

# **The political consequences of unemployment<sup>1</sup>**

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## **Abstract**

We analyze the channels by which an ill-functioning labor market changes the preferences of the people for public policy and therefore the decisions that are made. We not only discuss labour market reform but other important aspects of policy making such as the size and structure of government spending. The class of mechanisms that we highlight can be summarized as the very existence of unemployment generating political support for "sclerosis". This may help to explain the timid pace of reform, in particular the fact that any recovery sends them at the backfront of the political agenda, and the sometimes violent opposition generated by some measures, as we have seen mostly in France.

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## **Non technical summary**

A crucial issue is a democracy's aptitude at problem-solving. The democracies of Germany (1933), Spain (1936) or Chile (1974) were defeated not only because of the use of force to impose authoritarian regimes but also because of their incapacity to solve economic problems and sharp social conflicts. While such episodes look remote, the democracies of today's continental Europe have now faced the problem of high and persistent unemployment for twenty years and do not seem able to solve it. This brings the question of whether economic problems are made worse by their political consequences, or whether on the contrary they automatically generate sufficient support for adequate reforms to be undertaken.

When analyzing that issue, one expects various effects to be at work, some positive, other negative. For one thing, a "problem" generates "losers" (otherwise it is not a problem), and therefore some support for solving it. The unemployed would probably support any policy that creates jobs for them; the more numerous they are, the greater the support for such policies.

However there are other mechanisms that may block reform. It is this bleak side that we are looking at in this paper. We analyze the channels by which an ill-functioning labor market changes the preferences of the people for public policy and therefore the decisions that are made. We not only discuss labour market reform but other important aspects of policy making such as the size and structure of government spending. The class of mechanisms that we highlight can be summarized as the very existence of unemployment generating political support for "sclerosis". This may help to explain the timid pace of reform, in particular the fact that any recovery sends them at the backfront of the political agenda, and the sometimes violent opposition generated by some measures, as we have seen mostly in France.

We highlight three broad classes of mechanisms that may lead to undesirable political outcomes when unemployment is higher. First, incumbent employees can no longer rely on the market to provide them with improvements in living standards, so that they have greater incentive to undertake political action. Second, unemployment generates support for "conservationist" policies because it is associated with higher rents to the employed, and consequently greater support for protecting these rents. Third, unemployment and the rigidities that cause it may increase the demand for government intervention in order to offset their consequences. In the sequel, we discuss each of these mechanisms.

Our analysis departs from the simple view that sclerosis is generated by harmful institutions that exist as the outcome of sheer mistake and that to solve Europe's problems one just have to remove them. The approach that I have explored is based on the view that these institutions are the result of a political equilibrium in a power game between different interest groups. Within this approach, the present paper we study the causal links from the malfunctioning of the labor markets to political decisions that are likely to aggravate the sclerosis. Thus we have discussed how an ill-functioning labor market may increase social conflict, increase the support for protective measures that further deteriorate labor market performance, and lead to an inadequate size and structure of the public sector. Given the variety of phenoma that we have dealt with, it is not easy to summarize our findings in a quick, general conclusion.

However, a common feature is the *epidemic* aspect of sclerosis. If we take the view that the European unemployment problem is intimately associated with high employee rents, then the employed are likely to resist a large number of policy changes and reforms; their desire to stick to their job will distort their preferences relative to any move whose reallocative consequences might threaten their jobs. So, this simple market failure, originally limited to the labor sphere, generates support for rigid institutions in all areas. This is one factor (analyzed in section 2) that contributes to the "spreading of the epidemic". The second factor, present in sections 1 and 3, is the fact that when a market is not functioning well, people use political means to find *substitutes* for the market. In section 1 the substitute is direct pressure ("conflict"), in section 3 it is government involvement. These substitutes are costly, they use up resources that might be better devoted to the market activity, and further weaken the market mechanism by imposing various sorts of distortionary taxation on it. In the case of section 1, for example, it is likely that more conflict reduces the return to private activity as it increases uncertainty and can impose direct physical costs on the stock of capital; in section 3, a bigger government simply requires higher taxes to be financed, and thus imposes higher distortions on the private sector.

While we have insisted on the negative aspects, ideally the analysis should also provide guidelines on how to engineer such reform. In previous work I have discussed some aspects of that question, but a lot of research remains to be done. In particular, we still need clear guidelines with respect to the *timing* of reforms, as well as about *complementarities* across reforms. Much previous work (like Coe and Snower, 1996) has emphasized that labour market reforms are complementary, but one can think of substitutability as well; for example severance payments and unemployment benefits are two ways of compensating workers for job loss. Lowering one may imply increasing the other. Similarly, it is often stated that "good times" are better for reform (see Bean (1998), Calmfors et al. (1998)), but there are conflicting mechanisms and it all depends on which reform is being considered (See Saint-Paul, 1996b). Throughout the paper we have provided some empirical evidence about the phenomena that we discussed. This evidence goes in the right direction, but it is quite weak and merely indicative. This is somewhat inevitable. Political economy wishes to explain economic institutions, and there are far fewer observations, and many more underlying determinants, than when one tries to explain stock prices or individual consumption. Once the mechanisms (that often conflict with each other) are clearly spelled out, at the end of the day one must resort to judgement in order to assess which is most relevant and to make predictions and recommendations.

