EUI Working Paper SPS No. 2003/4

Herrmann: ***From the EMS to EMU***

Europeanisation Series

The Social and Political Sciences Department of the European University Institute is committed to the study of Europeanisation in its broadest political and social terms. We do not treat Europeanisation solely as a process centred on the work of the formal European institutions, important though these are. Europeanisation refers to all processes whereby various European populations discover and develop shared ideas, cultures, institutions and approaches. Equally important for study are situations where such processes do not take place, or where previous divergences persist or new ones appear. This series of Working Papers is devoted to explorations of this extended sense of Europeanisation - and its limits.

EUROPEAN UNIVERSITY INSTITUTE, FLORENCE

DEPARTMENT OF POLITICAL AND SOCIAL SCIENCES

EUI Working Paper **SPS** No. 2003/4

From the EMS to EMU: How Economic and Monetary Union Changes the Structure of Wage-Bargaining Throughout the Euro-Zone

ANDREA HERRMANN

BADIA FIESOLANA, SAN DOMENICO (FI)

Printed in Italy in May 2003
European University Institute
Badia Fiesolana
I – 50016 San Domenico (FI)
Italy

From the EMS to EMU: How Economic and Monetary Union changes the Structure of Wage-Bargaining throughout the Euro-zone[*]

Andrea Herrmann (European University Institute, Florence)
March 2003

Abstract

This paper analyses how EMU has affected the structure of national wage bargaining systems. Firstly, it demonstrates that the latter have become co-ordinated in almost all E(M)U member states due to the agreement of governments and social partners upon one economy-wide wage formula. Secondly however, by rejecting expectations of convergence, the paper shows that the level at which wage-increases are ultimately determined, depends on the competitive advantage of an economy. In other words, countries with a competitive advantage in high quality manufacturing dispose of a co-ordinated and centralised wage-bargaining system, while economies that compete on low cost production prefer co-ordinated but decentralised wage bargaining. The paper concludes that the *explicit* bargaining co-ordination within the EMU member states leads to the *implicit* co-ordination of wage increases throughout the Euro-zone. Thus, the signalling game, which *de facto* secured homogenous wage developments throughout the EMS-zone, has not been disrupted but replaced under EMU.

---

[*] An earlier version of this paper was presented as the dissertation which completed my MSc studies at the London School of Economics in August 2002. I am grateful to Elke Herrmann-Jordan for her comprehensive support in the preparation of this work. I wish to thank Colin Crouch, Pepper Culpepper, Bob Hancké, Martina Lodrant, Simon Michel Berger, Martin Rhodes and Philippe Schmitter for stimulating discussions and for their comments on earlier drafts of this paper. Any errors are mine.

1. Introduction

On 1st January 1999, eleven of the fifteen current EU member states finally replaced their national currencies with the Euro within the framework of Economic and Monetary Union. As a response to this decision, a rich literature has emerged that analyses how the delegation of monetary policy to the European Central Bank affects national wage-bargaining systems. While this literature broadly agrees *that* EMU leads to a change in wage negotiation structures, many different and often contradictory suggestions have been advanced about *the direction* this change may take. Although different adjustment paths are proposed, the literature generally argues in favour of convergence. In other words, EMU is supposed to lead *either* to the 'Europeanisation' of wage negotiations at a supra-national level (EIRO 1999b) *or* to bargaining decentralisation to the company-level (see *inter alia* Burda 2001; Busch 1996). *Alternatively*, a third strand of reasoning suggests the re-centralisation of income negotiations at the national-sectoral level (see *inter alia* Pochet 1998: 70; International Institute of Labour Studies 1998: 6-7).

One single adjustment path can, however, hardly account for the different socio-economic needs of the European member states, considering the variety of their capitalist economies. Indeed, there is little evidence that supports the theory of either Europeanisation, decentralisation or re-centralisation. This paper therefore suggests a fourth adjustment path as the most likely outcome of wage-bargaining development under EMU. Although EMU often leads to the *co-ordination* of national wage-bargaining structures since it best serves the interests of politicians, employers and unions alike, divergence can be found among co-ordinated systems in terms of the bargaining level at which final wage increases are determined. In contrast to the centralisation literature (Pochet 1998: 70; International Institute of Labour Studies 1998: 6-7), this paper argues that actual income rises are not negotiated predominantly at the national-sectoral level, but that they can be decided just as well at a decentral level. Accordingly, the main argument of the paper is that the ultimate bargaining level is a function of each economy's competitive advantage. Thus, countries with a competitive advantage in high-quality manufacturing dispose of a *co-ordinated and centralised* wage-bargaining system to enable an education and training system that allows labour to acquire very specific skills. By contrast, political economies that compete in low-cost production rather adopt a *co-ordinated but decentralised* system which does not equalise wage differentials within the various production sectors and employment categories of an industry. These findings shed new light on the theory claiming that EMU has put an end to European-wide wage co-ordination (see Hall 1994; Hall and Franzese 1998). The paper thus concludes that the signalling game which implicitly secured homogenous wage developments throughout the EMS-zone has not been disrupted but replaced under EMU, with the result that wage bargaining throughout Europe has shifted from one co-ordination equilibrium into another.

To illustrate the impact of EMU upon national wage-bargaining systems, the second section of this article explains how income negotiations were organised under the EMS and how this co-ordination mechanism has been changed by the single currency project. Section 3 and section 4 each proceed in two steps. While the theoretical framework is discussed in the first part, empirical analysis is carried out in the second part of each section. Accordingly, section 3, by comparing wage-bargaining developments in all EU member states, shows that EMU has in almost all cases led to the co-ordination of national wage-bargaining systems. Analysing co-ordination in more detail, section 4 compares the competitive advantage of the Italian and Spanish economies to account for the differences that can be found among co-ordinated wage setting systems in terms of the bargaining level at which final income increases are determined. Section 5 concludes by considering the implications of the above findings.

2. From the EMS to EMU: The End of the implicit European-wide Wage –Co-ordination Game?

The following section sets out to explain why EMU is supposed to change national wage-bargaining structures. This explanation is based on the well known-theory of Hall and Franzese (1998) illustrating the relationship between central bank independence and co-ordinated wage bargaining.

Despite the absence of any explicit provisions, wage bargaining was *implicitly co-ordinated* under the EMS. Such co-ordination was feasible due to the well-developed signalling process within the German wage-bargaining system, whose results where then translated throughout the EMS-zone. Accordingly, this signalling game consisted of two steps.

(1) The first step took place in Germany where the transmission of the Bundesbank's inflation preferences and the capacity of the co-ordinated wage setting system to incorporate these preferences secured non-inflationary wage increases. Co-ordination throughout the economy was secured by the informal arrangement in which the wage settlement reached by the IG Metall served as a guideline for the settlements of all other industries. Accordingly, the latter replicated the wage agreement negotiated by the biggest and best organised union of the automobile, engineering and steel industry. This allowed the principal wage negotiators to predict overall income increases in Germany with the result that bargainers did not have to protect wages against an unexpected rise in inflation by striking excessive wage settlements (Soskice 1990b: 45-46; Hall 1994; Hall and Franzese 1998)[1]. Until the end of the EMS regime, German wage negotiators refrained from increasing wages excessively because they generally knew how the Bundesbank intended to respond to their wage settlement: It was not uncommon for the Bundesbank to issue 'pointed comments on the wage demands of the unions, accompanied by (..) warnings about the likely monetary policy consequences of overly inflationary wage settlements' (Hall and Franzese 1998: 513-514). The signalling process between German wage setters and the Bundesbank was thus at the heart of the strong and stable economic performance of postwar Germany.

(2) In a second step, German wage settlements were replicated by wage negotiators throughout the EMS-zone. Although the EMS was originally intended to be a symmetric system, Germany rapidly became its anchor due to the economy's strength and the Bundesbank's reputation (De Grauwe 2000: 105). In order to defend the exchange rate, the independent central banks of the other EMS member states were committed to increasing interest rates if wage settlements

[1] Although Hall and Franzese (1998) do not define the concept of 'excessive' or 'inflationary' wage settlements, it is useful for the following argument of this paper to specify this term: Inflationary pressure results from those wage settlements that increase real income levels above the rate of productivity growth. In other words: as long as nominal wage increases do not exceed the sum of inflation and productivity growth, they are not 'excessive' or 'inflationary'.

within their country were notably higher than the German wage increases (see Soskice 2000: 67). As a result, the wage settlement of the IG Metall became the ceiling for the wage demands of the labour unions in the other EMS member states. This mechanism made the Bundesbank the implicit central bank of the EMS, while the IG Metall evolved into the implicit wage-setter for the monetary system.

