a direct effect on the competitiveness of the firms. Therefore, given this structure, comparatively high wage claims would reduce the prospects of the workers to stay employed by the firm. This consequence might effectively restrain wage increases in a system of wage bargaining at firms' level.
In summary, as a consequence of increasing economic integration in product markets, a tendency towards wage equalization should be expected within EMU, but it should fall short of full equalization of wages. If economic integration in product markets will lead to lower monopoly power of firms, real wages may increase on the average. But if, in contrast, this process results in higher concentration and more monopoly power of sellers on product markets real wages may fall. The same result may be the outcome of a shift in bargaining positions in labour markets that would favour employers at the expense of employees. Pressures on wages might also result from a diminishing degree of centralization in wage bargaining.

4. Some Scenarios of Developments in Labour Markets

Chapter 3 dealt with the various influences on labour markets that may be induced by the increasing degree of economic integration within EMU. The ultimate effects on wages and employment will depend on the reactions of labour market participants. The alternatives determining the results have been discussed in a controversial manner, at least in Germany. On the one hand, some of the authors expect a catching-up of wages in countries where productivity is comparatively low. This would lead to substantial differences in unemployment across regions within EMU (Belke 1996, 339). On the other hand, there are some fears that a process of competitive underbidding may put wages under severe pressure (Hoffman 1998; DIW 1998, 561). While looking at these alternatives, one may ask oneself what is the chance of finding a route in-between that avoids substantial regional differences in unemployment as well as a strong pressure on wages.
When, in 2002 at the latest, all prices and wages will be expressed in Euro within EMU, price and wage comparisons will be easier than at present. To the extent that the behaviour of voters and unions are influenced by ideas of fairness, the claim for equal pay might be made by unions within member states with lower productivity. In case these demands will be met before productivity has caught up, employment prospects will be reduced in the regions characterized by a lower level of productivity. This development may give rise to demands for financial transfers to regions that are at a disadvantage with respect to employment opportunities. Resistance on the side of the potential payers may lead to political tensions between the member states of EMU. German unification and its consequences are quoted as an example when such a situation developed. In this context one has to take note of the fact that, according to prevalent public opinion, policies to reduce unemployment remain primarily the responsibility of national authorities. This will not only dampen financial claims to other nations but also limit demands for equalizing wages prior to productivity.
Furthermore, as argued in chapter 3, there are more indications of downward pressure on wages within EMU than of the contrary.

If EMU imposes discipline on wage setting, the result may be competitive underbidding. Through exclusive wage restraints enterprises gain in competitiveness compared to their rivals in other member states. This kind of a beggar-my-neighbour policy gives reason to similar actions in the countries affected negatively by the first moves. A race of decreasing wages, unit labour costs, and prices could start. Faced with falling prices buyers in the markets for consumer durables or investment goods might be induced to hold back their orders, thus reducing economic activity. However, regardless of whether these fears of a deflationary spiral are well-founded or not, it seems safe to assume that such a process will provoke co-ordinated policy responses of the EMU-members that can cope effectively with the problems brought about by competitive underbidding in the labour markets. Moreover, the ECB obviously aims to avoid deflation as well as inflation (ECB 1999, 40: "Maintaining price stability avoids the large and arbitrary redistribution of wealth and income that arises in inflationary as well as deflationary environments,...").

5. Concluding Remarks

Looking at Scylla of wage increases that neglect productivity differences on the one side and at Charybdis of competitive underbidding in the labour markets on the other side, one may wonder whether there is a safe route in-between. Addressing this issue, the crucial point may be whether regional differences of productivity within EMU will tend to diminish. In this case, wages can approximate in accordance with productivity. On the one side, divergences in the path of unit labour costs will thus be avoided. If, on the other side, progress in the equalization of wages is sufficient to meet the demands for wage approximation expressed by the workes, one condition for the success of EMU will be fulfilled.

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