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protecting these rents. Third, unemployment and the rigidities that cause it may increase the demand for government intervention in order to offset their consequences. In the sequel, we discuss each of these mechanisms.

### **1. Unemployment weakens the mechanisms for transmitting productivity gains into wage growth, thus increasing the degree of social conflict**

How the benefits of growth are shared between labour and capital depend on institutions and on the functioning of the economy. A competitive labour market that ensures full employment provides a powerful mechanism for transmitting productivity gains into increases in living standards for workers. The increase in firms' profitability triggers entry and increases the size of their desired labour force, and because of full employment their attempt to hire is defeated and translated into higher wages as they bid up for labour services.

Here we want to argue that this mechanism is weaker when unemployment prevails. The existence of unemployment means that there is always the possibility that productivity growth is met by higher employment, not higher wages. But incumbent employees (the "insiders") are then tempted to organize in order to extract rents from increased productivity rather than let these rents go to outsiders. Under full employment competition for labour services ensures that the rent is transferred to insiders so that they do not have to collectively organize in order to get it.

Standard economic theory does not treat the two cases separately. It considers that there is a natural rate of unemployment above which wage pressure increases until unemployment is back to the natural rate. While the underlying economics may differ across models, thus reflecting the variety of phenomena lying behind the natural rate, such as job search, insider wage setting or incentive problems, it is this wage setting mechanism that ensures the transmission of productivity growth into higher wages. Full employment is only a limit case.

While this reasoning is perfectly correct, it ignores the option of going to collective action in order to reap the benefits of growth rather than letting market forces operate. It is actually possible to

extent the standard approach to make it compatible with our claim that unemployment increases the degree of conflict.

Figure 1 depicts equilibrium in an imperfectly competitive labour market. It is determined by the interaction between a downward sloping labour demand curve and an upward sloping wage setting curve. The wage setting curve depicts how real wages react to the unemployment rate. The more we get close to full employment, the higher the real wage and the steeper its reaction to any change in unemployment. This increased reactivity is a feature of most model of imperfectly competitive wage formation and also a feature of the real world (See Blanchflower and Oswald, 1994).

Figure 1 shows how employment and real wages would be determined absent any collective action. Now, we assume that by coordinating and agreeing on a certain degree of "conflict", the employed workers can shift the wage formation schedule vertically as shown on figure 2. By "conflict" we mean any *coordinated* move to impose a policy or institutional change that affects the wage setting curve  $WW'$ . One example is staging demonstrations to obtain an increase in the minimum wage. Another would be parliamentary lobbying in order to get a law that automatically extends union settlements to non-unionized workers within the same sector. The important thing to keep in mind is that the move has to be coordinated across all incumbents employees in the economy. So this does not include a strike at a small plant. The occurrence of such events and their impact on wages is *already* taken into account in the wage-setting curve, which depicts the aggregate relationship between wages and unemployment given policy and institutions. A local strike does not affect economy-wide policy and institutions, and therefore does not shift  $WW$ . Indeed, local conflicts obey a logic opposite to coordinated conflicts. While our point is that coordinated conflicts may be more likely at high unemployment, local conflicts are less likely: unemployment lowers the bargaining position of workers at the firm level because it makes it easier for the firm to find an outsider to replace the insiders, and harder for its workers to find another job (this is precisely the reason why  $WW$  is upward sloping). It makes strikes riskier, acting as a "discipline device". When unions coordinate, however, there is the additional effect that collective action can lead to a shift in the wage-setting curve.

The vertical distance between the original wage setting curve  $WW$  and its conflict-enhanced counterpart  $WW'$  measures how much conflict insiders are putting into the wage formation process: that is, how much of an increase in wages would insiders get should they reach their goal at the given unemployment level. We of course assume that there is a cost to this collective action. Unions must spend resources to convince their workers to mobilize and to demonstrate their commitment to politicians. The higher the vertical distance between  $WW$  and  $WW'$ , the higher the union's ambitions and the higher the cost. Now, the benefit of conflict is in forms of higher wages, as the economy shifts from  $B$  to  $C$ . It is also true, however, that employment is lower. Some of the insiders will lose their jobs as higher wages reduce labor demand. To some extent, this possibility will deter them from engaging into collective action in the first place. This will especially be true if it is not clear *who* is going to lose his job. If on the other hand layoffs take place by reverse seniority (as in many US unions rules or if firing costs rise with seniority), to the extent that the decisive voter within the employed is not laid off he will be more willing to accept the job loss.<sup>2</sup>

This risk of job loss is the reason why conflict is more likely when labour demand is rising. As shown on figure 3, when the labour demand shifts up they can lift the economy up to point  $D$  without any employment loss (This is the hysteresis effect of Blanchard and Summers (1986)). This tells us that conflict is more likely in upturns, and also that it may be one transmission mechanism from productivity growth (which raises labour demand) to wages.

