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Macroeconomic Performance

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Industrial Relations and Macroeconomic Performance ♦

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1. Introduction

In a comment written as an introduction to a work by Ezio Tarantelli published posthumously in 1986, two of his colleagues and friends, Lloyd Ulman and David Soskice, wrote: “...Further work , which must be left to others, will doubtless modify Tarantelli’s approach, but it will also build on his pioneering effort in the analytical and quantitative assessment of what has been referred to as neocorporatist arrangements and policies” (Tarantelli, 1986, p.1). The aim of this note is to develop this comment. Especial reference will be made to the “further work” which has been carried out during the last twenty years, and to Ezio’s “pioneering effort”, which still survives today.

2. FIRST QUESTION: WHAT IS THE RELATION BETWEEN INDUSTRIAL RELATIONS AND MACROECONOMIC PERFORMANCE?

The article by Ezio Tarantelli (ET) was entitled ‘The Regulation of Inflation and Unemployment’ and contained the central nucleus of his neocorporatist ideas. He tested empirically these ideas by estimating an univariate relationship, for 15 developed countries, between the well-known Okun’s index (or “misery index”, i.e. the sum of the inflation rate and the unemployment rate) and the corresponding value, for each country, of a neocorporatism index which measured some fundamental aspects of the industrial relations system. These aspects were: the “cooption” of trade unions (roughly the degree of ideological and political consensus between unions and government), the centralisation of collective bargaining and the regulation of industrial conflict. ET found a very high negative correlation between the misery index and the degree of “neocorporatism”, for the periods he considered, 1968-73, 1974-79 and 1980-83 (see fig. 1), and this brought him to conclude that, “..in the presence of a high degree of neocorporatismunemployment would be a less necessary tool of stabilisation policy” (p. 14). The article was published in the winter 1986 volume of ‘Industrial Relations’, the journal of the Department of Industrial Relations of the University of California at Berkeley. 13 years later, in a review article, published in the ‘Journal of Economic Literature’, another of ET’s colleagues and friends, Robert Flanagan, wrote of the theoretical contribution of neocorporatists in the following way: “Corporatism is an inherently multidimensional concept, for which precise definition is elusive” (p. 1155). As well as Ezio, Flanagan cites political scientists as Lehmbruch, Schmitter and Crouch, who provided definitions which were partially complementary, but partially different of the concept of “neo-corporatism” and who, moreover, according to Flanagan, did not formally develop a coherent theory of this concept. The constituent elements of corporatism were identified by the political scientists as some features of both the industrial relations system and the system of political representation. Indicators of these features were later borrowed by social scientists who tried to test the neocorporatist hypothesis by estimating relations similar to that estimated by ET. But “...even when such correlations emerge”, comments Flanagan, “they are difficult to interpret, because it is not clear which dimensions of the corporatist indexes provide the statistical action. There have not been many efforts to study the influence of individual elements of the broad corporatism indexes separately..... The notion of corporatism suffers from uncertain theoretical foundations and a lack of attention to the micro-foundations of the economic and social processes that produce superior outcomes” (p. 1157). Flanagan’s criticisms were harsh, though friendly (!), and seemed to imply that the neocorporatist theory was too

complex and insufficiently clear, combining economic elements with social and political ones in such a way as to make empirical testing difficult to carry out, and even difficult to interpret.

The economic literature which followed tried to overcome these limits and to some extent detached itself from the previous literature of political science. In the first place the government vanished almost completely from the analysis. Secondly with the aid of economic models, an attempt was made to make the 'story' simpler and based on more solid microeconomic foundations – at least this was the initial tendency.

The economic literature focalised almost exclusively on the characteristics of collective bargaining and on union strength, and a formal analysis was developed of the relation between a few simple features of the system of industrial relations and macroeconomic performance, deliberately ignoring aspects of a more political or sociological nature which were instead considered very important by scholars of corporatism. The theoretical framework developed by economists tended to exclude the idea that industrial relations had anything to do with inflation, and also to exclude any link between inflation and unemployment, apart from possible short-term interactions. The main problem of many industrialised countries as of the end of '80s, was a continuously high level of unemployment. In many models developed during this period, inflationary pressure still has an important role, but in the end it is the equilibrium unemployment rate which provides the main indicator of macroeconomic performance. The 'misery index' too has almost completely disappeared from analysis.