The signalling game was particularly pronounced between 1987 and the exchange rate crisis in 1992/1993. When capital controls were lifted in 1987, currency devaluation became extremely rare, because realignments without capital controls were difficult to implement without risking speculative attacks. The threat by the non-German central banks to punish inflationary wage-settlements therefore gained in credibility. Empirical evidence (Crespo 2001: 17) shows that this threat was well understood by both wage negotiators and governments throughout the EMS-zone (see also Hassel undated: 4-5). In many EMS member states, the social partners therefore agreed to tri-partite pacts, which were proposed by their governments to co-ordinate the wage-bargaining structures. As the theory of Hall and Franzese (1998) suggests, wage increases were particularly low in those EMS countries with co-ordinated wage-setting mechanisms, such as the Netherlands since 1982 (Visser and Hemerijck 1997), Ireland since 1987 (Wallace et al. 1998) and Denmark particularly after 1987 (Green-Pedersen 2001). In France and Belgium, where the fragmented or few encompassing wage-bargaining systems made co-ordination difficult, the government imposed wage restraint in line with German income increases (Rojot 1998; Hancké 1996). As an exception to the well-established norm of wage-bargaining co-ordination, the high unemployment rate and the difficulty of controlling inflation in both Italy and Spain showed the inefficiency of a non-accommodating monetary policy coupled with uncoordinated income negotiating systems (Pérez 2000).

Overall, the sophisticated signalling mechanism that developed between central banks and wage setters throughout the EMS-area led to a system of relatively low and stable rates of both inflation and unemployment. In other words, the macroeconomic equilibrium under the EMS was maintained because wage increases were implicitly co-ordinated throughout the EMS zone.

Following the logic of the above reasoning, the institutional design of EMU brought an end to the EMS signalling game because the adoption of a single currency automatically 'creates a new, more decentralised wage-bargaining structure in the EMU area as a whole' (Martin 1999: 5). This distorted the institutional equilibrium on which the EMS signalling mechanism was based. On the one hand, the German signalling process between the Bundesbank and the IG Metall was interrupted because the ECB does not determine interest rates according to the inflation rate of *one* country, but has to consider the *overall* inflation rate in the Euro-zone (De Grauwe 2000: 185). On the other hand, the signalling game that spread German wage increases across the EMS-zone has been distorted because - in contrast to its precursor - EMU is a genuinely symmetric monetary regime. Since Germany has lost its hegemonic position as anchor country, there are no more provisions that keep national inflation rates in line with the German inflation level (see De Grauwe 2000).

Thus wage negotiators throughout the Euro-zone are no longer able to predict overall income increases. Hall and Franzese (1998) underline the risk that this may induce bargainers to raise wages excessively. When national negotiators are uncertain about the pay settlements of their counterparts in the other EMU member states, they are likely to increase wages above the sum of inflation and productivity growth to protect real wages against an unexpected rise in inflation. If negotiators across Euro-land start to free-ride the system, the overall inflation-level grows. Since it is the predominant task of the ECB to secure price stability (De Grauwe 2000: 163), the Central Bank is supposed to raise interest rates to suppress inflationary pressure. Hall and Franzese (1998) therefore predict that the adoption of EMU will lead to a significant increase in unemployment throughout the Euro-zone. In other words, the end of the EMS signalling game is predicted as leading to increasing inflationary pressure, which will translate into recession and a rise in unemployment.

As a response to these gloomy predictions, the literature suggests various possibilities for a wage-bargaining adjustment that would secure macro-economic stability. While one strand of the literature (EIRO 1999b) suggests the Europeanisation of wage bargaining, consisting in a German-like signalling game at the European level, neo-liberal scholars (*inter alia* Burda 2001; Busch 1996) argue in favour of bargaining decentralisation, where wages are determined at the company level following the complete dismantling of income negotiation structures. Finally, re-centralisation literature (*inter alia* Pochet 1998: 70; International Institute of Labour Studies 1998: 6-7) proposes increasing the command of national governments over wage developments due to bargaining centralisation at the national-sectoral level. There is however little evidence that fully supports either of these theories. This paper therefore suggests a fourth adjustment path, namely continued co-ordination, as the most likely outcome of wage-bargaining development under EMU. The next two sections analyse this argument.

3. Co-ordination versus uncoordinated Decentralisation

The first basic argument of this paper is that the decision of the EMU member states to delegate the authority for monetary policy-making to the European level has not ended, but, on the contrary, has strengthened wage-bargaining co-ordination throughout the political economy. For the further development of this argument, it is crucial to point out that the impact of EMU upon national wage-bargaining systems already started following the Maastricht conference in 1991. Although the EMS *de jure* lasted until 31st December 1998, the EMS-signalling game *de facto* came to an end in 1993. After the widening of the exchange rate band of fluctuation to +/- 15 per cent in August 1993, the need for non-German trade unions to follow the German wage settlements became less compelling, because central banks could defend the exchange rate more easily (Crespo 2001: 21). While the EMS signalling game thus lost in significance in 1993, the idea of setting up a Monetary Union has crucially influenced the wage-bargaining structure since the Maastricht conference. All changes in wage bargaining after December 1991 are therefore better explained by the efforts of the national economies to enter EMU at the beginning of 1999. The reason for this is straightforward:

To reach the Maastricht convergence criteria, wage restraint was a highly promising, if not the only, way of achieving the required macro-economic equilibrium within a relatively short period of time. Since the convergence criteria foreclose the possibility of devaluation or of strong changes in interest rates, governments throughout Europe found themselves forced to secure wage restraint in order to bring inflation and budgetary deficits down. The literature on the economic performance of wage-bargaining systems (Calmfors and Driffill 1988; Soskice 1990b; Hall 1994; Hall and Franzese 1998) teaches us that there are two ways in which pay restraint can be achieved: either through wage-bargaining *co-ordination* or through the (uncoordinated) *decentralisation* of the wage-bargaining system.

(1) In a *decentralised bargaining system*, where wages are determined at the company level, the wage militancy of (firm-level) unions is reduced, because the price-elasticity of product demand is lower for the industry than for a company. Accordingly, increases in the workers' incomes directly affect the competitiveness of their firm. Excessive wage increases for some union members therefore immediately result in the dismissal of other union members. Unions therefore refrain from asking for excessive income increases with the result that wages are set at a market-clearing level (Calmfors and Driffill 1988).

(2) When the wage-bargaining process is *co-ordinated* throughout the political economy, the unions moderate their wage claims, because they internalise the negative externalities of their wage settlements. In other words, in co-ordinated wage-bargaining systems, explicit or implicit understandings between the social partners allow for the prediction of overall income increases. This enables wage negotiators to foresee the impact of income rises upon the economy, such as increases in the overall level of inflation or unemployment. Unions and employer associations therefore incorporate the impact of wage settlements into their decision-making and restrain from determining excessive wage increases because they are aware that the latter would negatively affect their members (Soskice 1990b; Hall 1994; Hall and Franzese 1998). The concept of co-ordination thus refers to the idea that wages develop in an homogenous way throughout the political economy. This means that wages set by the firms do not deviate from the pay-level which has been negotiated between the central unions and employer associations. Therefore, the wage agreement negotiated by a central group of bargainers covers the majority of all employees within a political economy. Soskice (1990b) points out that a high coverage rate can be achieved in three ways:

a) Firstly, by a centralised bargaining system, where highly encompassing peak associations negotiate wage agreements for their affiliates who constitute the majority of the economies' employees. In large countries, this is however a rather unlikely scenario, because an increased variety of industry sectors and occupational classes militates against standardised wage increases.
b) A second, rather decentralised co-ordination mechanism consists in the 'German' practice of striking a wage-agreement in one core-industry which is then replicated by the social partners of the other industry sectors. In addition, employers can enlarge the coverage rate of collective agreements by extending union contracts to non-unionised employees (Calmfors 2001: 79/80).
c) Finally, the state can secure high bargaining coverage rates by law. Through adopting so-called *erga omnes* mechanisms, the state ensures that 'collectively bargained wages act as binding minima for all contracts in the relevant sector' (Calmfors 2001: 79).

The difference between a decentralised co-ordinated and a decentralised uncoordinated wage-bargaining system thus consists in the homogeneity with which incomes rise throughout the political economy. While incomes in a decentralised and uncoordinated regime develop in a rather heterogeneous way according to the economic performance of each company, income rises are homogenous in a co-ordinated bargaining system, in line with the settlements that are determined between the central unions and employer associations.