The question in which we are most interested, however, is: what is the effect of the initial level of unemployment on conflict? To answer that question, the key thing to be noted is that the gain from conflict in terms of wages is larger, the flatter the wage setting schedule locally. Figure 4 describes the effect of conflict for two initial situations, one with low unemployment, the other with high unemployment. If employment was to remain constant then wages would increase by the same amount in both situations. However, the wage increase reduces employment relative to what it would be absent conflict. This employment falls leads to some wage moderation which partially offsets the

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<sup>2</sup>This is not in fact the end of the story. For once the least senior workers are fired, the decisive voter is no longer the same, and the previous decisive voter's job may now be at threat. For that reason he may oppose conflict even though he will not lose his job immediately.



direct effect of conflict. Because wages are more reactive to employment the tighter the labor market, the offsetting moderation will be stronger in the low unemployment case than in the high unemployment case. Consequently, the gains from conflict are higher when unemployment is initially higher. As said above, this is because the "market mechanism" for securing higher wages is now very weak.

Our story seems to contradict the conventional view that labour disputes are more frequent in upturns and therefore less likely when unemployment is high. It does not. One has to distinguish "upturns" from "high unemployment". The former refers to an *improving* situation (falling unemployment), the second to a *bad* one (high unemployment). The two are not contradictory: unemployment may be high and yet falling. Indeed, as said above, our story *also* implies that conflicts are more likely in good times. Second, one also has to distinguish coordinated from uncoordinated conflicts. The argument only applies to coordinated ones.<sup>3</sup>

For this reason, we do not expect the empirical evidence to be very illuminating regarding the importance of the effect we have highlighted. Empirically, the last decades have been characterized by a decline in union power and a decline in labour conflicts in most countries. That this has been accompanied by the rise in unemployment seems to contradict the above argument. However, if one makes a comparison across countries one does reach the conclusion that high unemployment countries have been less successful at reducing conflicts than low unemployment ones. Figure 5 shows the evolution of an index of the number of conflicts, for six of the G7 countries between 1970 and 1992. The index was set to one for all countries in 1970, which controls for country size effects as well as country-specific propensity to strike. We find that the decline has been strongest in the US, the UK and Japan, the three countries with the lowest average unemployment rate in the eighties. At the same times, this decline has been weaker in France, Italy and Canada. This gives us some ground to believe that social conflict is made worse by high and persistent unemployment.

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<sup>3</sup>Formally, this can be stated as  $CONFLICT = F(U, \Delta U)$ , where  $U$  is unemployment and  $F$  is increasing in its first argument but decreasing in its second one.

To conclude this section, let us note that the theory outlined above is at variance with Marx's views about unemployment as a "reserve army of labor". This view is captured by the shape of the wage setting curve; it is true that when natural wage setting mechanisms are left to operate a larger "reserve army" makes wages lower and less reactive to employment changes. But the other side of the coin is that precisely for that reason labor has greater incentives to collectively organize in order to obtain what it cannot get by letting market forces operate.

## **2. Unemployment increases the rents associated with the employment status, thus raising resistance to change and the political support for protective measures**

An important parameter for assessing the efficiency of the labor market is the size of the welfare differential between an employed and an unemployed worker. In a perfectly competitive labor market this differential should be equal to zero, for any worker looking for a job would find one instantaneously at the going equilibrium wage. Thus there would be no welfare difference between the employed and the unemployed. In practice, the employed have rents, that is they are strictly better-off than the unemployed. The size of this rents depend on their bargaining power (their ability to prevent the unemployed to underbid them, which itself is affected by labor market institutions), and also how closely their work effort can be monitored by employers. The rent is a measure of how far wage setting is from competitive behaviour; the higher the rent, the less competitive wage formation and the higher the natural rate of unemployment.

Most of the essence of labor market reform is about eliminating the rent. This is certainly true of any reform of the minimum wage and the bargaining process, or of any change that makes it easier for outsiders to compete with insiders: hiring rules, work rules, and many aspects of employment protection. And it is not surprising that incumbent employees will often oppose such reforms. Analyzing these mechanisms would come under the heading "the political causes of unemployment". Here, however, we are dealing with the political "consequences" of unemployment, and we highlight other effects. We take the rent as given and study its implications for a reform, or a policy measure, that has reallocative effects but *does not* affect the rent. The clearest example is a

measure unrelated to the labor market such as trade liberalization or a change in the composition of government expenditure. However, some aspects of labor market policy, such as the generosity of unemployment benefits (which does improve the bargaining position of workers, but through their outside opportunities, not through the rent), or employment protection when it makes it more costly to adjust the labor force but does not affect the wage formation process, can also be considered as at a first order approximation they do not affect the rent. If one looks at things in more detail, the rent is probably affected by a large number of factors, so that any policy change will affect it. Our exercise is best taken as a "controlled thought experiment". We want to know the consequences of labour market imperfections on policy determination; we take the rent as our measure of such imperfections; we thus consider the impact of the rent on public decisions, and its impact is best understood if the rent is held constant throughout the reform.