In models developed within traditional economic theory, the aim of the unions is to raise real wages using their bargaining power, taking into account the negative effects (negative for the unions themselves too) of an increase in real wages on employment. In the empirical studies which have tried to apply this model, indicators such as union density or coverage of collective bargaining are considered as being indicators of union strength and therefore conducive to higher real wages. A very different relationship was hypothesised by ET, according to which strong unions and high coverage of collective bargaining were a constituent element of the degree of centralisation of the industrial relations system. In the economic literature of this period, the twin aspects of a wage setting system, coverage and density on the one hand, and centralisation on the other, are kept separate. The former, as indicators of union power, have negative effects on employment, while centralisation may contrast this effect by producing a positive one. The positive role of centralisation has been explained in several important theoretical studies, above all the well-known work by Calmfors and Driffil (1998). It is enough to remember the importance of the role played by the existence of external economies and by the elasticity of labour demand in this context. In this current of literature, the concept of centralisation was quickly

replaced by that of co-ordination of collective bargaining (Soskice, 1990). What is important is not where bargaining takes place, whether centralised or decentralised, but rather to what extent it is co-ordinated, formally or informally.

The exact relation between centralisation (together with co-ordination) of bargaining, and macroeconomic performance, has been discussed both theoretically and empirically. The relation may be monotonic, signifying that more co-ordination implies wage restraints, or hump-shaped, as Calmfors and Driffil maintained in their article, meaning that good performance may be also achieved when wage restraints are the result of a high elasticity of the labour demand which unions must face when bargaining with a single employer. Within this theoretical framework, the worst situation from the point of view of wage pressure and the resulting higher unemployment, is represented by an intermediate level of co-ordination (corresponding more or less to bargaining at sectoral level, as it is done in many European countries, including Italy and Germany) which is able neither to internalise the negative effects of wage claims nor produce the positive effects of a more competitive and disciplined labour market. An enormous amount of research has attempted to verify the one (monotonic) or the other (hump-shaped), without reaching any precise conclusion.

Some of the most recent reviews of the literature go further and conclude that the very relationship between degree of co-ordination together with centralisation, and economic performance, seems to have vanished during the '90s (Aidt and Tzannatos, 2002). This is the result found by a recent OECD study (OECD, 2004), which by means of cross-country comparisons repeated over time, fails to find, especially for more recent periods, any direct correlation either between macroeconomic performance and degree of centralisation-co-ordination (see Tab. 1), or even with the indicators of union power, i.e. density and coverage. Conclusions are incomplete because they refer to simple univariate correlations in which the only regressors are the variables of the system of industrial relations. The analysis is not particularly sophisticated, and the OECD itself recognises that this is a preliminary study, preparatory to more sophisticated analyses. However, the results suffice to show that countries with similar wage-setting institutions do achieve different macroeconomic performances.

More sophisticated analyses is exactly what has been done by a large body of economic literature. It shows, both theoretically and empirically, that the wage setting system is indeed important in affecting the performance of the labour market. The system of collective bargaining is however set against a wider background. In rather elaborated models of the functioning of the labour market, both dynamic aspects and the conditions of general economic equilibrium are taken into account (Nickell and Layard's model (1999) is perhaps the most important example). On the

empirical front, these studies try to explain the different performances of the various countries not only on the basis of differences in the wage setting systems, but also on that of differences regarding other institutional aspects or political measures, referred both to the labour market and the overall economic system. Of these the most well known are the tax wedge, employment protection legislation, and unemployment benefits.

More recently other aspects of an institutional nature have been included in the analyses to explain the differences between countries' rates of unemployment and/or employment. This is the case for example of systems of regulation of product markets (Nicoletti et al., 2001), or the share of employment in the public sector in total employment (Algan et al., 2002; Forni, 2004), or the development of risk capital markets (Phelps, 2004).

Lively debate has developed over the relative importance of each of these institutional aspects, and, among them, the variables of the wage setting system have not always proved to be the most important in influencing the macroeconomic performance.

It is important to note that while some welfare costs could be considered as the subject of bargaining and political tradeoff in the original corporatist literature (wage restraints in exchange for more "welfare"), now in the more recent economic literature some of these social costs (for example unemployment benefits) cause a decidedly negative effect on unemployment and employment. The reform of the welfare system (another example is pension reform) has become a political concern for those countries which aim to improve their macroeconomic performance. In this context unions, which generally tend to defend the "status quo", do not play a positive role.

(Boeri, Brugiavini, Calmfors, 2001).

The most recent developments in economic literature have included studies which have tried to increase the explanatory power of the models used, hypothesising and empirically testing the possible interactions of the variables considered. Important contributions have been made by studies which hypothesise interactions between institutional variables and macroeconomic shocks (Blanchard and Wolfers, 2000), or between the taxation system and the wage setting system (Daveri and Tabellini, 2000), or between monetary policy and the wage setting system (Iversen, 1998), or again between the very variables which characterise the wage setting system, i.e. coverage, density, co-ordination (Belot and Van Ours, 2004).

