

**"DEMAND AND STRUCTURAL VIEWS OF EUROPE'S
HIGH UNEMPLOYMENT TRAP"**

by

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SUMMARY

The paper looks at three questions. First, how much of European experience with high unemployment can be explained by the distinction between demand and structural causes? The answer is that there is much to be learned by this distinction but that it does not explain everything. So, second, what alternative approaches exist? The paper suggests that there exist two useful additional ways of looking at unemployment: hysteresis, the fact that transitory shocks lead to permanent increases in unemployment, and the study of flows between jobs and no-jobs. Third, what does the analysis imply for policy making? The paper suggests that only broad attacks based on an explicit social contract are likely to succeed.

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Introduction

Policy debates about what to do about unemployment inevitably hit a vexing question: can anything at all be done? The question is vexing because uncontroversial answers are rare. Despite considerable efforts the profession remains divided. One view is that current unemployment reflects an economic slowdown and that, once growth resumes its normal path unemployment will naturally decline: accelerating this evolution is then seen as highly desirable. Another view is that unemployment results from deeper malfunctions in the economy: attempting to boost growth to reduce unemployment is bound to fail, possibly resulting only in higher inflation.

The economist's standard tool kit usually starts with an analysis of demand and supply. No matter how naive and simple this approach may be, it has the virtue of forcing us to be clear about what is wrong with the labor markets. Section 2 is an attempt to bridge economic principles and the lessons learnt over the passed decade of high unemployment. It should at the very least clarify the distinction between cyclical and equilibrium unemployment and establish a few robust facts. The next section explains why it may be illusory to stick too long with the demand-supply distinction. In the end, most approaches accept the notion of an equilibrium rate of unemployment, although the exact definition varies somewhat. In a nutshell, the rate of equilibrium unemployment is that rate which would be observed if the economy were durably operating at a normal level of activity, free from disturbances of one kind or another. Section 4 proposes an eclectic presentation of the

reasons why equilibrium unemployment is so high in Europe. The last section is devoted to policy implications. It puts in perspective various policy attempts and proposals and tries to detect which way we might go next.

Unemployment and wage rigidity

It is convenient to start with the time honored and - sometimes decried - demand and supply analysis of labor markets, even if a number of qualifications will be needed to take into account their specific nature (for similar presentations see Layard *et al.*, 1991, or Lindbeck, 1993). The demand schedule depicted in Figure 1 can be thought of as the marginal productivity of labor, adjusted by whatever explicit or implicit taxes are imposed on labor usage. These taxes include social security and other applicable levies, but also the effect on labor costs of regulations and restrictions on such aspects as hiring and firing costs or safety at work. The supply of labor schedule reflects the behavior of individual workers, i.e. their decisions to give up their free time to earn an income. This schedule is not necessary upward sloping as represented here; in the very long run - over decades - it seems to be downward sloping so that when the demand curve rises, reflecting technical progress, workers require both higher wages and more leisure. The present analysis is geared towards the shorter run over which it seems reasonable to accept an upward sloping schedule even though there is not much solid evidence on the short-run real wage elasticity of labor. It is typically found to be near zero, sometimes clearly positive especially for females. Evidence for the US see is

summarized e.g. in Card (1991) and for Europe in Layard *et al.* (1991). In the long run the secular reduction in the number of hours worked per person over the last century is well documented (see e.g. Maddison, 1991).

At point A, there is no involuntary unemployment: those who do not work consider that the wage rate is not high enough to compensate them for alternative uses of their time. This is unrealistic, of course. As is well understood, some wage rigidity is necessary to obtain involuntary unemployment. At point A, it is implicitly assumed that wages are set at a level which clears the labor market as prices quoted on the Chicago Board of Trade clear the wheat market. The "collective supply" schedule shown in Figure 1 captures the idea that wages are set through collective bargaining. On the reasonable assumption that collectively workers ask for higher wages than individuals would do, the collective supply schedule lies above the individual supply curve.¹ The negotiated wage w_2 corresponds to market equilibrium at point B. At this wage level, BC amount of work is offered but not taken up: this is involuntary unemployment.

Figure 1 about here

There are many other ways of introducing wage rigidity, each of them offering some some degree of plausibility. For instance, w_2 could correspond to a legislated minimum wage. Alternatively workers are paid efficiency wages: employers pay above the market-clearing wage in order to induce more effort from the employees. This possibility was first suggested by Calvo and

Phelps (1977) and later developed by Akerlof and Yellen (1984) who argued that, because firms cannot monitor workers' effort, they may want to offer an attractive wage that makes it costlier for workers to be fired if they are caught shirking. Whatever the reason, the important issue, as pointed out by Lindbeck and Snower (1988), is why wages do not move down to the equilibrium level w_1 . There are a great many answers to this question, each of them shedding light on one aspect or another of the special nature of the employee-employer relationship, including long-term personal bonds and investments in specific skills. Anyhow, the analysis proceeds on the assumption that wages cannot be easily and quickly brought below w_2 , while there is no mechanism which prevents them to rise above that level under the proper circumstances.

Equilibrium unemployment

The unemployment level corresponding to BC in Figure 1 can be called the equilibrium rate of unemployment. Through the demand schedule, it reflects the state of technology and the productive capacities of the country as well as the regulations and taxes affecting the labor market. The personal preferences of the work force are represented by the individual supply schedule while social and institutional aspects are captured by the collective supply curve. The equilibrium level of unemployment is structural: to reduce it one must change the deep characteristics of the economy which are encapsulated in the curves drawn in Figure 1.

Cyclical factors may drive *actual* unemployment away from its *equilibrium* level. This is shown in Figure 2. For example, we consider the case when aggregate demand on the goods market decreases. Firms are expected to react by temporarily reducing their demand for labor under a number of plausible conditions. For example, it is reasonable to consider that firms face costs when they change their prices - this is the so-called menu cost approach initiated by Mankiw (1985) - so that they will not react to a fall in demand by reducing prices, opting instead to reduce output and employment. Another case is that firms are monopolistically competitive on the goods market but small on the labor market. Then a fall in demand for their output is partly met by a reduction in prices and partly by a reduction in output and employment. In the first case firms profitability - or the mark-up on costs - should be counter-cyclical, in the second case it should be pro-cyclical.² In any case, I assume that the drop in goods demand lead to a fall in the demand of output at the given real wage.

The effect of the recession on the labor market is captured as the shift of the demand schedule from D_1 to D_2 . If, as is realistic, real wages do not fall, employment falls to the level corresponding to point D and unemployment increases to DC. Total unemployment can be decomposed into its equilibrium component BC and its cyclical component DB. The latter is often referred to as "demand unemployment" because any increase in demand could eliminate it.

Figure 2 about here

In principle, this is where macroeconomic policies can be useful. Fiscal or monetary instruments can be used to bring demand back to D_1 and maintain unemployment at its equilibrium level. Macroeconomic policies, on the other hand, are not well adapted to reducing equilibrium unemployment because they only affect the demand schedule. Obviously, since macroeconomic policies are temporary, they are unable to deal with a permanent feature such as structural unemployment but if they are sufficiently long-lasting they can alleviate what is then perceived as temporary unemployment. For example, starting again from the situation represented in Figure 2 by real wage w_1 and points B and C, consider the effect of a policy-generated demand expansion that raises demand to D_3 . At the new equilibrium (point E) the wage rate is w_2 , individual labor supply is represented by point F and unemployment is measured by EF which may be smaller or larger than initial unemployment measured by BC: at this stage, there is no particular reason - theoretical or empirical - to believe that macro policy has a beneficial effect on structural unemployment, an issue to which we return below.

Beyond theory: measurement

Much effort has been devoted to estimating the proportion of cyclical and equilibrium unemployment in total unemployment. One approach simply considers that equilibrium unemployment can be approximated by the average rate of unemployment over business cycles. There are many ways of performing this kind of calculation, depending on how one identifies the cycles. The

estimates shown in Figure 3, drawn from Layard *et al.* (1991), adopt the NAIRU concept. The NAIRU (Non-Accelerating-Inflation Rate of Unemployment) is the rate of unemployment at which inflation tends neither to increase nor to decrease. It is found by estimating an unemployment equation incorporating a number of structural explanatory variables (capturing various aspects of unemployment benefits and the wage-setting system) as well as the change in the rate of inflation (or money supply growth). The NAIRU corresponds to the case when inflation or money growth is constant.

The results obtained by Layard *et al.* (1991) are representative of most conclusions: the high rates of unemployment observed in Europe over the 1980-88 period are to a large extent of the equilibrium variety. Cyclical unemployment plays the same limited role that it used to play when unemployment averaged 2 to 4% some twenty years ago.