The rent has important consequences for the political preferences of incumbent employees. This is because it tells us how much they lose if they lose their jobs, or how much they are willing to pay for keeping them. The greater the rent, the greater the aversion of insiders to unemployment and the greater the political support for measures that protect their jobs. This argument can be illustrated with a simple formula. Assume incumbent workers vote on a policy measure that implies some reallocation of labor, so that they may lose their jobs as a consequence of the measure. To fix ideas, assume we are talking about a liberalization of trade that would destroy jobs in a "protected sector" and reallocate employment according to comparative advantage. Incumbent employees will support the reform provided it gives them an expected welfare greater than what they would have absent the reform. Call  $W$  the former and  $W_0$  the latter. Then :

$$W = (1-P) U + P E$$

, where  $P$  is the probability of keeping one's job,  $E$  the welfare of an employed worker after the reform, and  $U$  the welfare of an unemployed worker after the reform. This formula can be rewritten

$$W = U + PQ,$$

where  $Q = E - U$  is the rent to the employed. Incumbent employees will then support the reform if

$$U + PQ > W_0.$$

This formula tells us that the employed will support the reform, the more it increases overall welfare (a larger  $U$  with the same  $Q$  means that both  $U$  and  $E$  increase by the same amount, therefore the variable  $U$  captures the effects of the reform that are common to both the employed and the unemployed), the more it increases their rent, and the larger  $P$ . This latter effect tells us that the employed are more likely to support a reform provided their jobs are not too threatened.

Furthermore, this effect is larger, the larger the rent **Q**: algebraically, the effect of **P** is multiplicative in **Q**. If the rent is low then the employed are not very concerned about losing their jobs because one is then in a relatively competitive labour market where the cost of job loss is small. The contrary occurs if the rent is high. Thus, the higher the rent, the more incumbent employees will be concerned about the reallocative effects of the reform and the more likely they are to block a reform with a low **P**.

The above analysis implies that rents act as an obstacle to reform. At the same time any increase in the rent raises wage pressure, thus leading to higher equilibrium unemployment. Therefore, factors that shift the rent both increase unemployment and breed resistance to reform.

In the European case there is good reason to believe that high insider rents are one important cause of unemployment. These rents come from collective agreements, minimum wage provisions, hiring and firing rules, and union work rules that allow insiders to increase their welfare above the one granted by their outside opportunities. Such regulations increased in many countries in the late sixties and early seventies, and contributed to the initial increase in unemployment, which preceded the first oil shock.

We now discuss with greater details the implications of our reasoning, analysing in turn the support for employment protection legislation, the sluggishness in government expenditure, and work rationing.

## **2.1 Employment protection**

The most natural application of the above argument is that the higher the rent of the employed, the higher their political support for employment protection legislation. Employment protection legislation is complex; it associates to each cause of firing a set of constraints imposed on the employer. These constraints include severance payments, administrative supervision, obligation to provide the displaced workers with job counseling and to give them priority over hiring by the same conglomerate, unions' right of scrutiny and appeal, etc. To some extent, these constraints increase the employee's rent by making it more difficult for the employer to resist wage demands by refusing to employ the worker any longer. The direct effect of firing costs, however, is to make it more costly for

the firm to adjust its labour force when facing a fall in demand. In this section we will focus on that role, taking the rent as given (we are again in the framework of our "thought experiment" mentioned above).

In voting in favour of employment protection, incumbent employees trade off lower living standards (because employment protection maintains workers in less productive activities) against longer job duration. The value of the latter is proportional to the rent; long job duration would not be valued if the employed were not earning rents above the unemployed. The cost of job loss would then be zero. In Saint-Paul (1997), I have theoretically shown that the support for employment protection will arise whenever the rent is above a certain threshold.

Three other aspects are worth highlighting.