Different results have been obtained. This diversity is most certainly due to the differences between the theoretical models of reference and the varying specification of the relations tested empirically. It is also due to the time periods considered; indeed, with the passage of time a higher number of observations have become available, and this has made it possible, in addition

to the traditional cross-sections, to estimate the same relations over time, by taking into account variations both in macroeconomic outcomes and in institutional settings (see a recent interesting contribution by Nickell, 2004).

Results are also dependent on the rankings of the various countries as regards wage setting institutions. The level of co-ordination of collective bargaining existing in each country is the result of a subjective evaluation. Indeed, there is a lack of adequate quantitative indicators, so that results are highly sensitive to the different rankings of the countries examined. Sometimes it is sufficient for a couple of countries to shift position to change the results. Despite the great number of studies, each of which has attempted to establish its own ranking of countries, this is a sector in which further research could be useful. Some studies have tried

to include further dimensions of the industrial relations theoretical framework. One example is the concept of vertical and horizontal co-ordination suggested by Traxler (Traxler, 2003). This concept has been elaborated to describe central organisations' ability to control the behaviour of their 'rank and file'. Of the indicators used, some refer to aspects such as 'peace obligation' or 'enforceability of agreements' which were also developed by ET in his index of neo-corporatism. But even the traditional concepts of centralisation and co-ordination are broken down in ever-more sophisticated ways. In the OECD work cited above (OECD, 2004), the indicators of both centralisation and co-ordination are really compound indices, composed of simple averages of primary indices. Each primary index is used to give a score to each country. These procedures are rather ad hoc and do not make sufficient reference to theoretical arguments able to describe the mechanisms involved – not to mention the problem of giving scores in these rankings to the countries where two-tier systems are in force, i.e. with two levels of bargaining, national and local. The relative weight of the two tiers is not easily identified or measured, because they act together and influence each other. The problem often coincides with the role played by wage drift, which may substitute or be in addition to the wage increases obtained at the higher level of bargaining.

In conclusion it can be said that over the last twenty years the economic literature has provided some very interesting results, but has left many questions unanswered. This brings us again to the same difficulties ET and other scholars of neo-corporatism faced. Economic analysis should have simplified issues the scholars of neo-corporatism had made "complicated" by mixing economic factors with social and political factors. The complexity which left by the door came back in through the window, and the great abundance of theoretical and empirical analyses on this topic, and the quantity of institutional and political factors cited, leads us to repeat R. Flanagan's important observation, that "...any relationship between bargaining structure and macroeconomic outcomes is contingent on the particular economic and political environment of

a country” (p. 1162). Economic literature has enabled us to make enormous progress, but to day’s difficulties and problems, as well as some important intuitions, are rather similar to those faced and elaborated by ET and his colleagues 20 years ago.

3. SECOND QUESTION: WHY IS COLLECTIVE BARGAINING BECOMING DECENTRALISED?

The second question refers to a problem which was tackled only marginally by ET. It concerns the role, positive, that collective bargaining can have even at a decentralised level. In his article cited above, ET speaks of this only in the conclusions, when he mentions the concept of ‘decentralised neo-corporatism’, “ Although an oxymorom –he observes – decentralised corporatism is not an internally inconsistent theoretical concept” (p. 14) . He did not have time to develop this intuition, though it is easy to imagine what he had in mind.

Taking this as a starting point, I would like to extend the analysis to include the role of collective bargaining in influencing pay dispersion and wage inequalities. While the empirical literature has not fully clarified what is the precise relationship between the degree of centralisation and coordination of collective bargaining and the performance of the labour market, there is at the same time much empirical literature which shows more or less unambiguously that in systems featuring high levels of centralisation and co-ordination, pay dispersion is lower and wage differentials are more compressed (Blau and Kahn, 1999, 2002; OECD, 1997; Wallerstein, 1999). It is unclear whether compression of wage differentials can have negative effects on the levels of unemployment and employment. On the one hand textbooks teach that wage differentials must be left free to carry out their allocative function, otherwise there will be mismatches of varying kinds between labour demand and supply. On the other, in a number of studies it is shown that, in particular circumstances (for example when there are imperfections in the capital markets), a reduction in pay differentials can have positive effects on employment and even on growth (Acemoglu and Pischke, 1998, Agel, 1999).

The theoretical debate is still open and no final conclusion has been reached. Nevertheless, it is a matter of fact that in a growing number of countries the system of collective bargaining has been progressively decentralised (EEAG Report ,2004). There are probably several factors that can explain this process. One of these can be the increasing mismatches occurring between labour demand and labour supply, and the deterioration of the unemployment mix in many countries (in particular , skilled towards unskilled labour). This factor induced a number of countries to reconsider the balance of advantages and disadvantages of a centralised and coordinated system

of collective bargaining and the merits and demerits of a national wage policy based on principles of solidarity and equality.