This paper argues that in the run-up to EMU, both national governments and the social partners preferred co-ordination to decentralisation. These preferences do not change after the completion of EMU. Although wage restraint significantly contributes to achieving macro-economic stability, *national governments* often had to fundamentally reshape their economic and social policies to reach the Maastricht criteria. This included pension and welfare reforms as well as labour market flexibility issues. Since the social partners dispose of a significant information advantage in these fields, governments in co-ordinated bargaining systems cannot draw only on their expertise when shaping the necessary reforms. They also have fewer difficulties when it comes to implementation because the social partners, involved in the reform process, will sell the outcome to their members (see Culpepper 2002: 774). Once the country has been admitted into EMU, national governments, however, do not lose interest in promoting (wage-bargaining) co-ordination. As Crouch points out, electorates continue to hold their government accountable for the state of the national economy (Crouch 2000: 18). Under EMU, politicians however no longer dispose of an independent monetary policy or exchange rate mechanism to stabilise this. Furthermore, fiscal autonomy is significantly reduced by the Stability and Growth Pact, which stipulates fines if the budgetary deficit exceeds 3 per cent of the national GDP (De Grauwe 2000: 211/2). To secure macroeconomic stability, national governments are therefore highly interested in ensuring co-ordinated, non-inflationary wage increases that have a beneficial impact on the overall economy (Hall and Franzese 1998).

The *social partners* also have good reasons to favour co-ordination. Needless to say, *unions* prefer (wage-) bargaining co-ordination to decentralisation, particularly when co-ordinated wage restraint does not entail a continuous loss in real wages. However, the advantage of gaining or maintaining a strong voice in the economic and social policy-making process can be so important to the unions that they are even willing to accept real wage losses for a limited time period. On the other hand, *employers* may favour a co-ordinated wage-bargaining system, because it reduces the militancy of workers as well as the transaction costs for negotiating wage increases. Furthermore, standardised income-levels reduce wage and price competition (Traxler et al. 2001: 105). However, employers will only consent to co-ordinated wage-increases when the latter do not entail a loss in their industry's international competitiveness. This is particularly true for EMU, because fixing the exchange-rate precludes the possibility of competitive devaluation.

In sum, I argue that co-ordination is preferable for politicians, unions and employers alike if the co-ordinating wage formula provides for income increases that neither lead to inflationary pressure nor entail real wage losses or a decline in international competitiveness.

If the above reasoning holds true, two observable hypotheses can be deduced:

(1) Firstly, average increases in nominal wages were much lower in the EU member states over the 1990s than in the 1980s, in order to bring inflation down and to allow for compliance with the Maastricht convergence criteria.
(2) Wage restraint has been achieved through the co-ordination rather than the decentralisation of national wage-bargaining systems, whereby

(3) the adopted pay norms accommodate both the interests of governments in inflation-dampening wage increases as well as the interests of the social partners in maintaining the level of real wages and ensuring international competitiveness.

The following section analyses whether empirical evidence confirms these hypotheses.

Continued wage-bargaining co-ordination in the E(M)U member states

The empirical analysis of this section considers wage-bargaining developments in all fifteen EU member states, even though Denmark, Sweden and the UK finally decided not to participate in the European single currency. The present debate in the UK about the eventual adoption of the Euro does however show that these countries also made and still make considerable efforts to comply with the Maastricht criteria in order not to preclude participation in the single currency at a later stage.

Over the 1990s, national governments in all the EU member states except for the UK concluded or renewed tripartite agreements with their social partners or encouraged bipartite understandings between unions and employer associations (Calmfors 2001: 77-78). Provisions on co-ordinated pay restraint are of central importance to these so-called ‘Social Pacts’ (Hassel undated: 32-33). Table 1 shows that wage restraint in the E(M)U member states has indeed been pronounced during the 1990s, thereby contributing significantly to decreasing inflation rates over the same time period. These findings confirm the first initial hypothesis.

Table 1:Development of real and nominal wages and inflation since the 1970s

	Nominal wages			Inflation			Real wages		
	1971 - 1980	1981-1990	1991-2000	1971 - 1980	1981-1990	1991-2000	1971-1980	1981 - 1990	1991 - 2000
Austria	10,8	5,2	3,4	6,6	3,6	2,3	4,2	1,6	1,1
Belgium	12,2	5,0	3,7	7,5	4,6	2,3	4,7	0,4	1,4
Denmark	11,5	6,5	3,6	9,9	6,0	1,9	1,6	0,5	1,7
Finland	15,5	9,8	3,3	11,9	7,3	1,9	3,6	2,5	1,4
France	13,7	7,3	2,8	10,1	6,2	1,7	3,6	1,1	1,1
Germany	8,3	3,6	4,1	5,4	2,8	2,7	2,9	0,8	1,4
Greece	18,3	19,6	10,5	15,1	19,5	10,3	3,2	0,1	0,2
Ireland	18,6	9,2	5,1	14,4	7,1	3,7	4,2	2,1	1,4
Italy	18,4	12,0	4,2	15,4	11,0	4,1	3,0	1,0	0,1
Luxembourg	10,6	6,0	3,5	6,7	4,4	2,4	3,9	1,6	1,1
Netherlands	10,9	2,2	3,1	7,9	2,0	2,1	3,0	0,2	1,0
Portugal	22,6	19,1	8,3	17,0	17,7	6,2	5,6	1,4	2,1
Spain	20,4	10,2	4,7	15,8	9,5	4,0	4,6	0,7	0,7
Sweden	11,4	8,4	4,6	9,8	7,7	2,6	1,6	0,7	2,0
UK	16,0	8,7	4,7	14,3	6,5	3,1	1,7	2,2	1,6
EU-15 Average	**14,0**	**7,7**	**4,1**	**11,0**	**6,8**	**3,0**	**3,0**	**0,9**	**1,1**

Source: EIRO 2000b

As pointed out above, wage restraint can however be the result of either a decentralised or a co-ordinated wage-bargaining system. In this respect, restrained nominal wage increases *per se* do not say anything about the bargaining structure that has produced such an outcome. Instead the degree of uniformity with which incomes rise throughout a political economy gives information about the way in which wage restraint is achieved. Empirically, the homogeneity of wage increases can be demonstrated in two ways: either by the coverage rate of collective agreements or by the degree of wage-drift.

(1) In countries with a co-ordinated wage-bargaining system the majority of companies tends to comply with collective agreements negotiated between the central unions and employer associations. The coverage rate of collective agreements is therefore high in comparison to countries with a uncoordinated wage-bargaining structure. Accordingly, the coverage rate can be taken as a proxy for wage-bargaining co-ordination. Following this logic, table 2 shows that the majority of the EU countries and all EMU member states apart from Ireland can be classified as countries with a co-ordinated wage-bargaining structure, where at least 2/3 of all workers are covered by collective agreements.

Table 2: Coverage rate of collective agreements in the mid-1990s

	% of workers joining trade unions (union density rate)	% of workers covered by collective agreements (coverage rate)	'Excess coverage'	Extension of agreements through public law
Austria	34	**97**	63	+ +
Belgium	44	**82**	38	+ +
Germany	25	**80**	55	+
Portugal	< 20	**80**	> 60	+
Netherlands	19	**79**	60	+
France	< 4	**75**	> 70	+ +
Sweden	77	**72**	- 5	-
Finland	65	**67**	2	+
Spain	< 15	**67**	> 52	+
Denmark	68	**52**	- 14	-
Ireland	43	**43***	---	-
UK	19	**35**	16	-

Source: Calmfors 2001: 80

No reliable data available for Greece, Luxembourg and Italy

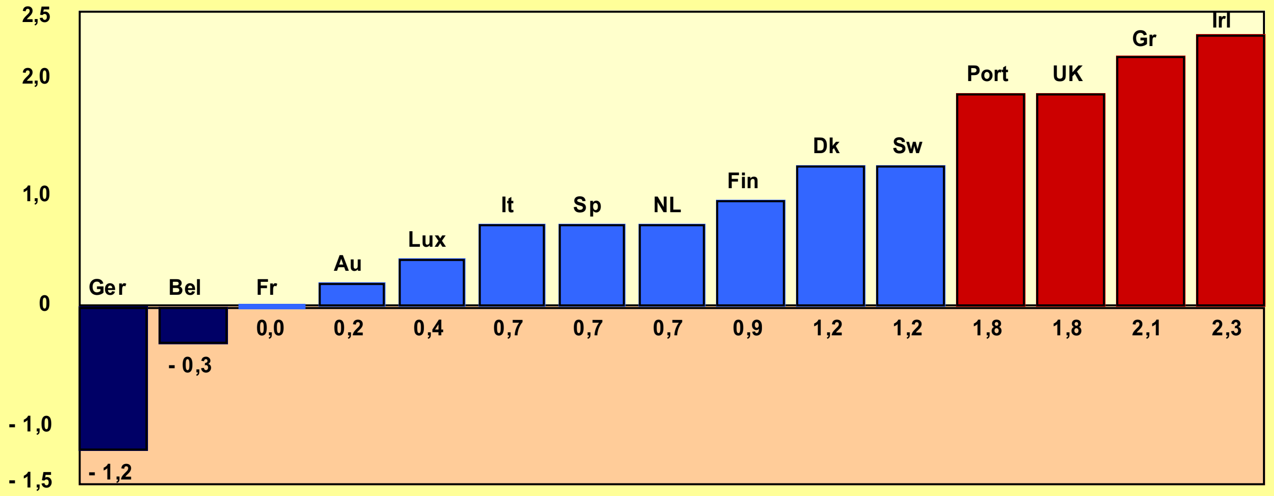
* Estimation based on the assumption that, although the social partners can *de jure* ask a Labour Court to register their agreement whereupon it can be extended to other employers and employees, this praxis is *de facto* 'remarkably absent from the Anglo-Saxon countries' (Calmfors 2001: 79).