Figure 3 about here

More sophisticated studies go deeper into the sources of unemployment. An influential set of work takes the view that from one industry to another the situation may differ so that we could have at the same time situations of underemployment in some sectors and situations of labor scarcity elsewhere. One recent example focusing on Europe is found in the collective studies reported in Drèze and Bean (1990). They consider that employment in a firm is limited by either of three possibilities: (i) available equipment (dubbed the classical constraint); (ii) available labor (supply constraint); and

(iii) the state of demand for the firm's output (Keynesian constraint). Their approach is to determine the proportion of firms in each state. The classical constraint state can be thought of as representing the source of "structural" unemployment while the Keynesian constraint state represents "cyclical" unemployment, and the supply constraint case corresponds to full employment.

Table 1 reports the estimated percentage of unemployment due to firms where employment is constrained by demand (D) and by capacity (C), the complement to 100% being the proportion where labor supply is binding. To compare with Figure 3, the table reports averages for 1980-86. Generally, this approach suggests that demand constraints play a dominant role. Yet, Bean and Drèze are quick to observe that a demand stimulation - which could eliminate demand unemployment - is by nature temporary and can even have negative effects in the longer run, for example if a fiscal expansion leads to increased public and external debts.

Table 1 about here

In fact, it seems fair to conclude that there is general agreement that even if demand is, at the margin, a frequent cause of unemployment, the bulk of European unemployment is structural in nature. This is what lies behind the common view that a demand expansion would not succeed in permanently lowering much actual unemployment: the demand component which represents a relatively thin crust lying on top a fat layer of structural unemployment

would be quickly exhausted.

Limits of the Structural-Demand Distinction

The distinction between structural and demand unemployment has been challenged on two main grounds, both based on empirical evidence gradually emerging from the European experience with high unemployment. The following sections present these two challenges.

Unemployment hysteresis or persistence

The pattern of unemployment in the EC countries, at least up to the mid-eighties, has been remarkable as Figure 4 reminds us. Unemployment has risen relentlessly, displaying little or no cyclical pattern. Step-like increases due to traditional cyclical downturns have not been subsequently reversed during cyclical upturns. This observation has led to the idea that unemployment is extremely persistent, possibly subject to the phenomenon of hysteresis.³ Persistence would imply that it takes a long period of time to reverse an increase in unemployment. With persistence, the equilibrium rate of unemployment is not necessarily changed; simply, deviations from equilibrium are long lasting. With hysteresis, a *temporary* increase in (cyclical) unemployment *permanently* raises the equilibrium rate so that there is no return to the pre-shock level. There is no clear cut distinction between cyclical and equilibrium unemployment any more.

Figure 4 about here

A number of reasons have been advanced to explain hysteresis in unemployment. First is the membership effect, i.e. the view that trade unions only care about their members. Following an adverse shock, those who lose their jobs are quickly "forgotten" by the trade unions which then fight to improve the lot of those remaining unemployed. Figure 5 illustrates this mechanism. Initially, structural unemployment is AB, determined by the demand schedule D_1 and the collective supply schedule CS_1 . Under the conditions discussed earlier, a recession temporarily shifts demand to D_2 . The new situation does not occur at point C, however, because the trade union will initially strive to prevent the real wage from falling. If successful, it will be able to maintain the pre-recession wage w_1 , reaching for point D and therefore adding a quantity AD of what will look like cyclical unemployment. The new collective supply schedule CS_2 reflects the fact that the trade union in effect now protects the employed at the expense of the newly unemployed AD. When the recession is over and demand reverts to D_1 , those who have been unemployed have left the union and the collective supply schedule remains at CS_2 ; when the economy is back to "normal", the union will strive for the higher real wage rate w_2 , *de facto* accepting the now higher equilibrium unemployment EF.

Figure 5 about here

Another source of hysteresis corresponds to the individual experience of workers once dismissed. The longer they stay away from their jobs the less competitive they become in the labour market. This can happen for several reasons: (i) they lose their skills; (ii) their potential is reduced if their only chance of employment is in positions where they are less qualified than before, either because they had accumulated skills specific to their previous employer's needs or because they have to move to an altogether different industry; (iii) the longer a worker is unemployed the more he will look suspicious to potential employers: lacking perfect knowledge of a candidates' fitness to work, employers often interpret long spells of unemployment as a signal that the worker is less "good" than workers who have never been unemployed or unemployed for a shorter period; (iv) they become less eager to search for a job (the discouraged-worker effect). The result is that long term unemployed workers face a diminishing probability of finding a job: in fact they represent an ineffective supply of available labor. A graphical representation, using the same apparatus, is offered in Figure 6. A recession results in some workers becoming unemployed. If the recession lasts long enough these workers drift out of the "effective" labor force: this is represented by a shift of the individual supply curve from the observed schedule IS_1 to an "effective" schedule IS_2 . Correspondingly the union-mediated supply shifts from CS_1 to CS_2 as firms do not take the long term unemployed into account. Equilibrium unemployment increases from AB to CE: the new equilibrium rate now includes DE long-term unemployed who come on top of normal short-term unemployment CD.

Figure 6 about here

A third source of persistence - but not of hysteresis - works via capital accumulation (this idea has been developed by Malinvaud, 1980, and revived by Burda, 1988). According to this view, capital shortages develop as the result of unemployment. Again, a temporary fall in the activity level reduces employment and makes some capital redundant. Through factory closures or scrapping, the stock of capital declines - or fails to grow along its previous trend - which reduces the number of jobs available. Reopening plants or catching up on the ensuing capital shortage may be a lengthy process so that the demand for labor decreases quickly when the recession occurs but recovers with considerable delay after the recession has ended. The effect is transitory in principle because, with an exogenously given rate of return, capital should eventually return to its trend-growth level. Persistence can turn into hysteresis only if the supply of labor is permanently reduced so that a permanently lower stock of capital is required to match a permanently lower supply of labor. This would be the case through the previous channels.

The importance of the capital-shortage mechanism in Europe since the mid seventies is strongly suggested by a comparison of the aggregate experience of the 12 EC countries with that of the US. For the US, Figure 7 shows an unmistakable pattern of cyclical movements in both unemployment and investment, with no trend. This rules out hysteresis by both the labor

supply and capital channels. In the EC, in contrast, unemployment is clearly following an upward trend. More convincingly perhaps, unemployment follows the pattern predicted by hysteresis theories: it rises rapidly at the time of each major slowdown (the two oil shocks and the 1989-91 recession) with no, or only partial, recovery. The capital channel to hysteresis is also suggested by the European experience as the investment ratio appears to be almost the exact mirror image of unemployment, with a downward trend and marked declines followed by partial recoveries.

Figure 7 about here

Job search

The demand-and-supply analysis is not the only approach to unemployment. Instead of looking at the *stocks* of people employed and unemployed at any point in time, a wholly different approach - pioneered by Phelps (1970), Hall (1979), Leonard (1987), Pissarides (1991), and Davis and Haltiwanger (1990) - looks instead at the *flows* of people from and into unemployment or at the *flows* of jobs created and destroyed. Under the first view, unemployment occurs when unemployed workers fail to identify a suitable job. Under the second view employment declines when the rate of job destruction exceeds the rate of job creation. This sounds like mere accounting but there is more to it. Table 2 shows that the flow of workers into and out of

unemployment during a given year is actually larger than the stock of unemployed workers. It clearly suggests that it is quite misleading to envision unemployment as the outcome of frozen labor markets. Even in countries with high unemployment, labor markets are extremely active, continuously "processing" jobs and workers.

Table 2 about here

It might be believed that these flows still respond to demand and supply disturbances in an easily predictable way. For example, we would expect a demand-driven recession to be accompanied by an increase in job destructions and a slowdown in job creations. This is indeed what Davis and Haltiwanger (1992) find for the US, a finding confirmed for Germany by Boeri and Cramer (1992). What is more surprising is the behavior of workers flows apparent in Figure 8. During a recession, inflows into unemployment increase, as seems reasonable. Yet, at the same time, outflows from unemployment rise almost in parallel, simply with a brief lag. Given the size of these flows, a small desynchronization is enough to generate sharp changes in the unemployment rate. A similar observation has been made for US by Darby, Haltiwanger and Plant (1986) and for France, the UK and Spain by Burda and Wyplosz (1994).⁴

It is quite tempting to interpret an increase in unemployment inflows within the usual demand and supply framework, as the result of an adverse demand disturbance. The subsequent rise of unemployment outflows, however, does not fit as easily with the usual approach. The response of unemployment outflows

is clearly the outcome of a search process through which jobs and people are reallocated, a process that has its own characteristics. For example, the effectiveness of the reallocation process depends on the incentives faced by workers when they look for jobs and those faced by firms when they look for people. Under this new view, considerations normally assigned to the supply-side interfere with the demand side. For example, recently laid-off workers will search more intensively than the long-term unemployed and better workers are likely to be re-hired faster. This in turn reduces the average quality of the pool of unemployed workers which can act as a disincentive for firms to hire. Other interpretations emphasize what has come to be called the "cleansing" effect of recessions: a sorting by surviving firms of their labour force and a better fit between workers and jobs.