First, in an imperfectly competitive labour market, introducing employment protection legislation does not necessarily increase joblessness and may even increase welfare (by contrast, in a perfectly competitive labour market there is no unemployment and the allocation of resources is efficient -- welfare cannot be increased by introducing a regulation). This is because while job creation falls, job destruction falls too, and the latter may have been too high relative to the optimum because wages are above the social opportunity cost of labor. If firing costs had such positive welfare effects one would not have to worry about the fact that the employed favour them in order to protect their rents. That is, there would be no reason to lament about the fact that institutions are set on the basis of "politics" rather than "social welfare", for the two criteria would lead to similar outcomes. However, one can show that the conditions that enhance the employed's support for job protection (a high rent) are precisely those that make it less likely that it increases employment or welfare. The greater the rent (the less competitive the labour market), the more likely it is that firing costs reduce employment, and the more likely it is that the employed support them.<sup>4</sup>

Second, one can show that a higher labour turnover reduces the political support for employment protection. This results may sound paradoxical; wouldn't the employed want *more* job

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<sup>4</sup>See Saint-Paul (1997) for details.

protection when more exposed to losing their jobs? The answer is: not if they fully understand the effect of firing costs on their living standards. Higher turnover means that firms become unprofitable, or obsolete, more frequently. That makes employment protection more valuable to insiders, since they face a greater "risk". At the same time, however, higher turnover means that firing costs will artificially maintain a greater fraction of obsolete firms in activity, meaning that a larger fraction of the economy is dedicated to inefficient activities. This implies a more negative impact of employment protection on living standards and wages. So, we have two effects, one positive and one negative, and each of them is larger when turnover is larger; one can show that they balance each other in such a way that turnover no longer intervenes. That would be the end of the story if employment protection could eliminate any source of turnover. However, there is a component of turnover which cannot be reduced by employment protection. For example, bankruptcies, and voluntary quits into retirement or because of geographical mobility are not reduced by imposing firing costs. When that component is higher, the political support for rigidity falls because it is less efficient in reducing the overall probability of losing one's job.

Third, employment protection creates its own political support by maintaining a mass of workers in unproductive activities. These workers oppose flexibility because they would lose their jobs; they will support it only if one is better-off being unemployed in a flexible society than employed in a rigid one. If they are powerful enough to block a reform, then there are "ratchet effects" in the sense that the conditions for removing employment protection legislation are more stringent than those for not introducing it when it is not there. This explains why labor market institutions are "persistent" in face of variations in their underlying determinants and why the same society may not want them if it does not have them but would not remove them if they are already around.

Taken at face value, this analysis does well at explaining why employment protection prevails in Europe and not in the U.S. Europe has both lower turnover and less competitive wage-setting institutions (thus higher employee rents). Can we also explain why rigidities arose when they did and why they tended to persist in the eighties although they appeared to be costly in terms of employment? A plausible story would run as follows. In the postwar era, labour demand was increasing in Europe because of the strong need of reconstruction (as evidenced by the constant

inflow of immigrant workers). This was an adequate time for union militancy and the establishment of employee rents, as evidenced in France by repeated hikes in the minimum wage and the proliferation of strike movements which culminated in 1968-1969.<sup>5</sup> In the early seventies the economy began to slow down and insiders felt the need to protect their rents. This is about when job protection legislation came into effect. For example, in France, a law requiring prior administrative approval before being able to layoff workers was passed. In the late seventies, however, the rent began to fall as the result of several factors, such as the increase in openness, competition from newly industrialized countries, the reallocation of production toward less unionized sectors, and possibly more "biased" technical progress which made the demand for unskilled labor more elastic to its price (rents are presumably more relevant for unskilled than for skilled workers, for whom the market is closer to equilibrium). Another possible factor is the oil shocks, which presumably harmed the least productive firms more than the most productive ones. All this lowered the value of job protection to the employed, unless they happen to be working in an "obsolete" job, in which case they would instantaneously lose it should employment protection be removed. Consequently governments tried to reform the law. However, job protection had created its own constituency, and many "obsolete" workers (in particular in old industrial sectors such as steel or naval construction) were ready to oppose the reform. This in turn explains why reform has been difficult in many countries, and was typically reduced to allowing the use of temporary contracts for specific purposes and types of workers, while leaving the degree of job protection for incumbent workers unaffected.

## **2.2 Policy persistence**

Another way that will be used by employees to protect their rents when unemployment is high is by blocking changes in policy that generate job reallocation across sectors. While under full employment such reallocation is associated with a rapid move towards a new sector paying the same equilibrium wage, when unemployment is high people fear that any shock that reduces employment

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<sup>5</sup> This may appear to contradict our analysis of section 1 which implies that unemployment favours conflict. But remember that this only applies to coordinated conflict and to the initial *level* of unemployment, whereas an increase in labour demand makes conflict more likely. For our story to hold, we just need that the cumulated effect of the repeated increases in labour demand on coordinated conflicts and of the low level of unemployment on uncoordinated conflict is larger than the opposite-sign effect of the low level of unemployment on coordinated conflict.



in their own sector will result in an unemployment spell. This argument is very general. It applies to any change in government policy that has effects on the allocation of labour. This includes many labor market reforms, trade reforms, or changes in the composition of government expenditure<sup>6</sup>. The implication is that the more imperfect the labor market, the greater the political sclerosis in all areas.