In most cases the coverage rate by far exceeds the percentage of workers who actually join trade unions. High excess coverage rates are often the result of intervention by the state, which imposes the extension of collective agreements by law. This is a particularly pronounced practice in Austria, Belgium and France, but it is also common in Germany, Portugal, the Netherlands, Finland and Spain. Interestingly, *erga omnes* mechanisms are absent in Sweden and Denmark, which however show high union density rates anyway. Furthermore, in Germany and Austria high coverage rates result from the employers' activism to extend union contracts to non-unionised workers (Calmfors 2001: 79-81). Denmark provides an interesting borderline case, because an important part of unionised workers are not covered by collective agreements. Taking the coverage rate as a proxy for co-ordination, Denmark as well as Ireland and the UK rather qualify as uncoordinated wage-bargaining systems.

(2) Another way of measuring wage co-ordination consists in determining the level of wage-drift, defined as the difference between nominal income rises and standard wage increases. Since the majority of firms in co-ordinated wage-bargaining regimes does not deviate from the wage-levels determined by peak associations, wage increases are more homogenous with the result that wage-drift is comparatively lower than in uncoordinated regimes. In other words, the more

employers comply with collective agreements, the less empirically significant are income increases that are determined by employers and employees outside the collective framework. Using wage-drift as a proxy, Figure 1 shows a very similar classification pattern to Table 2.

Figure 1: Average wage drift in percent (1999 - 2001)



Source: Schulten 2002: 3

Three groups of countries can be distinguished: Firstly, Germany and Belgium qualify as countries with a highly co-ordinated bargaining structure, because the wage-drift over the last three years was negative, meaning that average income rises for non-unionised workers were below the level of standard wage increases. A second group of countries, composed of the majority of the EMU members, shows low wage-drift between 0 and 1.5 percent thereby qualifying as co-ordinated wage-bargaining systems. Finally, the UK and Ireland as well as Portugal and Greece where wage-drift over the last three years was above 1.5 points can be ranked as countries with an uncoordinated bargaining structure. While these findings correspond to the above ranking of Ireland and the UK as uncoordinated bargaining systems, they cast doubt on the stability of wage-bargaining co-ordination in Greece and Portugal. Although governments in both countries have concluded Social Pacts with the representatives of labour and business, they did not succeed in establishing a stable dialogue between the social partners. While in Portugal the largest unions did not subscribe to the Social Pacts offered by the government, collective negotiations in Greece are often suspended, which has led to a 'stop-go social dialogue' (Calmfors 2001: 77-78).

In sum, we find that the majority of the E(M)U member states disposes of co-ordinated wage-bargaining structures. Although the classification of Denmark, Greece and Portugal remains somewhat ambiguous, Ireland and the UK are the only countries that clearly qualify as uncoordinated wage-bargaining systems. This provides interesting insight into the Irish wage-bargaining reality. Although tripartite agreements have been a well-established practice in Ireland since 1987, they have not led to a genuinely co-ordinated wage-bargaining process because neither the Irish state nor Irish employers have taken a decisive initiative to extend the coverage rate of collective agreements. Thereby Ireland is the only E(M)U member where the concluded Social Pacts did not have any significant co-ordination effect. Accordingly, the only countries that achieved wage restraint through an uncoordinated and rather decentralised bargaining system are Ireland and the UK. This confirms the second initial hypothesis that co-ordination is preferred to decentralisation.

Interestingly, empirical analysis (EIRO 2000b) shows that wage co-ordination in almost all E(M)U member states results from the application of a strikingly uniform pay norm. It stipulates that wage increases remain within a margin that is determined by the sum of inflation (wage floor) and productivity growth rates (wage ceiling). How can a single wage formula accommodate the interests of politicians, employers and unions alike? As demonstrated above, *governments* had and still have to ensure that wage increases do not lead to inflationary pressure, meaning that nominal wage increases must not exceed the sum of inflation and productivity growth. This coincides with the interests of *employers*, because the international competitiveness of their sector is maintained as long as real income increases do not exceed the level of productivity growth.[2] Accordingly, the sum of inflation and productivity growth rates becomes the wage ceiling of collective wage agreements. The wage interests of the *unions*, on the other hand, are determined by the commitment to guarantee the maintenance of real wage levels to their members. This means that nominal wage increases have to be at least equal to the rise in inflation. Thereby inflation becomes the wage floor for collective wage increases.

Pay norms that stipulate wage increases in line with inflation and productivity growth rates are indeed central provisions to the Social Pacts that national governments concluded with their social partners over the 1990s. In the cases of Finland, Germany, Greece, Italy, Portugal and Spain, the wage formula is spelled out directly, whereas Social Pacts in Belgium, Denmark, Ireland, the Netherlands and Sweden adopt the pay norm indirectly by claiming that wage increases have to be in line with income rises in the other EU members in order to maintain international competitiveness (EIRO 2000a). This not only confirms the third hypothesis stated in the beginning of this section, but it also suggests that a remarkably uniform co-ordination mechanism is emerging throughout the E(M)U zone.

The following section turns to a more elaborate analysis of the wage setting process in those countries that dispose of a co-ordinated bargaining system.

---

[2] Pay norms of national Social Pacts take productivity levels at various levels as a benchmark, i.e. they suggest average productivity growth of the company, of the industry or of the whole economy as a point of reference for wage increases. In the rare instances where economy-wide productivity is suggested as a benchmark, ultimate wage increases are (just as in the overwhelming majority of the E(M)U member states) decided at the industry- or the company-level (EIRO 2000a). This allows employers of those industries (companies), which have witnessed productivity increases below the economy's average, to determine wage settlements in line with their industry's (respectively their company's) competitiveness. Accordingly, pay norms establish productivity levels as a ceiling for wage increases. They are not meant to be applied in a rigid way that would endanger the competitiveness of national industries.

4. Centralised versus decentralised Co-ordination

The second basic argument of this paper is that the bargaining level at which co-ordinated wage increases are actually determined is a function of a country's competitive advantage. This argument notably distinguishes the paper from the reasoning of the wage-bargaining literature, which argues that EMU has led to a re-centralisation of the wage-bargaining process (Pochet 1998: 70; International Institute of Labour Studies 1998: 6/7). The central flaw of this literature consists in its erroneous assumption that Social Pacts – since they have been concluded at the national level – have automatically (re-)established the central level as predominant for the final determination of wage increases. In his well-known article, Soskice (1990b: 44) instead convincingly argues that the wage-bargaining process can be co-ordinated irrespective of the level at which income rises are actually decided. In other words, wage bargaining can be co-ordinated when wage increases are negotiated at the national level, but also when they are set at a decentral level. The aim of the second part of this paper is therefore to account for the different forms of (de)centralised wage-bargaining co-ordination that can be found in the EU member states.

The literature on institutional efficiency convincingly argues that different competitive strategies require different labour market institutions (see *inter alia* Finegold and Soskice 1988; Traxler 1997; Hall and Soskice 2001). While high-quality production and the manufacturing of customised goods necessitate concertation between the social partners and a centralised wage-bargaining system, a decentralised bargaining structure is at the core of successful low-cost competition (Traxler 1997: 31). The reason for this is straightforward:

The manufacturing of *high-quality* products and customised goods depends crucially on a work-force with very specific skills that often can be used only within the context of one industry or company. The centralisation of wage bargaining plays a central role in enabling an *education and training system* that delivers the necessary skills (Finegold and Soskice 1988; Hall and Soskice 2001), because it motivates both employers and employees to engage in sophisticated education and training programs. *Employers* only invest in highly-specific training if they are assured that their trained workers will not be poached by competitors. Centralised wage bargaining leads to the equalisation of wages at equivalent skill levels across the national industry. Equal wage levels, in turn, reduce the risk of poaching, because workers are less likely to change a company if pay remains the same. For the employers this is an important mechanism to ensure that their investment in specific vocational training will pay off (Hall and Soskice 2001: 25). In a similar vein, *employees* are only willing to acquire highly specific skills that are not transferable from one industry to another, if they are assured that such investment results in lucrative employment. In centralised bargaining systems, unions and employers usually do not only negotiate wages, but also determine training courses that provide workers with highly specific skills. The determination of training protocols, skill categories and professional diplomas, which are recognised by employers throughout the industry, ensures that workers can make use of highly specific skills not only in the context of one company but across the whole sector (Hall and Soskice 2001: 25). Furthermore, the equalisation of wages at equivalent skill levels (see above) assures workers 'that they are receiving the highest feasible rates of pay in return for' their commitment to invest in specific skills, which, in turn, motivates them to make such commitment (Hall and Soskice 2001: 25).