The flow view brings to the forefront two aspects of labour markets overlooked or incompatible with the demand and supply approach. First, the sorting process itself may influence the outcome: hysteresis occurs as overall employment now depends on events which trigger jobs and workers reallocation as well as to the characteristics driving the reallocation process. Second, the heterogeneity of both the labour force and available jobs affect the ease, speed and effectiveness of the reallocation process.

Thus the available evidence challenges the demand and supply approach, and research along this line has barely started. Potentially important policy implications follow as attention is now attracted not only to macroeconomic

aspects but to the inner workings of the labour market. In particular, the separation of the sources of unemployment into two neat categories, demand and structural, appears to excessively "box" the analysis.

Figure 8 about here

Equilibrium Unemployment

With so little of total unemployment apparently explained by cyclical factors, attention naturally focuses on equilibrium unemployment. One major lesson from years of scrutiny is that equilibrium unemployment is not easily explained by a few key factors. Rather, it is an accumulation of causes, each with rather moderate effect, which must be invoked.

Collective bargaining

The fact that wages are set through collective bargaining is certainly a crucial factor. Not only does this prevent wages to adjust to changing conditions, be it at the firm, industry or aggregate level, but it may also lead to hysteresis.

Early work (Bruno and Sachs, 1985) emphasized "corporatism", i.e. the degree to which wage negotiators were willing to cooperate rather than oppose and to take into account the wider social implications of their actions. A

higher degree of corporatism was seen as conducive to wage moderation. Calmfors and Driffill (1988) challenged this view drawing attention to the specific role of the degree of centralization of wage negotiations. They proposed a "hump shape" relationship between centralization in bargaining and real wages (and therefore unemployment): very centralized and very decentralized bargaining produce more real wage restraint and employment than bargaining at the industry or crafts levels. In the latter case, worker representatives are more inclined to play a game of leapfrogging, trying to obtain better agreements than elsewhere because there is little risk of hurting one's own firm competitiveness when the agreement covers the whole industry or a craft which cuts across all industries. Centralized bargaining forces workers' representatives to take into account the effect of wage settlements on the whole economy, hence a tendency towards moderation. Similarly moderation is fostered in firm or plant level bargaining because competition on the goods market prevents firms from passing on to their prices excessive labor costs, thus making the threat of firm's failure very real.

The empirical evidence on the hump shape hypothesis is now reasonably robust. Layard *et al.* (1991) and Calmfors (1993) convincingly show that there is a loss in terms of moderation when negotiations take place at the intermediate level. Yet, the linkage between centralization and wage-setting behaviour may be more complex than suggested by the early literature, as suggested by Calmfors (1993a). Account should be taken of the number of levels of negotiations, the degree of openness of the economy,

regionalization and asymmetries in the extent of coordination among employers on one side, and among employees on the other. A related issue concerns the role of inflation since it is nominal wages - in fact nominal increases - which are set through negotiations. As noted by Calmfors (1993a), there may be a psychological minimum for nominal wage increases, corresponding to perceived secular productivity advances. With very low inflation this translates into a floor for real wages. Thus it is possible that, *ceteris paribus*, more inflation delivers more real wage flexibility for a given degree of nominal wage rigidity.

Collective bargaining also generates hysteresis. As seen above, hysteresis, or at least persistence, may occur when employed workers are not ready to share potential jobs with the currently unemployed workers if it is at the cost of lower compensation. As noted by Lindbeck and Snower (1988), this is only possible if unemployed workers do not underbid employed workers. Underbidding is often prevented by social customs, often even backed by specific legislation which empowers unions to negotiate wages and condone practices (harassing, posted remunerations, hiring restrictions) which discourage underbidding. Similarly, in several countries, law also stipulates that collective agreements reached between employer associations and trade unions are binding even in non-unionized firms and for non-unionized workers.

The apparent collusion between employers and employees' organizations appears very surprising at first blush. It is clear, however, that the

employee-employer relationship is a rich and complex one. It is one that needs to be built for the long run. This is one reason why the whole wage structure cannot be changed to respond to short run fluctuations: the various costs (time but also conflicts and loss of trust) of renegotiating often exceed the benefits of wage flexibility. In addition, workers develop firm-specific skills of value to both employees and employers. This gives a particular value to insiders. It helps explain why firms are not willing to jettison their relationship by hiring less expensive outsiders.

Government interference

In Europe the most highly regulated and taxed market is the labor market. The reason for widespread government interference is similar to those which have given rise to labor organizations: protection of individuals from more powerful employers, and externalities because souring labor relations sometimes lead to social and political unrest. The list of public interventions is vast. The European experience, and the contrast with the US, and in some instances with Scandinavia, justifies focusing on the three following aspects.

Minimum wages in principle hurt the young and less qualified workers. Among the EU countries, five (France, Luxembourg, the Netherlands, Portugal and Spain) have a national legislation imposing a nation-wide minimum wage. In five others, minimum wages result from national (Belgium and Greece) or industry-level (Denmark, Germany and Italy) bargaining. It is only in the UK

and in Ireland that there is no mandatory minimum wage. Where it exists, the rate of unemployment among the young typically largely exceeds the average rate as can be seen in Table 3 (the UK is an exception). Minimum wages eliminate low productivity jobs (for example petrol station attendants or newspaper home delivery). Some jobs are created elsewhere, for example in designing, producing and servicing more elaborate gas pumps, but many more jobs simply disappear.

Table 3 about here

Restrictions to hiring and firing as well as regulation of part-time work elicit job saving reactions. By making it more difficult and costlier for firms to adjust labor usage to their fluctuating needs, such restrictions lead them to rely on the minimum number of workers needed and resorting to overtime work instead of a variable work-force at times of high-capacity utilization. When, in addition, overtime is severely restricted, as is the case in several countries, labor-saving automation emerges as the best response.

Finally, taxation of labor is amazingly high. In a number of European countries, on average, overhead costs come close to half of net take-home pay as is shown in Table 4.⁵ In a sense, this is what taxation principles would indeed recommend: in principle taxation should be highest on the "goods" the least likely to be withdrawn from the market as a result. Undoubtedly, since Adam bit the apple, most people need to work. But the

situation is more complicated than just that. It all depends on who eventually bears the cost of labor taxation. If it falls on the employer, labor taxes raise the cost of labor. While in the short run the demand for labor is quite inelastic, it is highly elastic in the long-run. Thus what appears as good revenue-enhancing measure today may become a major source of unemployment over time. This effect is compounded by the fact that labor taxes are mainly used to finance social expenditures. As unemployment rises so do expenditures to deal with it (unemployment benefits, labor market programs, etc.) and therefore the need to raise more income further raises labor taxes, which eventually feed into more unemployment. The only way to avoid this effect would be for taxation to be borne by the wage earners, effectively reducing their net income. Given the previous discussions on hysteresis and real and nominal wage resistance, this does not seem a promising way out. In the end, it seems that simple (i.e. partial equilibrium) taxation principles need to be seriously amended in this case.

Table 4 about here

Natural causes of equilibrium unemployment

A last source of equilibrium unemployment is the existence of "natural" market imperfections. Past low unemployment rates in Europe as well as low rates elsewhere could suggest that this latest category is quantitatively of limited importance. This conclusion may not be warranted for two reasons: hysteresis and the dynamics of jobs and workers flows.

Mismatch, i.e. inadequacies of labor demand and supply at a disaggregated level is unavoidable. It is always the case that scarcity of particular skills in particular regions coexists with excess supply of other skills in the same or other regions. Empirical work on mismatch, e.g. the studies in Bean *et al.* (1986) and Layard *et al.* (1991), has tended to conclude that it is at most a small contributing factor to equilibrium unemployment. Yet, as already noted above, many results from the recently developed literature on jobs and workers flows cannot be understood without taking due account of the heterogeneity of workers and jobs. Worker heterogeneity is obviously needed to account for the fact that during a recession flows from unemployment into jobs rise in parallel with the flows from jobs to unemployment. Similarly, job heterogeneity is unambiguously revealed by the finding that the number of job creations and destructions varies considerably across plants within the same industry (Davis and Haltiwanger, 1990). Of course, the role of jobs and workers heterogeneity might have strong cyclical effects while being unimportant over horizons beyond the business cycle. In that case heterogeneity would merely contribute to cyclical and not to equilibrium unemployment. Figure 8, however, suggests otherwise. In Germany and elsewhere, the flows of workers into and out of unemployment exhibits more than a cyclical behavior; they have trended upward in parallel with the trend increase in the rate of unemployment. This is one indication, yet to be confirmed by more theoretical and empirical studies, that mismatch or heterogeneity of jobs and people may significantly contribute to equilibrium unemployment.

Policy Implications

This section attempts to draw the implication of the analyses presented in earlier sections. It accepts what seems to be the currently accepted wisdom: that neither supply-side nor demand-side policies *alone* will seriously and permanently come to grip with mass unemployment in Europe. But the fact that this diagnostic has been accepted for many years and yet not translated in policy actions suggests that the mere prescription of a two-handed approach (e.g. Blanchard *et al.*, 1985) is not sufficient. A useful new step in the recent literature is to look for ways that would make the prescription politically palatable.