Take for example the case of a country that needs to reduce the burden of its public sector -- a situation which many western European countries have faced in the last two decades. Public employees will try to counter attempts to reduce the size of the public sector, for fear of experiencing a long unemployment spell ; and, the larger the public sector initially, the more powerful this lobby and the more difficult to reduce government spending. This logic equally applies to sectors heavily dependent on government services and subsidized sectors, who have the same vested interest in maintaining a large government.

This argument may explain why reducing the weight of the public sector in many European countries is a painful process, which faces a lot of resistance by voters and organized interests. Such resistance may have to do with the state of the labor market and the high level of unemployment in many European countries. Unemployment induces people to stick to their jobs and accordingly lobby or vote against measures that would tend to destroy their jobs.

There are many real-world examples where the existence of unemployment affects the structure and level of public spending because of political considerations. Thus, while in the U.S. the 1994 congressional elections favored an agenda of sharp reductions in public spending, it has proved much more difficult to reduce it in France in 1995, in spite of a deficit of 6 % of GDP. Many programmes and subsidies were not removed because they would jeopardize jobs in a situation of high unemployment. Over the longer run, it has taken decades to remove subsidies to declining industries such as the textile, steel, or naval industries, and many bodies such as the Planning, Industry, or Veterans administration have survived the original reasons for their existence and go on employing many people. Similarly, in countries such as Russia and Poland, the emergence of unemployment has brought back to power ex-communist who maintained subsidies to the energy and

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<sup>6</sup>Saint-Paul (1996a) formally studies this phenomenon.

heavy industry sectors and slowed the privatization process. By contrast, in the Czech republic where unemployment was much smaller, subsidies were quickly removed and transition was much quicker.

When voting on government spending, in addition to the utility of public goods, people take into account the effect of government expenditures on their probability of getting a job. In the absence of unemployment, there is no such effect, and government spending is determined by the "true", or "intrinsic" preferences of the median voter with respect to the public good. In particular, a given individual will vote for the same spending level whether he works in the public or the private sector (in the public sector we include the share of the private sector heavily dependent on government contracting, such as the defence or medical industry). When there is unemployment, government expenditure affects the probability of being employed, so that public sector employees will have different preferences from private sector employees. An increase in government spending increases employment in the public sector at the expense of the private sector, so that public employees have higher probability of keeping their jobs and private employees a lower probability. Accordingly, public employees will be more in favor of a large public sector, all else equal, than private employees. This phenomenon may generate sluggishness, or positive persistence, in public expenditure: more civil servants today mean a larger political support for a high spending level, hence more spending tomorrow.

This sluggishness is mitigated by the voting behaviour of the unemployed. They will vote in a "radical" way, i.e. they will be in favor of high spending if it is initially low and conversely. The reason is that they want large job reallocation to take place in order to increase their likelihood of getting a job. Thus, while voting by the employed leads to sluggishness and positive persistence, voting by the unemployed leads to instability and negative persistence. It is however likely that the unemployed are less well represented politically than the employed, so that we expect resistance to change to be stronger when unemployment is higher.

In addition to the unemployment rate, another important parameter which affects the magnitude of the effects highlighted here is labour mobility, i.e. how frequently people move between employment and unemployment. When mobility is high the above effects are small because current

labor market status does not have a large effect on the probability of being employed in the future. By contrast, when mobility is low, those employed in a given sector today have a high probability of working in the same sector tomorrow relative to ending somewhere else, so that their employment probability will be very sensitive to the employment level of their own sector. It is this "insider" effect which is at the root of these persistence mechanisms.

The main message is that the existence of unemployment changes the dynamic structure of public policy. Typically, we expect the employed to be more powerful than the unemployed, so that unemployment will create resistance to change. One possible way to test for that would be to look at the time series behaviour of government spending, relative to trend GDP. However, our main argument certainly does not apply to routine changes in government spending, that are typically very small and therefore unlikely to be associated with political conflicts over their effects on employment. For example, in the sample of OECD countries that we use, changes in government spending between two subsequent years on average amount to less than 0.5 % of GDP, in absolute value. This point is reinforced by the fact that most of these changes are routinely implemented by incumbent governments who do not face an election.

We therefore concentrate on events where substantial change occur. We do this in two ways. First, we ask the following question: how high is unemployment at times of *large* changes in public spending?<sup>7</sup> The answer is that it is in general low, relative to the country's average. Table 1 shows average unemployment deviation at date t-1, provided spending changes by an absolute magnitude at least equal to some threshold between t-1 and t. We use a panel of OECD countries, with yearly data on spending and unemployment rates between 1960 and 1993.<sup>8</sup> We see that unemployment is significantly lower than average for these episodes, regardless of the threshold being picked up. The

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<sup>7</sup> Ideally, one would prefer to use data on unemployment duration rather than on unemployment, since unemployment duration better controls for cross-country differences in the insider effect, but panel data on unemployment duration are not available.