In contrast to high-quality manufacturing, the success of *low-cost production* depends on a decentralised wage-bargaining system. Since the wage militancy of the unions is reduced at the decentral level (see Calmfors and Driffill 1988, as explained above), a co-ordinated and decentralised bargaining system potentially allows for the *lowest possible wage increases*. Another important advantage of decentralised wage bargaining for low-cost economies is that possible wage differentials within one sector are not suppressed. Although a political economy with a decentralised wage-bargaining system lacks the necessary institutional support to provide labour with highly specific skills, this disadvantage is secondary to the opportunity of keeping wage increases as low as possible, because low-cost production does not require specific skills in any case.

If the above reasoning holds true, the following testable hypothesis can be derived:
1. Countries that have a competitive advantage in high-quality production dispose of a (co-ordinated and) centralised wage-bargaining structure, while
2. a decentralised (and co-ordinated) wage-bargaining structure can be found in countries with a competitive advantage in low-cost production.
3. While employees in high-quality economies are highly skilled, labour in low-cost economies disposes of a rather low level of education.

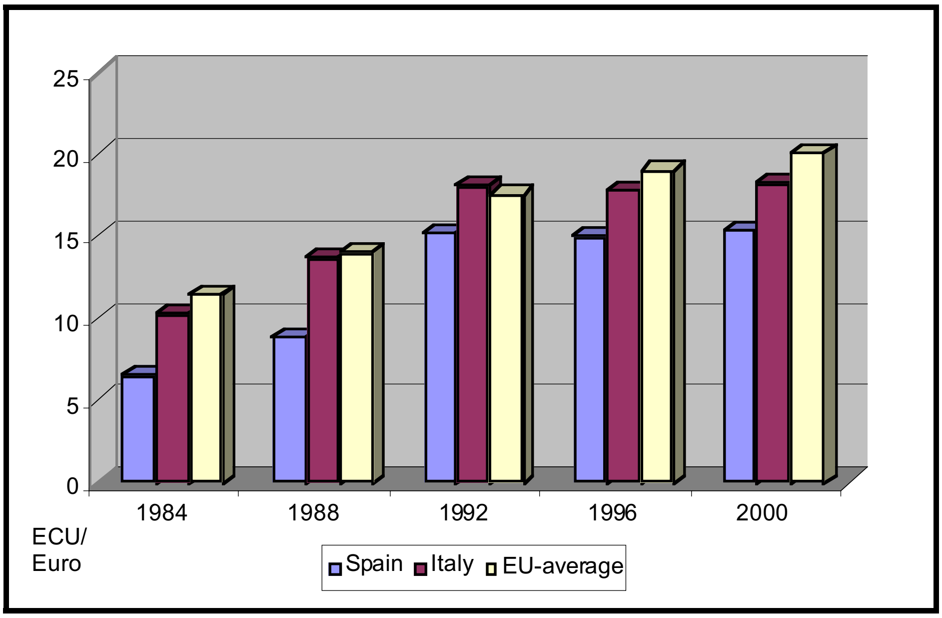
The next section investigates whether these observations can indeed be made.

Competitive advantage and wage bargaining in Italy and Spain

The following empirical analysis compares the development of wage bargaining in Italy and Spain since the Maastricht conference in December 1991. This comparison is most illuminating for three reasons. Firstly, both countries followed a very similar adjustment path from the early 1990s on, from uncoordinated wage-bargaining systems towards explicit bargaining co-ordination throughout the national economy. Secondly, a large majority of the manufacturing sector in Italy and Spain is (still) engaged in the production of traditional goods, such as textiles, rubber and plastic. Neither country has yet taken the adjustment path towards a high-tech economy such as the UK or Ireland. Thirdly, Italy and Spain are crucially different when it comes to their competitive advantage: everything else being equal, this key difference accounts for the variations that can be found between the Italian and the Spanish wage-bargaining process.

The first step of analysis sets out to demonstrate that Spain has a competitive advantage in the field of low-cost production, whereas it is advantageous for Italy's industries to engage in high-quality manufacture. The most important production factors for successful *low-cost manufacturing* are cheap raw materials and cheap labour. Since raw materials are flexible while labour is not, cheap labour costs are decisive for the success of low-cost production. Accordingly, figure 2 - taking labour costs as a proxy - shows that the Spanish economy is particularly competitive in standardised low-cost manufacture. Within the EU, Spain has the lowest labour costs after Greece and Portugal (Beyfuß and Weber 2002: 6).

Figure 2: Average Labour Costs per Hour, paid in the Manufacturing Sector (1996)



Source: Statistisches Jahrbuch für das Ausland, various years

High-quality production, on the other hand, can be expressed in terms of the value that is added to raw materials by the production process. Accordingly, table 3 reflects Italy's competitive advantage in high-quality, i.e. high value-added manufacture.

Italy's competitive advantage clearly consists in the specialisation of its manufacturing sector in high-quality production and in the manufacturing of customised goods (Regini 1997: 103-104). A glance at the Italian trade balance shows that the fashion industry (textiles, clothing and footwear) as well as the designer-furniture sector are still part of the most successful Italian export industries in 2000 (OECD Database on International Trade and Competitiveness: undated). Even during the period of economic crisis in 1992/1993, these traditional manufacturing sectors showed continuous growth. Moreover, Italy is among the ten biggest European steel exporters and performs strongly in the export of road vehicles and customised machinery tools (Drüke 2000: 39ff). In contrast to Spain, the survival of these rather traditional manufacturing sectors has been possible due to the specialisation of the Italian economy in high value-added production and in customised commodities (Regini 1997).

Table 3: Value added in the most important Italian and Spanish manufacturing sectors (1996)

Gross value added (factor prices in 1000 ECU) per worker in 1996					
	Textiles	**Paper and Paper Manufactures**	**Plastics and Rubber Manufactures**	**Metal Working Manufactures**	**Machinery and transport equipment**
Austria	47	88	49	48	49
Belgium	41	53	59	45	56
Denmark	45	52	51	45	44
Finland	38	68	50	43	52
France	33	52	42	39	46
Germany	38	58	48	46	51
Greece	19	21	25	26	---
Ireland	22	80	37	30	41
Italy	**40**	**56**	**50**	**46**	**52**
Luxemb.	---	54	76	46	49
Portugal	12	25	20	13	17
Spain	**23**	**37**	**36**	**26**	**34**
Sweden	43	58	46	48	52
UK	26	46	35	31	39
EU	**33**	**53**	**44**	**39**	**45**

Source: Statistisches Jahrbuch für das Ausland (2001)

Table 3 also reflects that, in line with its competitive advantage in low wage levels, the Spanish manufacturing sector has engaged predominantly in low quality production. Low-cost manufacture in the field of textile, clothing, leather and footwear, but also in rubbers and plastic traditionally belonged to the most successful export industries of the Spanish economy. Since Spain's accession to the European Union, Spanish wages have however increased without a parallel raise in labour productivity. Thus Unit Labour Costs have significantly deteriorated. The internationalisation of the markets and the emergence of low wage countries in Asia and Eastern Europe as strong competitors to Spain's low value-added industry is threatening its competitive advantage (Martín 2000: 70ff). Accordingly, the dependence on imports of manufactured goods has increased over the last decade (Scobie 1998: 76). Today, the most important export sector of the Spanish economy is the road vehicle industry (OECD Database on International Trade and Competitiveness: undated). Interestingly, the Spanish car industry is without exception owned by or associated with foreign automobile manufacturers who have out-sourced standardised production processes in order to make use of the still comparatively lower Spanish wage levels (see Scobie 1998: 73).

The second step of the analysis reveals that the competitive advantages of Italy, respectively Spain have determined the bargaining level at which final income increases are negotiated.