Another important factor to consider as a possible explanation of the process of decentralisation, is the idea that the pay structure and pay differentials can be seen both as useful incentive mechanisms and as a tool to develop participation and increase collaboration of workers inside the firm. This is probably what ET had in mind when he wrote of 'decentralised corporatism'.

The shift towards decentralisation has not always followed the same path. Different countries have taken different paths and three types can be distinguished.

In some countries the shift has been slow and smooth, and has not changed the existing system in a radical way. There has been an increase in scope and diffusion of collective bargaining at the company level. In some countries this has happened through decisions of individual companies that in specific circumstances, have left their employers' association or have decided to "opt out" from the coverage of a multi-employer collective agreement. This is the case, for example, of Germany (Ochel, 2005). In other countries the unions took part in the process. Especially in countries where a two-tier system of collective bargaining is in place (bargaining occurs not only at a multi-employer level, but also at the company level) unions have favoured some form of decentralisation as long as this strengthened rather than weakened the existing system. This is, for example, the case of Italy (see: Casadio, 2003). All these moves towards decentralisation have not proceeded at a very fast pace and there is not much empirical evidence on the final results in terms of an increased flexibility of relative wages. The implicit objective was to reconcile the advantages of coordinated bargaining with the advantages of decentralisation, that is to achieve the best of the two worlds: wage restraint at macro-level and flexibility of wages at the micro-level.

However, as far as the macro-level is concerned, one has to observe that if a gradual shift towards company-level bargaining moved the industrial relations system more towards an intermediate position in the ranking of countries according to their degree of centralisation and coordination, and if, at the same time, the hump-shaped hypothesis were true, there would be a reduction in incentives for wage restraint, and a consequent deterioration of the performance of the labour market.

On the other hand, if a high level of coordination of company bargaining were maintained, the positive effect expected from decentralisation on wage differentials would be uncertain. Recent research shows how in countries with a high level of national co-ordination, for example Belgium, Italy, company-level bargaining does not make a significant contribution to contrasting the compression of wage differentials determined by national labour agreements.

In table 2 measures of inequalities (standard deviation(St. dev.) and coefficient of variation (CV)) have been calculated for wages of individual workers of four countries: Belgium, Italy, Spain, and U.K.. The data have been collected through the “Structure of Earnings Survey” conducted by Eurostat in 1995. The table presents values for St. dev. and CV of wages, both for manual and non manual workers , separately by bargaining regime. MEB represents the group of workers covered by a multi-employer bargaining, while SEB represents the group of workers covered by a single-employer bargaining. There is an important difference among the four countries. In Belgium and Italy the bargaining system is two tier : all workers considered in the table are covered by a MEB, but only some of them are covered , in addition, also by a SEB. In Spain and U.K. workers are covered only by one type of contract : one type exclude the other.

Two extreme cases can be detected from the results described in table 2. One is Belgium where, contrary to expectations, wages are less compressed when workers are covered only by a MEB. The other is U.K. where wages are much more compressed exactly when workers are covered by a MEB. For Italy and Spain the results are more mixed and depend on which measure of inequality is considered.

On the whole the data show that where a strong national coordination of local bargaining exists, as it is the case of Belgium and, to some extent also in Italy, bargaining at company level does not necessarily increase wage inequalities and does not contrast the compression of wage differentials that might be determined by national wage agreements . These results are probably due to the forces of imitation and coordination that limit the role of SEB in widening inter-firm differentials and to the egalitarian character of

wage policies that in an environment where values of equity, solidarity and uniformity are strong and diffused, are also followed by unions negotiating at the level of the single firm, or single establishment. Only in U.K., workers covered by a MEB have less dispersed wages. These results seems to show that it is not easy to combine elements of centralisation and/or coordination with elements of decentralisation of collective bargaining in order to reap the benefits of both situations.

A completely different path has been followed by those countries in which the process of decentralisation of bargaining has been radical and also accompanied by massive de-unionisation. This is the case of a series of English-speaking countries: the United Kingdom, New Zealand and to some extent Australia. A radical shift from a multi-employer bargaining system to a single-employer bargaining system has taken place at the same time as a dramatic fall in union density and in the level of coverage of collective bargaining. It is certain that the use of performance-related pay schemes has increased significantly, and wage structures have become much more

flexible. In these countries wage dispersion is greater and wage differentials are much less compressed than they are in continental Europe. In these countries there has been also a process of radical de-regulation in the field of employment protection legislation. In addition, other important reforms have been made, for example reform of product and service markets, and reform of public administration, with an emphasis on various forms of liberalisation and privatisation. Although these reforms are often believed to produce positive macroeconomic effects, it is hard to say what effects all this complex change has produced. Certainly in some of these countries, the unemployment rate reached relatively low levels when, at the same time, it was dramatically increasing in some of the largest countries of continental Europe, where the process of reforming the functioning of labour and product markets was much more slow. Nevertheless it is difficult to attribute this better performance to single specific aspects of the radical change which has taken place, so that we do not know precisely what it has been the role played by the process of decentralisation of the collective bargaining system.