<sup>8</sup>The countries are: Australia, Austria, Belgium, Canada, Germany, Denmark, Finland, France, United Kingdom, Italy, Japan, Netherlands, Norway, Sweden, USA. The unemployment and spending variables are from the *OECD Economic Outlook* database, the spending variable being defined as the change in government spending divided by trend DP, where trend GDP is defined using a Hodrick-Prescott filter with the usual parameter of 100.

higher the threshold, the lower average unemployment for the episodes being selected. This suggests that substantial reforms are more likely to occur at low unemployment rates, which is in accordance to the above discussion provided the employed are politically more influential than the unemployed. This may not be true, however, of reforms that are specifically designed to alter labor market institutions, which may be more viable when the employed are exposed to unemployment; see Saint-Paul (1993,1996b)

The second way is to use data on the government's political stance and define episodes of substantial change as changes in the political composition of the government.<sup>9</sup> Table 2 reports estimates for a probit model for the probability of a change in the political orientation of the government. In addition to the unemployment rate, we have used variables describing the state of the macroeconomy as controls. These include the inflation rate, budget surplus, and gross government debt in the year preceding the political change. Country fixed effects were included.

One might have believed that unemployment makes a governmental change more likely. This regression suggests, in accordance with the idea that unemployment actually increases resistance to change, that on average governments change less often at times of high unemployment. Also note that the budget variable has the right negative sign, which is typically significant, while the two other macro variables are essentially insignificant.

Therefore, the evidence broadly supports the idea that higher unemployment creates sluggishness in government spending and opposition to reform.

### **2.3 Work rationing**

Another aspect of high unemployment is that it may generate support for *work rationing* measures in situations where job reallocation would occur under a well-functioning labor market. These measures may include early retirement schemes, "training programmes", and working time

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<sup>9</sup>We have used the dummy constructed by Alesina and Roubini (1997), which is equal to +1 if the government is right-wing and -1 if it is left-wing.

reduction, now popular in a country like France and on the agenda of the Italian left and of Spanish trade unions. Let us focus on this latter issue.

As far as the rethoric is concerned, it is based on the fallacy that total hours (or sometimes total output) is exogenously fixed, so that to give work to somebody one has to take work away from somebody else. It is in fact possible that the *impact* effect of working time reduction creates jobs; the only thing that is needed is that total output falls less than weekly hours, which may happen if prices are sticky and nominal aggregate demand does not fall. However, in the medium run, unemployment is back to the natural rate, which has no reason to have fallen -- it may actually increase because of incentive problems. The economy is poorer as the same number of people (or fewer people) work less hours.

Therefore, one cannot deny that part of the popularity of this recipe hinges on utopia ( a "free lunch"), misunderstanding, and ideology. However, once it is recognized that workers are heterogenous, just like other measures it makes winners and losers, so that it is somewhat rational to support it for at least part of the workforce. It is this rational aspect of working time reduction that we discuss here, although we believe that the support would be substantially weaker if only these rational considerations were taken into account.

It may seem unsurprising that unions are in favour of it, since everything else equal their workers are better-off if they work shorter hours. However, when one thinks a bit more about it, there is somewhat of a puzzle. If it is the case that people want to work shorter hours because they consider that the workweek is too long *given* the hourly wage, that is, they would prefer to work less in exchange for an equiproportionate reduction in earnings, then this is up to each individual's decision and there is no reason why the government should step in and impose a mandatory reduction in hours worked. If it is too costly for an individual to reduce his labour supply because of the implied changes in taxes and benefit entitlements, then the problem is how to make the tax system more neutral vis-à-vis the length of the workweek, not to impose a reduction in hours. Indeed, part-time work has developed a lot in countries such as the United Kingdom and the Netherlands, suggesting a large

fraction of the labour force prefers to work less than 30 hours a week. But there is no reason to ration working time to those who want to work full time.

On the other hand, a reduction in working hours without an equiproportionate fall in earnings, which happened in France in 1982 and should happen again in 2000, may be interpreted as the outcome of union activity in order to boost the welfare of their members. The question is then: why do they want to do that rather than going on working full time and having higher wages?

One element of an answer may be obtained if one observes that in practice, most of the successful worksharing agreements have been *defensive*. That is, they prevail as a substitute for layoffs in situations where labor demand is expected to fall. The archetypal example is the Volkswagen agreement which reduced the workweek to 4 days in 1995 in the face of sluggish demand. A more recent example is how employees of the French social security system are currently negotiating a reduction in their workweek to 32 hours in exchange for accepting the introduction of a "chip card" that will greatly simplify the management of that administration. Therefore, instead of freeing resources from red tape to more productive activities, this technological breakthrough is being dissipated in the form of leisure for incumbent employees of the French social security.