Shortly after the Maastricht conference, the Italian social partners in July 1993 agreed to the government's proposal to institutionalise the wage-bargaining process which had been fragmented and uncoordinated up till then. The central provision of the pact, renewed in 1998, consists in the determination of a wage formula according to which, every two years, wages are negotiated successively at two different levels. Firstly, pay is increased at the national-sectoral level according to the inflation target of the ECB (EIRO 1999a). Secondly, wages can be topped up at the firm level according to the company's productivity growth rate (EIRO 1998a). Although the Italian pay formula *de jure* provides for wage top-ups at the firm level, such productivity premia are *de facto* only negotiated in large companies. In Small and Medium Enterprises (henceforth SMEs), which constitute the overwhelming majority of all Italian firms, productivity premia are rarely granted to employees. Thus, it is only for workers in large companies, making up less than 20% of Italy's working population (Drüke 2000: 45), that income increases are actually negotiated at the firm level. For the absolute majority of Italy's employees, working in SMEs, final income increases are determined at the central, i.e. the national-sectoral level (Callieri 2002).[3]

As pointed out above, a centralised wage-bargaining system motivates both employers and employees to engage in education and training providing highly specific skills. Firstly, Italian employees are willing to acquire specific skills because unions and employer associations at the central level have established industry-wide recognised diplomas which are awarded to Italian trainees after they have passed the exams at the end of vocational education programs. Once they have finished vocational education, employees in Italy are however expected to complete and up-date their knowledge through attending continuing training courses provided by their companies (EIRO 1998b). At that stage the equalisation of wages at equivalent skill levels is of crucial importance for the investment of employers into a highly specific training system because it reduces the risk of poaching (see above). This is exactly what motivates Italian employers to invest in highly specific skills. Even SMEs collaborating in the production of customised manufacturing in so-called 'industrial districts', provide continuing training – often by combining their efforts in order to develop highly specific training courses (Drüke 2000: 45- 46). Thus, employers in Italy have a vested interest in an industry-wide centralised wage-bargaining system, not only because it reduces the risk of poaching but also because it keeps conflicts on wages out of the company (see Estevez-Abe at al. 2001: 145ff). After its victory in May 2001, the newly elected right-wing government under Silvio Berlusconi issued several proposals to make the labour market more flexible. Interestingly though, no provision touches on the wage setting system or proposes its decentralisation on the lines of the Anglo-Saxon model (EIRO 2002b). These findings confirm the first hypothesis formulated in the beginning of this section.

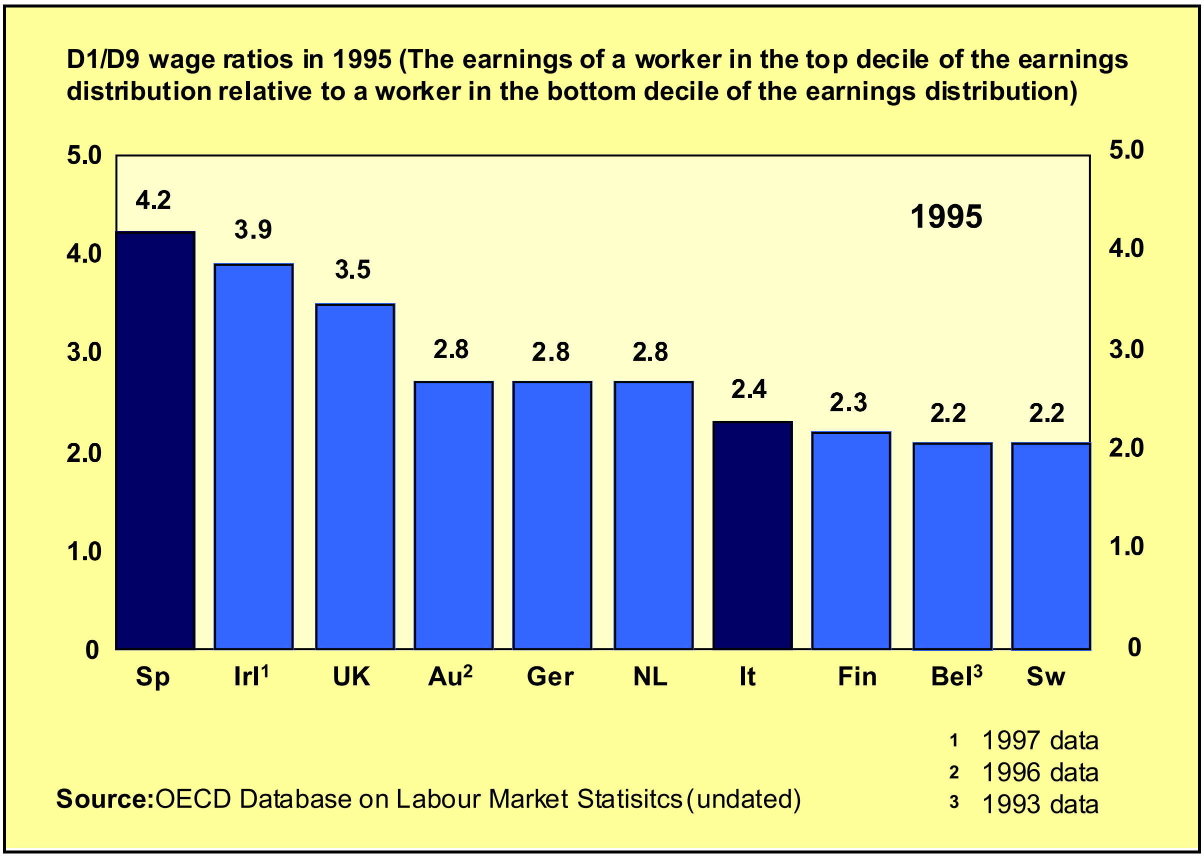
In contrast to their Italian counterparts, it took the Spanish social partners nearly ten years longer to agree officially upon the co-ordination of the wage-bargaining structure. In 1992 and 1993 Spain's social partners rejected their government's proposal to introduce wage restraint through an overarching incomes policy accord (Pérez 2000: 443). At that time, opposition mainly came from the *unions*, who were afraid that real pay increases would – at least temporarily – be lower under a centrally co-ordinated regime than under a decentralised and rather uncoordinated bargaining system (idem). Spanish *employers* were certainly in favour of wage restraint, but have traditionally preferred a decentralised bargaining system because centrally determined pay increases would suppress wage

[3] In 1994, 82% of the Italian workforce were employed in SMEs. More recent data is not available, but figures have remained stable (EIRO 2000b; Drüke 2000: 45-46).

differentials. Figure 3 shows that wage differentials in Spain are indeed pronounced between the various Spanish regions - even within one industry or employment category (Suárez Santos 2002). Furthermore, until the mid 1990s, the potentially higher and more inflationary wage increases, resulting from the rather uncoordinated system, could be offset by competitive devaluation. Indeed, the Peseta was devalued four times between 1991 and 1996, thereby contributing substantially to the strengthening of Spain's international competitiveness (Scobie 1998: 12ff). Thus, in the early 1990s neither employers nor employees were interested in the *centralisation* of the Spanish wage-bargaining system.

However, albeit no formal agreement existed between the social partners, *informal co-ordination* of collective wage-bargaining can increasingly be observed over the 1990s. On the one hand, unions were aware that the government would unilaterally impose income restraint if wages increased excessively. On the other, the *erga omnes* principle introduced by legislation secured the extension of decentrally negotiated agreements to all employers of the region's industry (Pérez-Díaz and Rodríguez 1995: 170). This *de facto* led to moderate and homogenous wage rises throughout the Spanish political economy (Pérez 2000: 448). Increasing co-ordination becomes visible in the agreements which the social partners concluded in 1994 and 1997. Although they did not introduce a co-ordinating pay norm, both agreements aimed at furthering the transparency of the wage-bargaining structure (Pérez 2000).

Figure 3: Wage differentials in selected EU member states



The situation changed after the completion of EMU, when exchange rate fixing precluded the possibility of devaluation to maintain the competitiveness of the Spanish economy. To ensure macro-economic stability, the Spanish government - by threatening to impose a reform unilaterally - exerted pressure on the social partners to reach an official agreement on wage-bargaining co-ordination. Consequently, in December 2001, employers and unions agreed on a common wage formula according to which negotiators at all levels are requested to set wage increases in line with the government's annual inflation forecast. 'Wage increases [can however] be higher than the forecasted inflation rate within the limits arising from [productivity growth]' (EIRO 2002a).

Interestingly though, this co-ordination formula does not contain any obligations concerning the prevailing bargaining level. Indeed, in line with the competitive advantage of the economy, wage negotiations in Spain still take predominantly place at decentral levels. Only 1.6% of all collective agreements are concluded at the national-sectoral level, whereas collective agreements at the company level amount to 72.4%. Accordingly, the majority of the Spanish workforce[4] is covered by agreements concluded at the provincial-sectoral or the company level (CEOE 2002:6).[5] Albeit co-ordinated, collective bargaining on wages is thus still highly fragmented and decentralised. This not only entails moderate wage increases but most crucially secures that *wage differentials* are not suppressed within one sector (Suárez Santos 2002).