Finally a third kind of path, perhaps more profitable, has been taken by some northern European countries. This is the path known as 'organised decentralisation' as it has been called by Traxler (Traxler, 1995). It refers to a system of collective bargaining where decisions are taken at the local level, but they must respect the general guidelines set by a national "framework" agreement. Translated in terms of wage policy this system of "organized decentralisation" implies that the national level of bargaining determines only the total "margin" and leaves freedom to parties bargaining at company level to distribute this margin to individual workers. In this way, in some countries responsibility is divided between centralised and decentralised levels. At the former, which determines the total margin, responsibility is taken for keeping total wage demands under control. At the latter, where real wage increases of individual workers are determined, it is possible to fix both wage differentials in accordance with the conditions of local labour markets, and to use wages as incentives (for stimulating more effort and on-the-job-training), and for performance-related pay schemes at individual and collective level. Efforts in this direction have been made in Holland (Eironline Netherlands, 2002) and Denmark (Eironline Denmark, 2003), but it is perhaps in Sweden that this path towards decentralisation has been followed the most.

The means by which decentralisation is put into practice in Sweden are numerous and vary from industry to industry. In some industries the decentralisation process has gone even further: table 3 shows how a significant proportion of workers are covered by national agreements which do not even specify the total margin to be distributed at local level. Not only wage increases for individual workers, but also average overall increases are defined at this latter level (see Tab. 3). This procedure is adopted in industries covering 7% of workers in the private sector and is also

adopted in the public sector, in a total of about 30% of the whole. This type of bargaining applies above all to white-collar workers with higher education. In this respect it must be borne in mind that Sweden abandoned its traditional centralised system some time ago, with the specific aim of meeting the wishes of private firms and public administration, which complained that the centralised system had over-compressed wage differentials by education and skill level, thwarting workers' investment in human capital. It seems that in Sweden decentralisation of bargaining has produced an increase in wage dispersion and a widening in salary differentials, without compromising the role of bargaining at a national level to keep overall wage dynamics under control. In principle, this solution seems to offer the best opportunity for combining the benefits of co-ordination in terms of internalisation of various effects caused by wage pressures, together with the benefits of increased flexibility of relative wages.

There are some 'buts', which hold for all systems of wage determination emphasising the role of norms for wage increases. These can certainly carry out the important role of providing benchmarks for subsequent bargaining at local level, but the danger is that from being 'ceilings' beyond which decentralised increases cannot go, they become 'floors', i.e. minimum increases, after which local bargaining leads to additional increases. In Sweden, the system of organised decentralisation seems to work properly and norms are correctly interpreted as ceilings to be respected, but it is not necessarily true that it would work well elsewhere, in different economic, social and institutional contexts. For example, the attempt, to import this system into public sector bargaining in Italy, although only partial, did not bring the expected advantages either in terms of overall control of wage dynamics or in terms of increased flexibility in wage structures (Dell'Aringa, Lucifora, Origo, 2005). Also in this case the words of Flanagan sound most appropriate: the success of a specific collective bargaining system is "contingent on the economic and political environment of a country".

Moreover, not all countries with centralised systems of bargaining suffer the same skill mismatch problems experienced in Sweden. The flexibility of wage structures that is required to avoid mismatches may vary from country to country. Let's take the example of Germany, Italy and Spain. These are the countries which, together with France, experience the most serious employment problems in the whole of continental Europe. Germany and Spain have two of the highest rates of unemployment, while Italy has the lowest rate of employment in Europe. However, the employment problems of these three countries are essentially regional. They are the countries with the greatest regional disparities in unemployment and employment rates. If the unemployment and employment rates of the most developed regions of these countries are compared with rates of those countries which have undergone successful reform, such as

Sweden, Denmark, Holland, and Ireland (countries which are also comparable with many regions of the previous four big countries), one finds no substantial differences. They show, more or less, the same good performance of the labour market.