Hysteresis and demand side policies

I have noted above that most studies find a limited role for cyclical, i.e. demand-constrained, unemployment. This conventional wisdom, which has emerged during the eighties, has had the effect of seriously dimming enthusiasm towards demand side policies. Indeed the recession currently winding out in Europe differs from previous postwar experience in one crucial respect: the apparent refusal by governments of all political persuasions to undertake demand management.

Monetary policy has been everywhere primarily committed to the defense of a pegged exchange rate. Only in those countries where defense has failed in

the face of speculative attacks - themselves often triggered by the belief that unemployment was becoming politically unsustainable - has monetary policy been partially relaxed. Even there, however, the monetary authorities have not fully exploited their newly-won freedom. Figure 9 shows the evolution of short-term (money market) interest rates - those that are directly under central bank control - in the UK, Italy, Spain and France in relation with the German rate. It is clear that only in the UK did the authorities significantly lower the interest rate following either their leaving the ERM (UK and Italy in September 1992) or reaped devaluations (Spain from October 1992 to May 1993). The same is true of France which did not leave the ERM but informally devalued in August 1993 when the bands of fluctuation were considerably enlarged; in fact France has since then unofficially strived to return to the previous narrow band, as did Belgium, Denmark and Ireland. Similarly, fiscal policy has hardly been used beyond the reluctant acceptance of the automatic stabilizers, as we will see shortly.

Figure 9 about here

The emphasis on supply-side policies and the dismissal of demand-side action is based on that part of analyses rooted in the demand-structural distinction. Yet, a message from earlier parts of this paper is that this distinction may not be robust. This is one implication of the flow approach. It is also implied by the possible existence of hysteresis effects. In the presence of hysteresis the abandonment of demand-side policies goes beyond

just tolerating temporary cyclical unemployment. If temporarily high unemployment tends to perpetuate itself, preventing it from rising is not just demand-side policy. More importantly even, with hysteresis, a demand-led attack on what is perceived as equilibrium unemployment may have a long-run beneficial supply side effect. At least, this is a theoretical possibility. This raises one important question: what are the risks of such a strategy?

The traditional answer is that when the rate of unemployment falls to its equilibrium level, demand pressures lead to an increase in the inflation rate and that further attempts to reduce inflation will require more unemployment. This reasoning relies of course on some version or another of the Phillips curve which, however decried among academic economists, appears to exercise considerable influence on policymakers. Yet, the only long-run well-established explanation of inflation is its relationship to money growth. This robust result justifies care in adopting expansionary monetary policies but implies that debt-financed fiscal policy has no inflationary effect, at least in the long-run. Viewed this way, it is surprising how little use is being made of fiscal policy.⁶

This observation is compounded by the very real possibility that passive fiscal policy may well be yet another source of hysteresis or persistence. It is clear that unemployment benefit expenditures closely follow the path of the unemployment rate itself. In principle, this could be offset with tax increases or public spending cuts, but taxes are clearly countercyclical and

governments typically - and rightly so - do not increase tax rates or cut spending during cyclical downturns but simply let the "automatic stabilizers" play. It is not surprising therefore to see in Figure 10 that budget deficits exhibit a clearly cyclical pattern.

Yet the contrast between the EC and the US also suggests the very disturbing idea that hysteresis in public deficits match hysteresis in unemployment, much as we also detected the possibility of hysteresis in capital accumulation (Figure 8). Figure 10 indeed reveals that European budget deficits have permanently risen at the same time as unemployment rates were ratchetting up. In contrast, in the US where unemployment does not exhibit any trend increase, the budget deficit oscillates trendlessly too.

Figure 10 about here

A possible explanation, yet to be thoroughly investigated, runs as follows. When unemployment increases so does spending on unemployment benefits and labor market programs. Since in most countries unemployment benefits are financed by labor taxes, efforts to stabilize the budget require raising labor taxes. This further increases the cost of labor and thus contributes to yet more unemployment, possibly triggering a vicious cycle converging to a bad equilibrium. In the end governments must tolerate not to entirely cover the additional spending by additional taxes. In that case we expect to see unemployment and budget deficits inexorably grow together.

The resulting upward creep of public deficits does not however correspond to expansionary actions. Rather it represents borrowing against the future without dealing with the present's unemployment problem. A superior alternative seems plausible: use fiscal policy early on in the phase of rising unemployment. It may kill in the bud an emerging cycle of hysteretic unemployment increases. In doing so, an active current budget deficit prevents future passive deficits. This is one plausible, but controversial, interpretation of the long period of small unemployment rates in the Nordic countries (see Calmfors, 1993b). If true, it means that concern with high public debts is misplaced: the choice would not be between fighting unemployment and containing public red ink, but between high unemployment with high debt in the case of inaction and similarly high debt but lower unemployment following fiscal policy actions.

Supply side policies: Swedish lessons from European unemployment

Supply-side policies aim at eliminating market inefficiencies or at alleviating distortions brought about by government interventions. Put differently, supply-side policies aim at reducing the structural component of unemployment. From the preceding analysis which precedes, two observations seem warranted: first, the list of potential sources of long-lasting unemployment is very long and covers a large spectrum; second, little is known about the relative contribution of each of these potential sources to the overall outcome.

The combination of a large number of potential supply-side measures and the ignorance of their relative importance argues for an across-the-board attack, essentially trying "everything that can help and won't hurt". These lessons are largely reflected in the Lindbeck Committee Report (Lindbeck *et al.*, 1993). In particular it contains a nearly exhaustive list of the measures which directly follow from the analysis presented here. These measures range from labor market negotiations to the social safety net and taxation, to distortions of a number of goods markets (e.g. housing) and to failures in education and inadequacies of public infrastructure. It would be unhelpful to restate the detailed list here, especially as the same list has been, and is being, debated nearly everywhere in Europe.

What has to be emphasized are two novel aspects of the Report. The first one is that the list is presented as a comprehensive *package*. This is in line with the above observation that high unemployment is the outcome of a large number of contributing factors, each of them with limited impact. The second innovation of the Lindbeck Report is the recognition that political oppositions are likely to derail the best crafted program, a point to which I return below.

Paretian transfers and social contracts

None of the foregoing policy implications is new. What is particularly striking is that so few of these measures have been adopted so far throughout Europe despite more than a decade of mass unemployment. One of

the most useful insights of Lindbeck *et al.* (1993) is that economic policy recommendations must take into accounts both economic principles and political constraints.

For example, it is hard to avoid concluding that trade unions or, more generally, any form of insiders' organized labor, have contributed to the wave of rising unemployment. Does this mean that organized labor has been behaving systematically in a devious way? This is a very misleading and counterproductive conclusion. To start with, we should always start from the assumption that individuals defend their interests, in and outside the market-place; there is nothing devious about that. Second, the insiders still represent a massive majority of all workers, which gives democratic legitimacy to the political defense of their interests. Of course, in properly functioning democracies, minorities need to be protected. In this case they are: the unemployed usually receive payments paid for by taxes levied on the employed workers.

The problem is elsewhere: to be effective in the pursuit of highly justified social goals, unions need to be large. Yet it is a fact of life that large organizations naturally behave as rent-seeking units. The problem is further compounded by the fact that many firms, or employers associations, themselves enjoy monopoly powers on the goods market and have an incentive to tacitly defend employees' organizations with which they share their monopolistic rents. To eliminate some sources of unemployment, therefore, these rents must be taken away, which is bound to trigger hostility.

The problem is general as it affects most supply-side policies. The market failures and inefficiencies which lie at the root of much of structural unemployment in Europe typically reflect some advantage captured by some group. Behind each efficiency hides a rent. It is enough to read the list of measures proposed by Lindbeck *et al.* (1993) to realize the basic fact that the common good often requires sacrifices by some particular groups. Economists have long dismissed such a purely political constraint by referring to the principle of Pareto according to which winners *can* compensate losers when society benefits from particular changes. But *do* they?

The approach followed in the UK over the 1980s is instructive in this respect. Open hostility towards unions has led the Thatcher government to seriously curtail their role, and the associated rents. Strike activity, for example, which had crippling effects in the 1970s, has been regulated. There are some indications (see e.g. Bean, 1989; Matthews and Minford, 1987; and Minford, 1994) that British labor markets have become more flexible so that real wage rigidity has declined markedly. As a result unemployment seems to have been more responsive to the upturn in the second half of the 1980s, as is shown in Figure 11 which provides a comparison of France and the UK.⁷

Figure 11 about here

The case of Britain shows that a determined government can reduce rents and

promote efficiency *without compensating the losers* when it enjoys a strong political support to do so. But then why have other governments on the continent obviously not followed the same approach? The answer is obvious: either they lack the political backing or they are worried of adverse political consequences. As a consequence, they rather act little or not all, and let unemployment persist. Hence the need for changing the incentives that policy makers face recognized explicitly by Lindbeck *et al.* (1993): new conditions must be established to promote measures which reduce equilibrium unemployment.