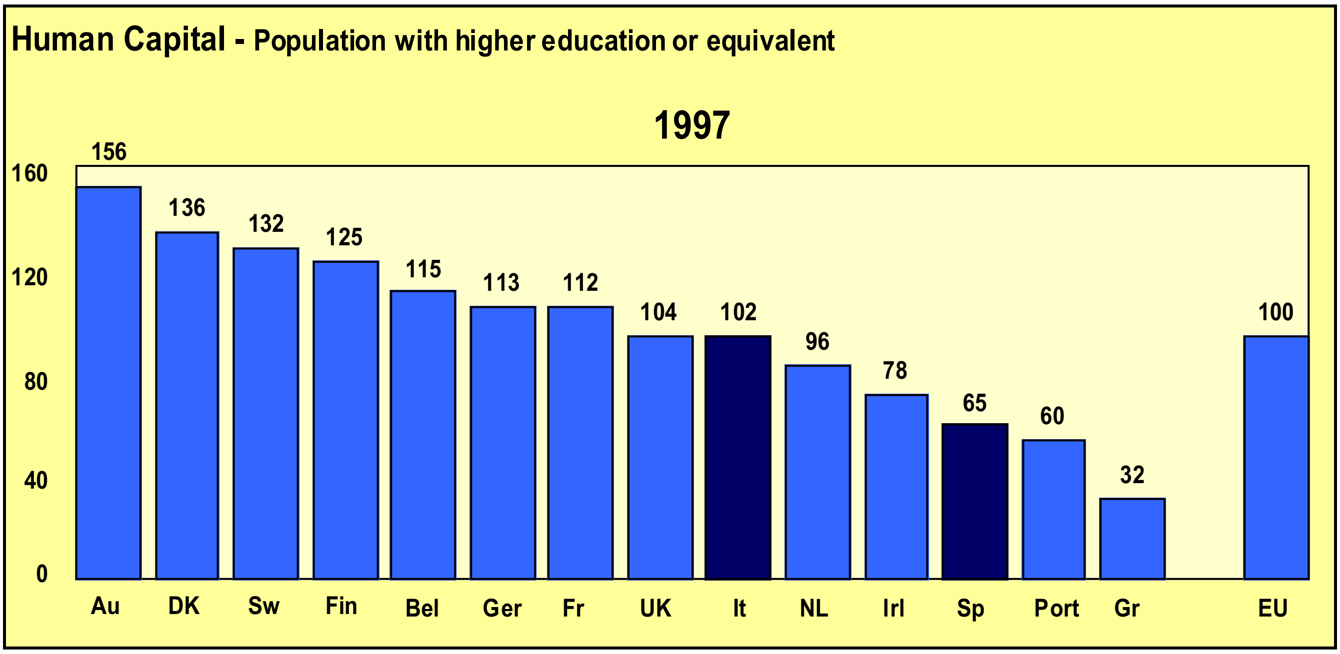
[4] About 65 % of the Spanish workforce is covered by collective agreements that are concluded at a decentral level (CEOE 2002: 6).
[5] Figures refer to agreements concluded in 1999/2000.

The need for flexible and low wages is also manifested by another remarkable phenomenon of the Spanish labour market, namely, the huge percentage of temporary employment. In 1997, 'nearly 34 per cent of wage-earners were subject to temporary contracts, almost three times the average EU ratio' (Martín 2000: 49). The gap between wage levels that are paid to temporary employees on the one hand and permanent workers on the other amounts to 47%, thereby constituting by far the most pronounced difference between permanent and temporary pay levels of all the European member states (OECD 2002: 142).

In addition to the large number of flexible employment contracts, (wage) bargaining decentralisation significantly contributes to maintaining Spain's competitive advantage in low-cost production, since it allows regulation of employment conditions and wage levels according to the individual needs of each (group of) company(s). This confirms the second hypothesis that countries with an competitive advantage in low-cost production opt for decentralised bargaining co-ordination.

In a last step, the above reasoning shall be counterchecked. If it holds true that centralised wage bargaining is at the basis of a sophisticated education and training system, whereas decentralised wage bargaining is an obstacle to providing workers with specific skills, we should find that education levels in Italy are significantly higher than in Spain. This logic is indeed confirmed by figure 4. Taking the amount of the population with higher education as a proxy, the figure shows that in Italy significantly more employees engage in higher education than in Spain. Thereby Spain qualifies as the EU country with the third lowest level of employee education, while Italy slightly ranks above the EU average. These findings confirm the last initial hypothesis.

Figure 4: Human capital endowment (1997)



Source: Martín 2000: 33

5. Conclusions

This paper has demonstrated that EMU has led to the co-ordination of national wage-bargaining systems in almost all E(M)U member states due to the conclusion of Social Pacts, because governments need(ed) the support of their social partners to secure macro-economic stability. Co-ordination results from the application of a wage formula, which looks strikingly similar in all countries that have concluded social pacts in the run-up to EMU. In this pay norm inflation constitutes the floor for wage increases, whereas the wage ceiling is given by productivity growth. Applying such formula offers three advantages. Firstly, in accordance with the interests of labour, real wage levels are maintained. Secondly, in line with the employers' preferences, international competitiveness in the form of stable unit labour costs is secured. Finally, reflecting the government's interests, inflation has fallen in the medium term because wage increases are in line with the predicted rise in price levels and productivity growth. While pay norms set strict benchmarks for the magnitude of wage increases, they leave considerable flexibility to the social partners in terms of the bargaining level at which final income rises are determined. Empirical evidence has shown that the level at which wage increases are actually set, is a function of a country's competitive advantage. Whereas low-cost economies go for a co-ordinated but decentralised wage setting system, countries with a competitive advantage in high-quality production rather adopt a co-ordinated and centralised wage-bargaining structure.

Two noteworthy implications result from these findings:

(1) Firstly, when wage-bargaining systems are explicitly co-ordinated within almost all E(M)U member states, this leads to the implicit co-ordination of wage-bargaining structures throughout the Euro-zone. Soskice (2000: 51) points out that two institutional preconditions are necessary for effective bargaining co-ordination:

Firstly, ‘a system of knowledge transmission, so that different bargaining groups know what outcome is expected of them’. Secondly, an efficient sanctioning mechanism is needed in order to punish those bargainers that make inflationary pay settlements.

Wage bargaining under the EMS had both elements: First, the signalling mechanism between the Bundesbank and the IG Metall as well as the exchange rate peg between the Bundesbank and the other EMS central banks allowed for the necessary knowledge transmission of inflation expectations. Second, since both the Bundesbank and the central banks of the other EMS member states had at their disposal the credible and well-understood threat to raise interest rates, negotiators restrained from bringing about excessive wage increases that would have exceeded the sum of inflation and productivity growth. Thus, the informal wage co-ordination under the EMS evolved into a relatively stable and robust regime, that kept itself in balance.

But also under EMU, a European-wide transmission and sanctioning mechanism seems to have come into being: On the one hand, the ‘magic wage formula’, which is an essential component of all Social Pacts, serves as the necessary *transmission* mechanism. Wage-bargainers throughout E(M)U are able to foresee that the majority of incomes will increase within the limit of inflation, defined as the ECB’s inflation target, and company- or industry-wide productivity growth. This, on the other hand, entails the *sanctioning* of those bargainers that do not increase wages in line with this formula. Since competitive devaluation is by definition no longer possible within a single currency area, defection from non-inflationary wage settlements is now punished by a loss in international competitiveness. Thus, even in countries that have not officially adopted the ‘E(M)U pay norm’, such as France, negotiators are highly likely to keep income increases in line with those of their competitors in explicitly co-ordinated wage-bargaining systems. It follows that wage increases *continue to be implicitly co-ordinated* across the member states of the monetary zone.

It can therefore be argued that the EMS signalling game has not been disrupted but transformed by the completion of EMU, so that European-wide wage bargaining has shifted from one co-ordination equilibrium into another.

(2) Secondly, one can expect that institutional differences between high-quality and low-cost economies will become more pronounced through Economic and Monetary Union. As pointed out above, EMU not only brings an end to competitive devaluation but also increases the transparency of prices. Thus, the need for an efficient production system becomes even more compelling for a company to remain internationally competitive. Since wage-bargaining institutions can notably contribute to the efficiency and international competitiveness of national production systems, it is highly likely that employers will press for the most supportive institutional framework. Accordingly, one can expect that wage bargaining in low-cost economies will become increasingly *co-ordinated and decentralised*, whereas economies specialised in high-quality manufacturing will opt for a *co-ordinated and centralised* wage-bargaining system.

It is, however, up to future research to verify these claims.

References

Beyfuß, J. and Weber, A. (2002) *Industriestandort Deutschland: Ein grafisches Porträt,* 9th edn. Köln: Deutscher Instituts-Verlag.

Burda, M.C. (2001) *European labour markets and the Euro: How much flexibility do we really need?,* Berlin: ENERPI: European Network of Economic Policy Research Institutes, Working Paper.

Busch, K. (1996) Le danger de dumping social et salarial. In: Jacobi, O. and Pochet, P., (Eds.) *Union économique et monétaire et négociations collectives*, Bruxelles: Observatoire social européen.

Callieri, C. (2002) *Telephone interview with Carlo Callieri*, Vice-chairman of Confindustria in 1992.