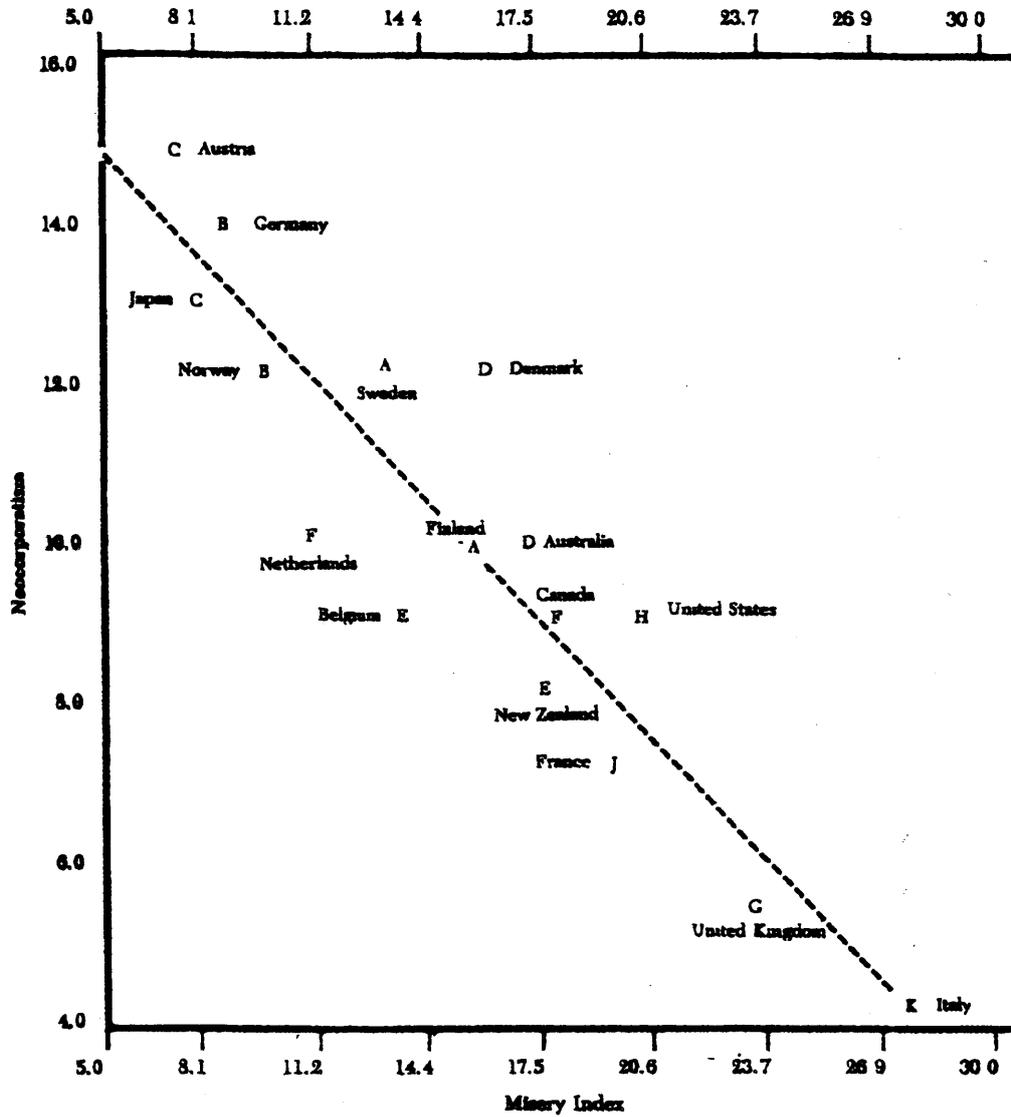
It is not far from the truth to say that the problem regarding lack of jobs in Europe is concentrated in some backward regions of Italy, Germany, Spain, and possibly also France. If this is the problem, possible solutions should concentrate on this. However, over recent decades wage differentials between regional areas have gone in the opposite direction from that required (see Figs. 2 and 3). In Germany and Italy especially, wage differentials between geographic areas have decreased over time, while differences in unemployment and employment rates have increased. A greater flexibility in geographical wage structures requires a greater decentralisation of collective bargaining, which to be effective may require a reduced level of co-ordination, both formal and informal, at the national level. On the other hand, what the four largest nations of continental Europe need is perhaps greater co-ordination within the whole of the eurozone. Collective bargaining co-ordination has to take place at the same level as monetary policy-making to be effective in favouring wage restraint (Crouch, 2000). For this reason, sooner or later the need for some kind of co-ordination above the national level for the whole of the eurozone will arise. The geographical dimension is destined to take on increasing significance when identifying levels of bargaining and co-ordination. The traditional triple distinction of “firm-sector-economy wide”, which has so far characterised the organisation of collective bargaining in European countries and which has been the focus of analysis in the economic literature, perhaps needs to be and should be supplemented ever more by a new triple distinction, that of “region-country-eurozone”.