Two conditions seem necessary (but certainly not sufficient). First, that organized groups must be willing to give up some of the rents that they hold. Second, that governments be reassured of their chance of success where they have failed so far. Thus supply-side policies are likely to be adopted, and to succeed, only when accompanied by explicit transfers to compensate the losers. One way or another there must be an explicit promise that a payment will be forthcoming against the willingness to abandon a welfare-reducing rent. (This has the obvious advantage of disciplining governments for they will not commit themselves to such payments unless they determine that they have a reasonable chance of success.)

Now, this observation must be linked to the previous conclusion that only wide-ranging packages are likely to work because high unemployment has many reasons, each with quantitatively uncertain effects. We now see that a successful attack against unemployment will have to be comprehensive,

affecting a very large number of interest groups throughout society, each one being promised some compensation. This is why social contracts are appealing. They provide the framework to implement the Paretian principle of side payments to the losers. They meet the need for comprehensiveness.

The additional required ingredient is public support. It is surprising that nowhere have the unemployed formed their own union; after all, there are more unemployed workers than there are coal miners or farmers in France or the UK. No doubt, this is partly due to the stigma attached to unemployment, but public action may be helpful here in building up an organization lobbying against unemployment.

Conclusions

Between politically difficult supply-side and discredited demand-side policies, Europe seems to be stuck in a high unemployment trap. Part of the problem may be a sterile distinction between demand and structural views. This distinction could be usefully downplayed for two main reasons. First because other frameworks than the standard demand and supply one tend to blur this distinction. Second because of the lesson learned over the last decade: that high European unemployment is caused by a large number of factors and will not be reduced by just a subset of the necessary measures, be they geared to the structural or demand components.

More fundamentally, we need to recognize that most efficient policies must chip away at rents accumulated by a large number of groups. The result is a complex technical and political situation where economists propose efficient measures unlikely to survive on the political testground. Pareto superior outcomes do not dominate automatically in the political arena, they must be backed by a social contract which redistributes the welfare gain in such a way that there are no losers.

It may be argued that social contracts have existed before and did not quite work where they were implemented (see, for Sweden, Calmfors and Forslund, 1990). The kind of contract proposed here differs: it is a comprehensive one, not just aimed at moderating wages. It includes a large number of measures to be taken jointly, backed by explicit redistributive mechanisms. In many respects this is the approach proposed by Lindbeck *et al.* (1993) and tried recently in Belgium, France, and Spain. In each instance, it must be acknowledged that, so far, the political response has not been enthusiastic. Unless a better solution is uncovered, this is an argument for trying harder.

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Table 1. Proportion (%) of unemployment attributed to firms being demand-constrained (K) or capacity-constrained (C)

	K	C
Austria	74.3	9.1
Belgium	76.9	21.0
Britain	82.7	9.6
Denmark	50.8	37.0
Germany	59.4	28.3
Italy	51.8	19.4
Netherlands	59.1	38.4
Spain	77.0	22.3
USA	42.7	37.9

Note: The remaining case, the complement to 100%, correspond to firms constrained by labor supply.

Source: Bean and Drèze (1990, p.42-43)

**Table 2. Gross labor market flows in 1987
(Thousands)**

Country	Unemployment		
	Inflows	Outflows	Average stock
France	4,115	4,128	2,728
Germany	3,726	3,636	2,497
Spain	6,473	6,213	2,924
U.K.	3,032	3,478	2,696
U.S.A.	19,770	20,227	8,312
Japan	2,041	2,015	1,732

Source: Burda and Wyplosz (1994)

Table 3. Male unemployment rates over 1980-1989
 (% of corresponding population)

	Age Group	
	15-24	25-54
France	7.8	5.0
Germany	4.4	4.4
Ireland	15.3	15.1
Italy	12.6	3.0
Netherlands	7.5	5.3
Portugal	7.5	2.7
Spain	21.3	11.0
U.K.	16.1	9.0

Source: OECD Employment Outlook (1992, p.47)

**Table 4. Labor costs in manufacturing:
percentage of direct and indirect costs**

	Direct Labor Costs	Indirect Labor Costs
Belgium	69	31
Denmark	96	4
Germany	76	24
Greece	80	20
Spain	75	25
France	68	32
Ireland	82	18
Italy	70	30
Luxembourg	83	17
Netherlands	73	27
Portugal	74	26
UK	86	14

Source: CEPR (1993)

¹In all rigour, the "supply" schedule is better seen as a "wage setting" curve that traces out either the wage response of monopolistic trade unions to shifts in labour demand or the bargaining outcome in response to changing conditions in the labour market. At the cost of oversimplification, I adopt the term "collective supply" both to appeal to intuition - supply versus demand - and to emphasize the fact that the labour market is not of the perfectly competitive atomistic variety.

²For a thorough discussion of these issues, see Rotemberg and Woodford (1994) and Dixon and Rankin (1994).

³ The concept of hysteresis has been applied to unemployment by Phelps (1972), Gregory (1986), Gottfries and Horn (1987), Lindbeck and Snower (1984) and Blanchard and Summers (1988). For an overview, see Franz (1990).

⁴Detailed data of where unemployed workers flow to are not easily available. German and French data, quoted in Burda and Wyplosz (1994), show that both unemployment flows - to employment and to out-of-the-labour force - flows are counter-cyclical.

⁵ It is interesting to note that labor taxes are extremely low in Denmark, and yet unemployment there has been high for a long time. This observation illustrates two themes of the present paper: 1) that no one cause explains a significant part of high unemployment so that no single solution will have easily discernible effects; 2) that take home wages are set with an eye to extracting the maximum available rent for both parties, so that when the government's bite is reduced both employers and employees carve up what is released.

⁶One possible interpretation is that fiscal policy is not operative because of Ricardian equivalence. There is, however, little evidence that Ricardian equivalence is empirically serious enough to completely eliminate the ability of fiscal policy to affect demand (see e.g. the articles in the *Journal of Economic Perspectives* 3, (1989), pp.37-54).

⁷This interpretation of the UK labour market is far from universally accepted. A number of British economists contend that the breakdown of easy channels for discussions and negotiations between employers and employees has led in fact to a deterioration, not an improvement, of structural unemployment. They foresee a resurgence of high inflation - as in the late 1980s - as soon as unemployments heads downward (I thank Richard Layard for an exposition of this view during a fast walk down the streets of Stockholm).