Calmfors, L., et al (2001) The future of collective bargaining in Europe. In: Boeri, T., Brugiavini, A. and Calmfors, L., (Eds.) *The role of unions in the twenty-first century : A report for the Fondazione Rodolfo Debenedetti*, pp. 1-156. Oxford: Oxford University Press.

Calmfors, L. and Driffill, J. (1988) Bargaining structure, corporatism and macroeconomic performance. *Economic policy* **6**, 13-61.

CEOE - Confederacíon Espanola de Organizaciones Empresariales, Department of Labour Relations (2002) *Collective Bargaining within the Spanish Labour Relations System*, Presentation given in Turin on 22nd February 2002.

Crespo, C. (2001) *Labour unions and central banks: From the EMS to EMU,* London: Dissertation for the MSc in European Studies (unpublished); London School of Economics and Political Sciences.

Crouch, C. (2000) Introduction: The political and institutional deficits of European Monetary Union. In: Crouch, C., (Ed.) *After the Euro: Shaping institutions for governance in the wake of European Monetary Union*, pp. 1-23. Oxford: Oxford University Press.

Culpepper, P.D. (2002) Powering, puzzling, and 'pacting': the informational logic of negotiated reforms. *Journal of European Public Policy* **9**, 774-790.

De Grauwe, P. (2000) *The economics of monetary union*, 4th edn. Oxford: Oxford University Press.

Drüke, H. (2000) *Italien: Wirtschaft, Gesellschaft, Politik*, 2nd edn. Opladen: Leske + Budrich.

EIRO - European Industrial Relations Observatory (1998a) *Pay trends in Italy since the July 1993 agreement*, Available at: http://www.eiro.eurofound.ie/1998/06/feature/IT9806326F.html.

EIRO - European Industrial Relations Observatory (1998b) *Collective bargaining and continuing vocational training in Europe April 1998; Contributing Articles: Italy,* Available at: http://www.eiro.eurofound.ie/1998/04/study/index.html.

EIRO - European Industrial Relations Observatory (1999a) *National social pact for development and employment signed*, Available at: http://www.eiro.eurofound.ie/1999/01/feature/IT9901335F.html.

EIRO - European Industrial Relations Observatory (1999b) *The "Europeanisation" of collective bargaining July 1999; Comparative Study*, Available at: www.eiro.eurofound.ie/1999/07/study/index.html.

EIRO - European Industrial Relations Observatory (2000a) *Wage policy and the EMU; Comparative Study,* Available at: http://www.eiro.eurofound.ie/2000/07/study/index.html.

EIRO - European Industrial Relations Observatory (2000b) *Wage policy and the EMU; Contributing Articles: Italy*, Available at: http://www.eiro.eurofound.ie/2000/07/study/index.html.

EIRO - European Industrial Relations Observatory (2002a) *Central agreement on bargaining in 2002*, Available at: http://www.eiro.eurofound.ie/2002/01/feature/ES0201207F.html.

EIRO - European Industrial Relations Observatory (2002b) *Unions divided as dialogue resumes*, Available at: http://www.eiro.eurofound.ie/2002/06/inbrief/IT0206102N.html.

Estevez-Abe, M., Iversen, T. and Soskice, D.W. (2001) Social protection and the formation of skills: A reinterpretation of the welfare state. In: Hall, P.A. and Soskice, D.W., (Eds.) *Varieties of capitalism: The institutional foundations of comparative advantage*, pp. 145-183. Oxford: Oxford University Press.

Finegold, D. and Soskice, D.W. (1988) The failure of training in Britain: Analysis and prescription. *Oxford Review of Economic Policy* **4**, 21-53.

Green-Pedersen, C. (2001) Small states with big success: Party politics and governing the economy in Denmark and the Netherlands form 1973 to 2000. In: Anonymous *Paper prepared for the Annual Meeting of the American Political Scinece Association, San Francisco, 30th August - 2nd September*

Hall, P.A. (1994) Central bank independence and co-ordinated wage bargaining: The interaction in Germany and Europe. *German politics and society* **31**, 1-23.

Hall, P.A. and Franzese, R.J. (1998) Mixed signals: central bank independence, coordinated wage bargaining and European Monetary Union. *International organization* **52**, 505-535.

Hall, P.A. and Soskice, D.W. (2001) An introduction to varieties of capitalism. In: Hall, P.A. and Soskice, D.W., (Eds.) *Varieties of capitalism: The institutional foundations of comparative advantage*, pp. 1-68. Oxford: Oxford University Press.

Hancké, B. (1996) *Labour unions, business co-ordination and economic adjustment in Western Europe, 1980-1990*, Berlin: WZB für Sozialforschung; Discussion paper FS I 96 - 309.

Hassel, A. (undated) *A new going rate? Co-ordinated wage bargaining in Europe*, Max-Planck-Institut für Gesellschaftsforschung; Available at: http://www.mpi-fg-koeln.mpg.de/people/hl/downloads/European_wage_bargaining.pdf.

International Institute for Labour Studies (1998) *Network on Organized Labour in the 21st Century - Progress Report on the Network*, Available at: http://www.ilo.org/public/english/bureau/inst/project/network/netrep.htm.

Martin, A. (1999) *Wage bargaining under EMU: Europeanization, Re-Nationalization or Americanization?*, Center for European Studies, Harvard University; Available at: http://www.etuc.org/ETUI/Publications/DWP/martinwage.pdf.

Martín, C. (2000) *The Spanish economy in the new Europe*, New York: St. Martin's Press.

OECD (2002) Taking the measure of temporary employment. In: Anonymous *OECD Employment Outlook*, pp. 127-183. Paris: OECD.

OECD (undated) *Online database on international trade and competitiveness*, Available at: http://www.sourceoecd.org/content/html/index.htm.

OECD (undated) *Online database on labour market statistics: Percentile distribution of gross earnings*, Available at: http://www1.oecd.org/scripts/cde/members/LFSDATAAuthenticate.asp.
Pérez-Díaz, V. and Rodríguez, J.C. (1995) Inertial choices: An overview of Spanish human resources, parctices and policies. In: Locke, R.M., Kochan, T. and Piore, M., (Eds.) *Employment relations in a changing world economy*, pp. 165-196. Cambridge, MA: The MIT Press.
Pérez, S.A. (2000) From decentralisation to reorganization: Explaining the return to national bargaining in Italy and Spain. *Comparative politics* **32**, 437-458.
Pochet, P. (1998) The social consequences of EMU: An overview of national debates. In: Pochet, P. and Vanhercke, B., (Eds.) *Social challenges of Economic and Monetary Union*, pp. 67-102. Brussels: European Interuniversity Press.
Regini, M. (1997) Social institutions and production structure: The Italian variety of capitalism in the 1980s. In: Crouch, C. and Streek, W., (Eds.) *Political economy of modern capitalism: Mapping convergence and diversity*, pp. 102-116. London: Sage.
Rojot, J. (1998) EMU and industrial relations in France. In: Kauppinen, T., (Ed.) *The impact of EMU on Industrial Relations in European Union*, pp. 72-82. Helsinki: Finnish Industrial Relations Association.
Schulten, T. (2002) *Tarifpolitik in Europa 2001/2001*, Düsseldorf: Hans Böckler Stiftung: WSI.
Scobie, H.M. (1998) *The Spanish economy in the 1990s*, London: Routledge.
Soskice, D.W. (1990) Wage determination: The changing role of institutions in advanced industrialized countries. *Oxford review of economic policy* **6**, 36-61.
Soskice, D.W. (2000) Macroeconomic analysis and the political economy of unemployment. In: Iversen, T., Pontusson, J. and Soskice, D.W., (Eds.) *Unions, employers, and central banks: Macroeconomic coordination and institutional change in social market economies*, pp. 38-74. New York: Cambridge University Press.
Statistisches Bundesamt (various years) *Statistisches Jahrbuch - Für das Ausland; Ausgaben 1990 - 2001* , Stuttgart: Metzler/Poeschel.
Suárez Santos, R. (2002) *Telephone interview with Roberto Suárez Santos*, Department of Labour Relations, CEOE (Confederacíon Espanola de Organizaciones Empresariales); 11th July 2002.
Traxler, F. (1997) The logic of social pacts. In: Fajertag, G. and Pochet, P., (Eds.) *Social pacts in Europe*, pp. 27-36. Brussels: European Trade Union Institute.
Traxler, F., Blaschke, S. and Kittel, B. (2001) *National Labour Relations in Internationalized Markets*, Oxford: Oxford University Press.
Visser, J. and Hemerijck, A. (1997) *A Dutch miracle: Job growth, welfare reform and corporatism in the Netherlands*, Amsterdam: Amsterdam University Press.
Wallace, J., Thomas Turner and Alma McCarthy (1998) EMU and the impact on Irish industrial relations. In: Kauppinen, T., (Ed.) *The impact of EMU on Industrial Relations in European Union*, pp. 122-139. Helsinki: Finnish Industrial Relations Association.