TABLE 1 – The degree of bargaining centralisation/co-coordination (CC) and macroeconomic performance (averages 1990-2002)

	Unemployment Rate	Misery index
High CC	7.4	11.3
Intermediate CC	7.1	8.6
Low CC	7.2	11.1

Source: OECD (2004)

Figure 1 – Neo-corporatism and Misery Index (1980-1983)



LEAST SQUARES

Misery index = 31.2 - 1.49 neo-corporatism

$\bar{R}^2 = 0.75$

Source: Tarantelli (1986) p. 13

Table 2. Unconditional measures of wage inequalities

	Std dev			CV		
	All	MEB	SEB	All	MEB	SEB
ITALY						
All	0.439	0.427	0.445	0.153	0.151	0.148
Non manual	0.465	0.459	0.451	0.147	0.147	0.137
Manual	0.295	0.305	0.246	0.110	0.114	0.089
BELGIUM						
All	0.428	0.465	0.375	0.067	0.074	0.059
Non manual	0.433	0.473	0.383	0.066	0.072	0.058
Manual	0.260	0.246	0.242	0.043	0.041	0.039
SPAIN						
All	0.532	0.512	0.490	0.074	0.073	0.066
Non manual	0.586	0.588	0.526	0.079	0.080	0.069
Manual	0.430	0.381	0.417	0.061	0.055	0.057
UK						
All	0.545	0.407	0.568	0.268	0.203	0.278
Non manual	0.605	0.461	0.624	0.274	0.219	0.281
Manual	0.374	0.333	0.380	0.204	0.173	0.210

Note: Data refer to the Structure of Earnings Survey (Eurostat, The survey contains matched employer-employee information for the year 1995. MEB represents groups of workers covered only by a multi-employer collective bargaining. SEB is for workers covered by single-employer collective bargaining. See: Dell'Aringa-Pagani (2005).

TABLE 3: Types of collective agreement in Sweden, 2002

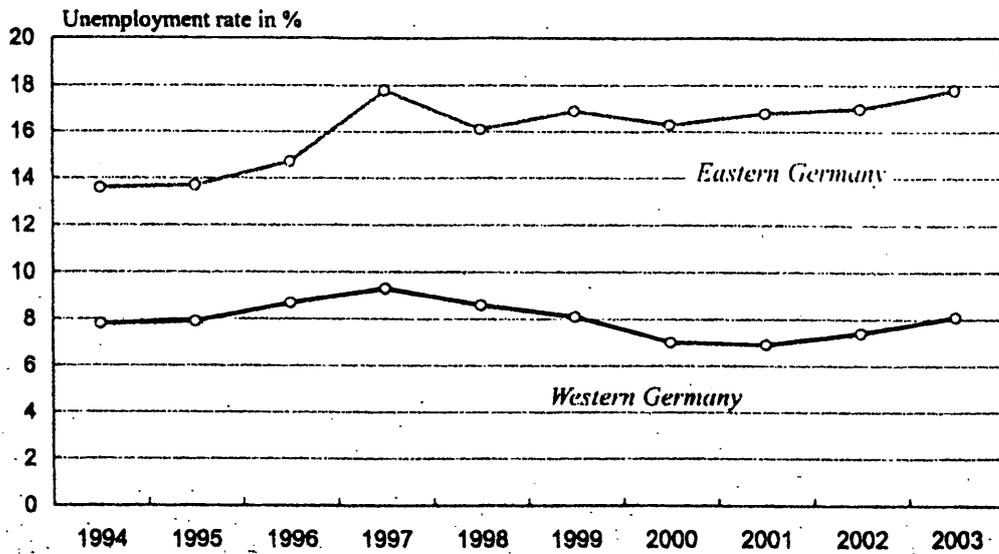
	Percentage of employees in each sector		
	Private sector	Central government	Local government
1. Local bargaining without nationally determined margin for wage increase	7	32	28
2. Local bargaining with nationally determined margin for wage increase if the local parties cannot agree	5		
3. Local bargaining with a nationally determined margin for wage increase if the local parties cannot agree and some type of binding individual guarantee	8	68	
4. Local bargaining on the distribution of nationally determined margin for wage increase without any type of individual guarantee	7		24
5. Local bargaining on the distribution of nationally determined margin for wage increase with a binding individual guarantee or an individual guarantee if the local parties cannot agree	45		48
6. Nationally agreed general wage increase plus local bargaining on the distribution of additional nationally determined margin	18		
7. Nationally agreed general wage increase	7		

Note: Local government refers to regional authorities and municipalities.