Figure 1. The Labor Market with Collective Bargaining

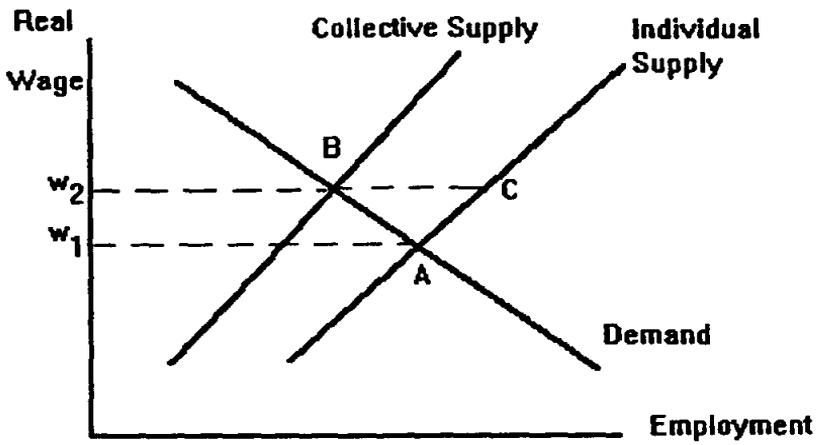


Figure 2. Structural and Cyclical Unemployment

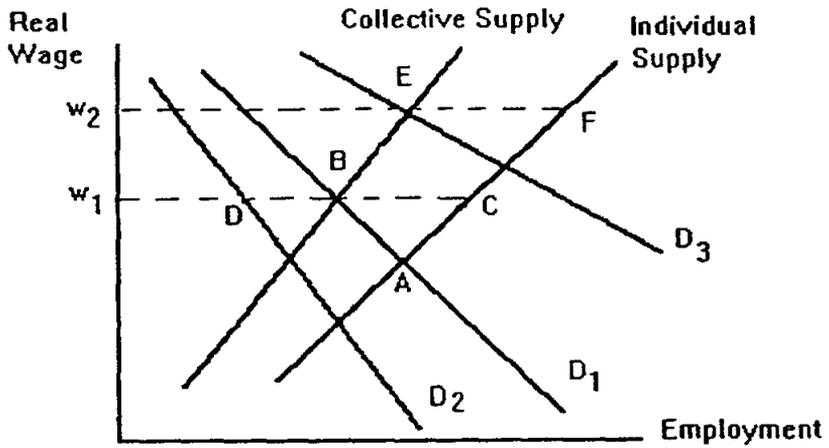
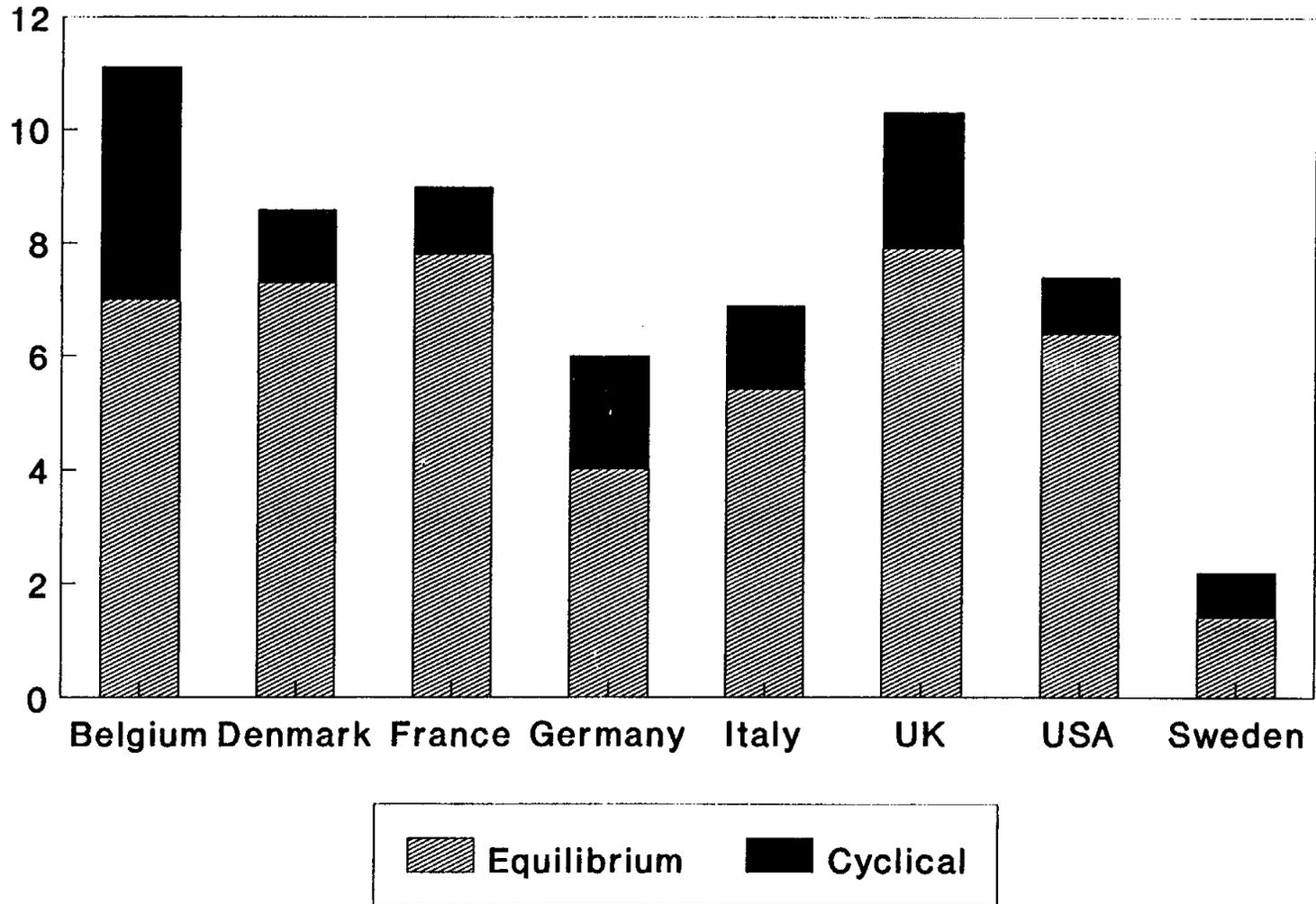
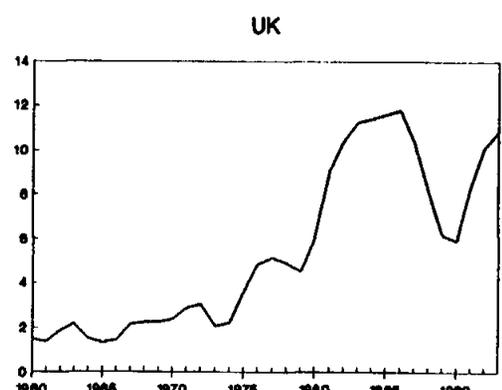
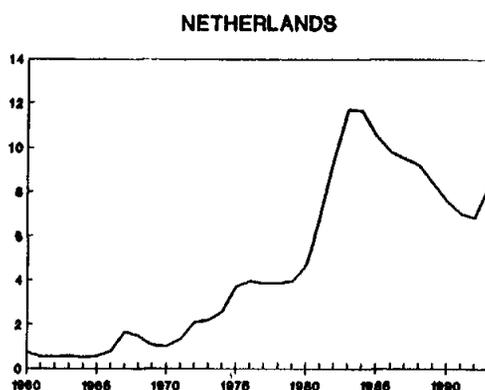
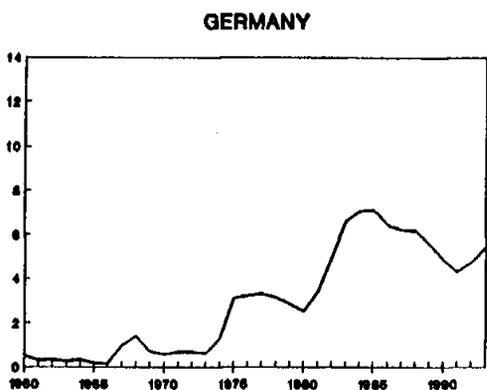
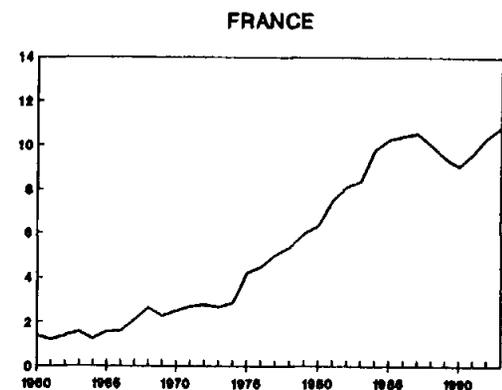
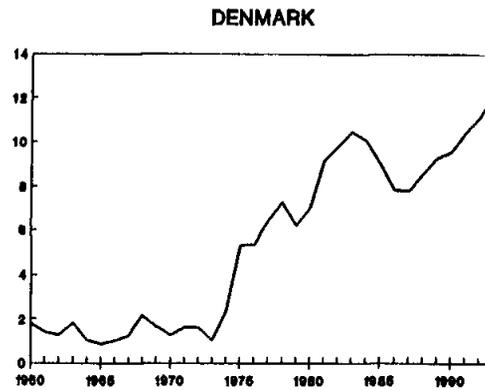
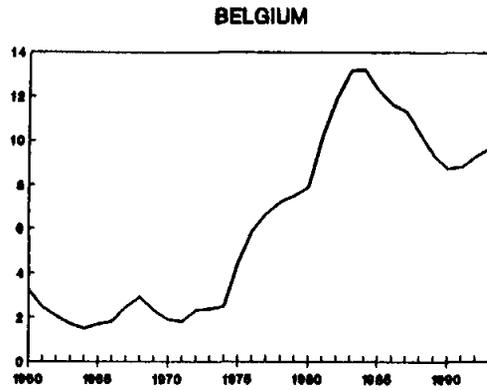


Figure 3: Equilibrium and cyclical unemployment in 1980-88



Source: Layard et al. (1991)

Figure 4. European unemployment rates



Source: OECD, Economic Outlook

Figure 5. Hysteresis: the Membership Effect

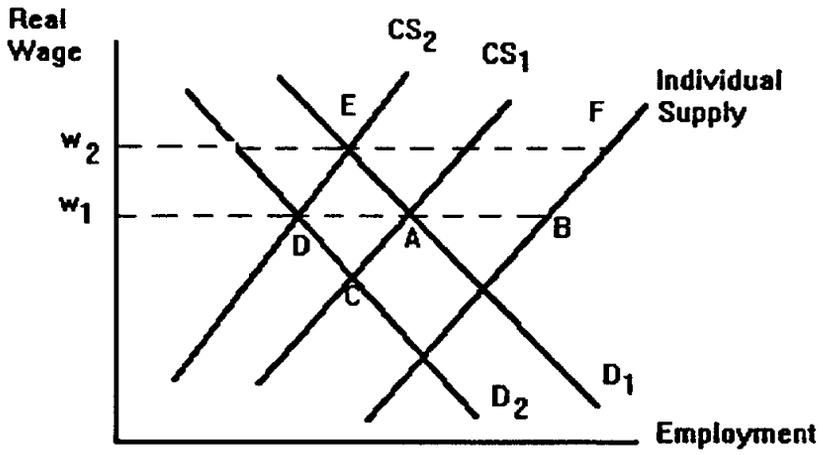


Figure 6. Hysteresis: Depreciation of Human Capital

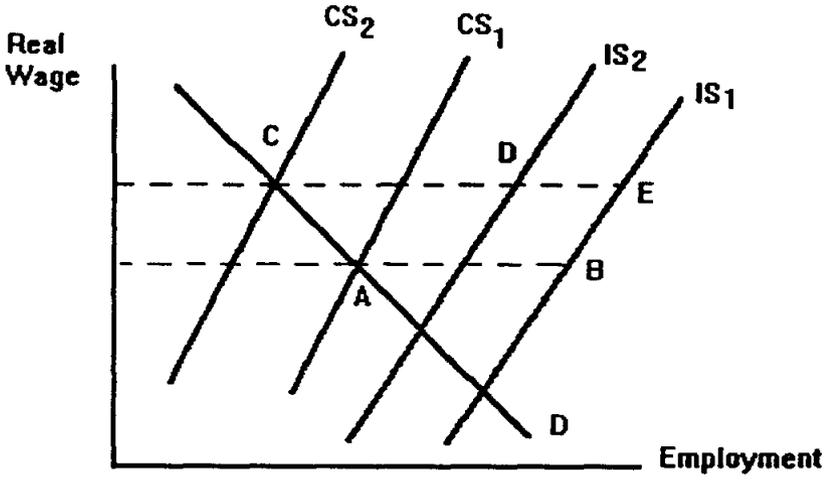
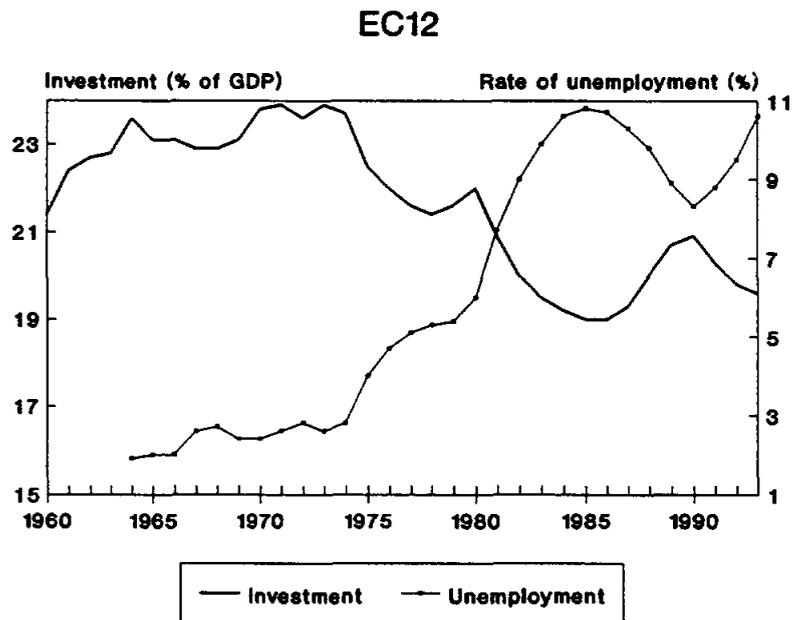
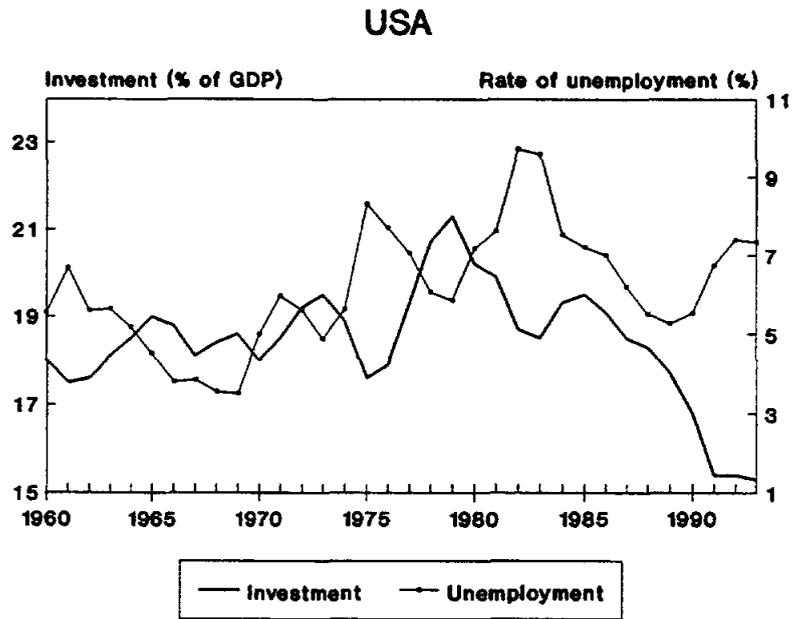
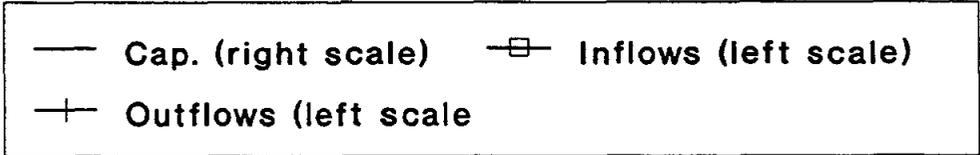
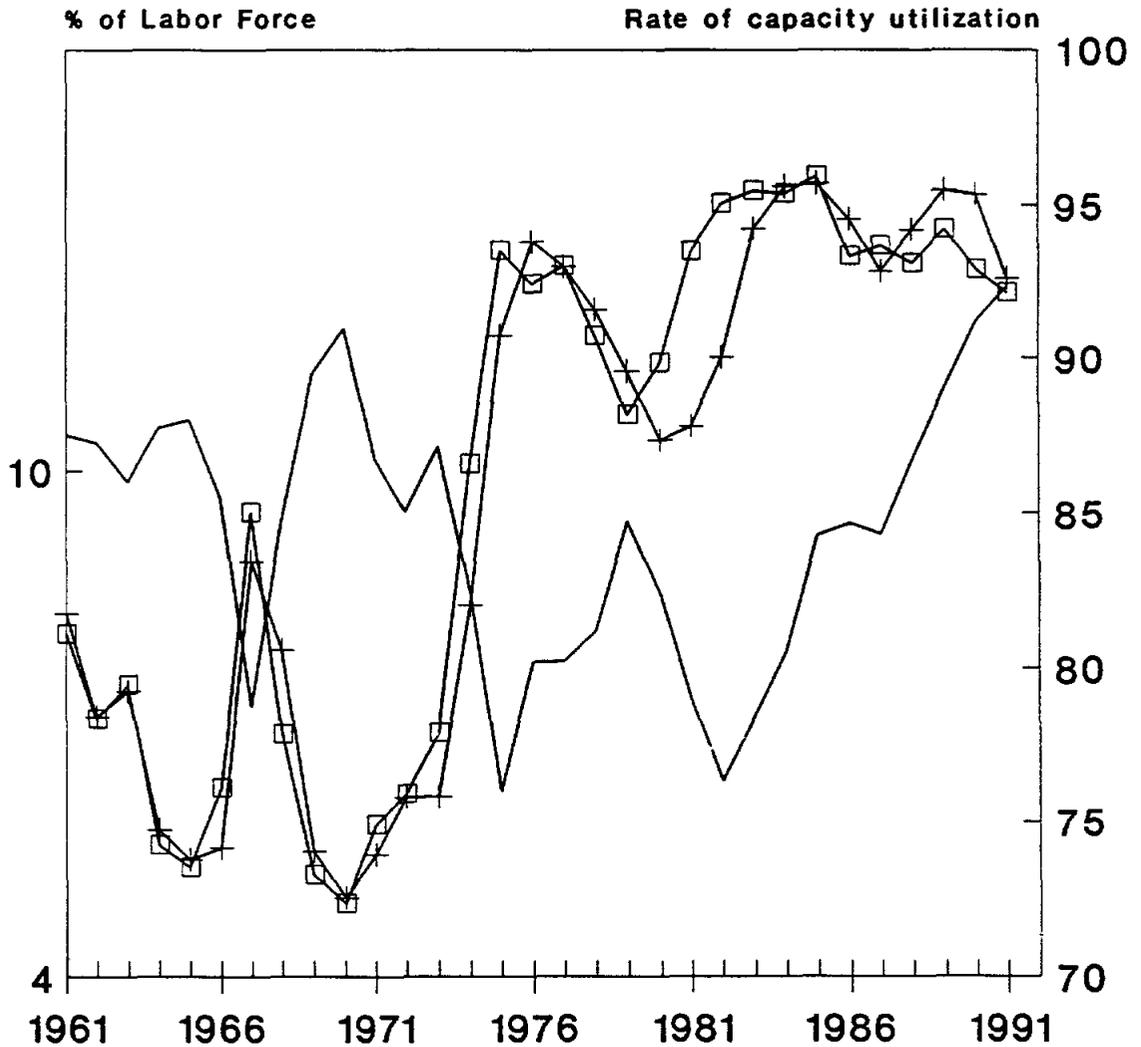