Source: *Avtalsrörelsen och lönebildningen* (2002). Reproduced by: EEAG, Cesifo, 2004

Figure 2 A

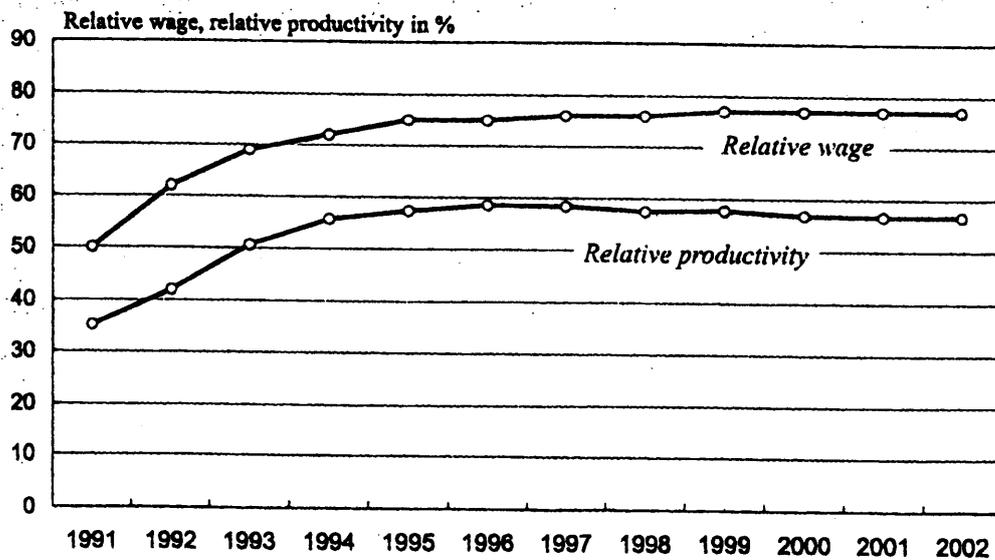
UNEMPLOYMENT RATES IN EASTERN AND WESTERN GERMANY



Source: Federal Employment Services, Germany.

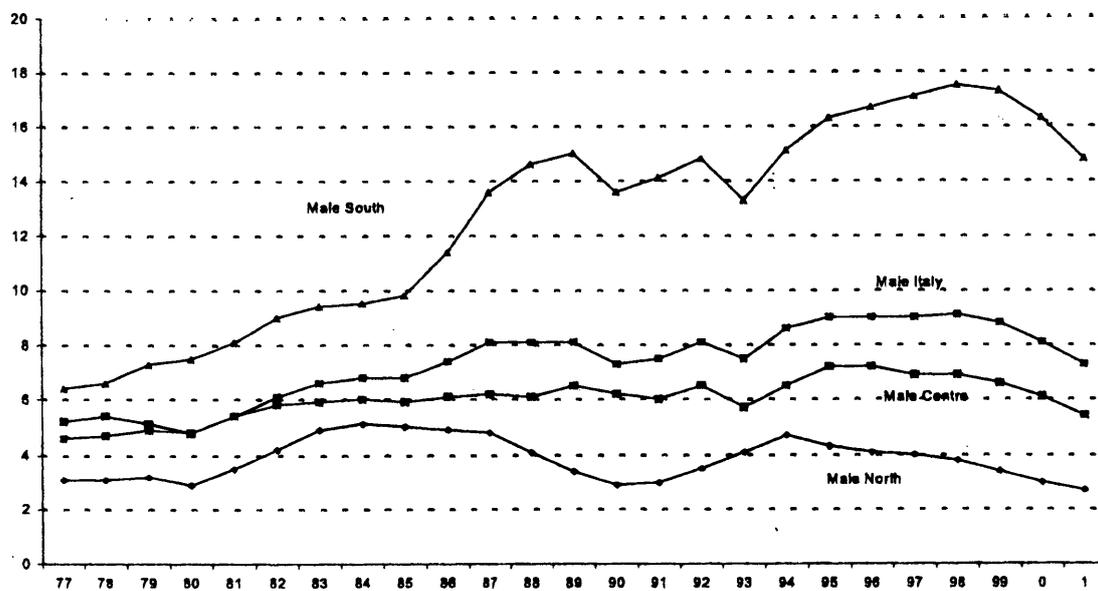
Figure 2 B

RELATIVE WAGE PER EMPLOYEE AND RELATIVE PRODUCTIVITY PER EMPLOYEE IN EASTERN VERSUS WESTERN GERMANY



Source: Federal Statistical Office, Germany. Reproduced by EEAG, Cesifo. 2004

Figure 3. Regional Male Unemployment in Italy: 1977-2001



Source: *Istat* and *Bank of Italy* – Reproduced by Bertola, Garibaldi (2004)

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