Figure 7. Investment and unemployment



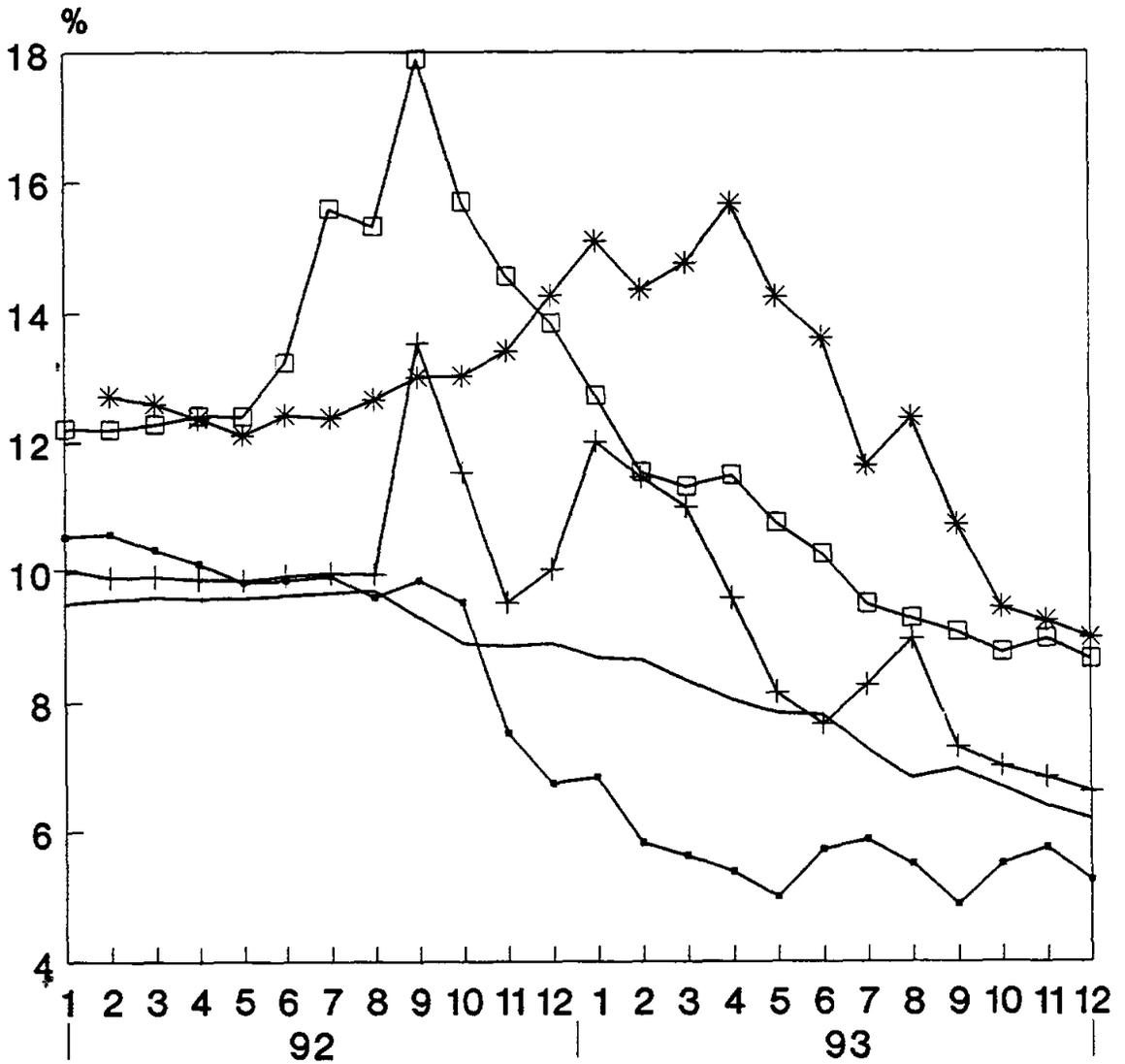
Source: European Economy

Figure 8. Unemployment flows and the business cycle in Germany



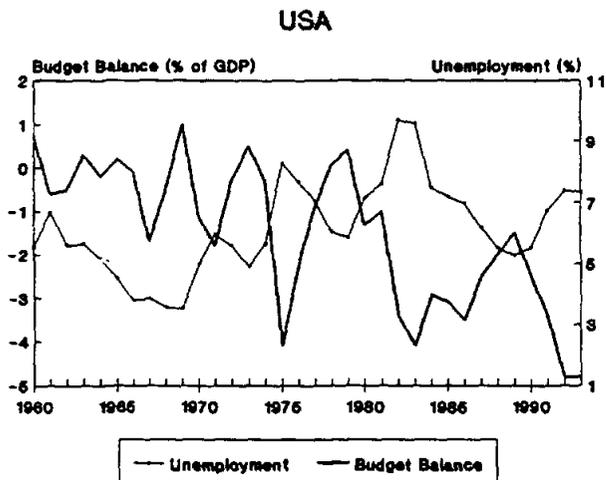
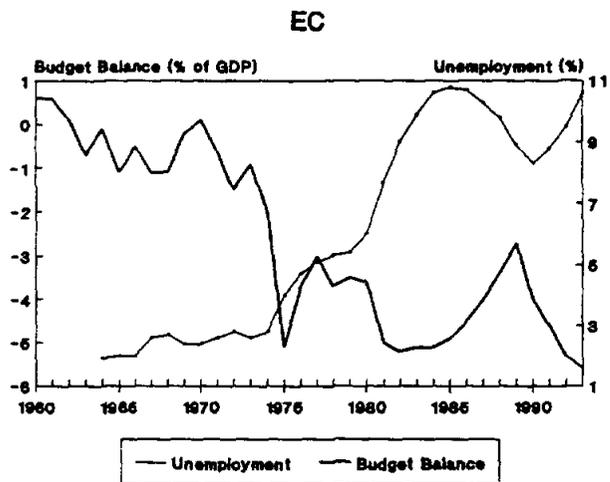
Source: Burda and Wyplosz (1994)

Figure 9. Short-term interest rates
(Money market rates)



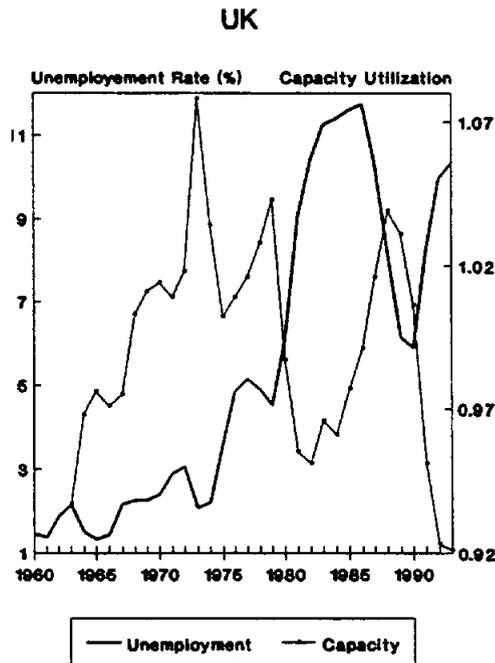
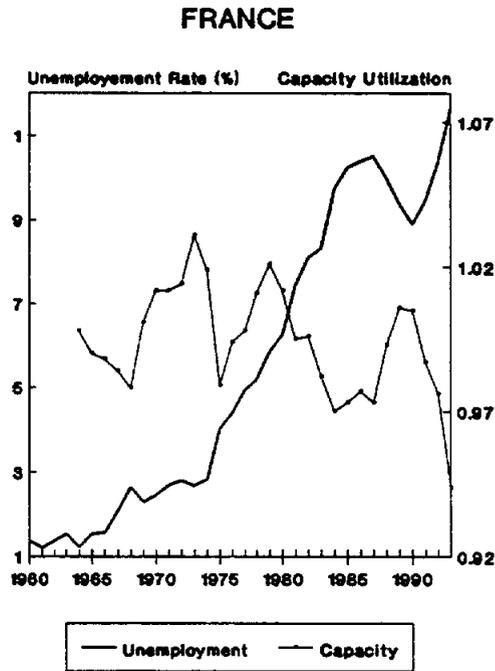
Source: IMF

Figure 10. Budget balance and unemployment



Source: European Economy

Figure 11. The cyclical behavior of unemployment



Source: OECD Economic Outlook, Dec 1993