Such defensive practices are characterized by the fact that before adjustment takes place, insiders decide that they prefer to redistribute hours between themselves rather than take the risk of losing their jobs. Such arrangements have several interesting characteristics:

1. They cannot prevail simultaneously in the whole economy. This is because to the extent that they lead everybody to work less, they reduce demand. Thus if other sectors reduce hours the demand for Volkswagen falls even more, making it necessary to reduce working time further at Volkswagen, and so forth.<sup>10</sup> Workers in sectors in decline want to reduce working time but workers elsewhere don't, and workers in sectors in decline do not want other workers to work less. At face value, this argument is more likely to explain arrangements such as the Volkswagen agreements than the recent French

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<sup>10</sup>That may not be the case if jobs are actually created, but as we already discussed this is unlikely to occur in the medium run, at least from the viewpoint of "orthodox" economic theory, which is the paradigm underlying this paper.

law. However, in practice, the law will not apply to everybody. Firms of less than 10 employees will never be hit, and firms of less than 20 employees will be spared for a while. Therefore we expect hours worked to be reduced much more in the industry than in services (since firms are larger in the former sector than in the latter), which squares with the argument just exposed. Under that interpretation, the limitations to the applicability of the law would not represent feasibility constraints that should be alleviated in the future, but rather the desire to redistribute from some sectors to others where the ruling party's electorate is more concentrated. Such redistribution takes place because of the effect of asymmetrical changes in working time on relative prices.

2. As in the two preceding subsections, it is the existence of rents to the employed that creates the political support for such measures. Insiders prefer to share work between themselves rather than run the risk of job loss only because job loss implies the loss of a rent. In a well functioning labor market they would not care about losing their jobs because after a short spell of unemployment they would find a job in another sector at an equilibrium wage higher than if they had opted to stay in their sector and work less hours. It is because they expect long spells of unemployment and because the employed are strictly better-off than the unemployed that they prefer to reduce working time. To summarize, the less competitive the wage formation process, the higher the employed's rents, the higher the political support for WTR.

3. In equilibrium, the reduction in wages will not be proportional to the reduction in hours. This comes from a traditional "monopoly effect". By restricting hours insiders manage to increase the relative price of the good they are producing; this increase prevents their wage from dropping by as much as the reduction in hours worked. This is why the reduction does not have to take place in the whole economy: insiders want to reduce their total supply of hours *relative* to other sectors. This would not happen if reduction occurred in all sectors simultaneously. Another implication is that support for working time reduction is more likely to be high in protected sectors than in sectors open to international competition.

4. In cases where there is no dominant large firm in the sector considered, there is an incentive for workers at an individual firm to free-ride on the shorter working time of other workers in the same

industry. As long as they are small relative to the size of the sector, they can increase their earnings by working more without jeopardizing their jobs, since they have only a negligible impact on that sector's total supply of hours.<sup>11</sup> To put it otherwise, no small individual firm would sign such agreement. It would increase its cost without affecting the price of its output, which would jeopardize jobs further rather than protecting them (i.e., the small firm's output is perfect substitute for the output of other firms in the same sector). Working time reduction can only protect jobs at the sectoral level, where demand is inelastic enough so that the total demand for hours falls by less, in response to the relative price increase, than the reduction in working time. Hence it is necessary that the agreement be enforced by a superior authority, either a strong representative union or the law itself.

5. Work rationing should in principle not be eternal. When the sector is hit by a positive shock, insiders will elect to go back to a normal workweek instead of hiring more people. In practice, however, this phenomenon may not be apparent in the data because of the secular trend towards a shorter workweek.

Further insight about the determinants of the support for work rationing can be obtained by using an analytical model, which is briefly described in the Appendix and in more detail in Saint-Paul (1998a) (The effect of working time reduction has already been analyzed in the context of imperfectly competitive labour markets by Calmfors (1995); recent analysis includes Marimon and Zilibotti (1998)). The exercise that we performed is as follows: we consider a two-sector economy initially in steady state. The economy is characterized by a certain level of the employed's rent, a certain degree of complementary in consumption between the two sectors, and a certain degree of labor turnover. We then assume that this economy is hit by a shock such that employment would fall by 10 % in one sector (to be reallocated to the other sector) absent any rationing measures. Before the shock actually takes place, the employed in the sector where employment would fall vote on whether or not to reduce working time in order to protect their jobs. We compute the impact of a reduction in working time in that sector on their welfare and on equilibrium wages. We do this for two alternative values of the degree of complementarity between the two sectors (as measured by the "elasticity of substitution"

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<sup>11</sup> This is just Olson's (1965) argument about the logic of collective action.



in the utility function of consumers), two alternative value of the job destruction rate (5 % per year and 15 % per year), and two alternative values of the rent, corresponding to two values for the initial unemployment rate (10 % and 20 %, respectively). As evident from table 3, the support for working time reduction is higher (i) when the initial unemployment rate is higher (because this is associated with a higher rent for the employed), (ii) when turnover is lower (because controlling for the unemployment rate, lower job destruction is associated with lower job creation, hence higher rents to the employed), and (iii) when the two goods are more complements (because consumers' demand is less sensitive to the cost hikes triggered by a reduction in hours worked. Thus, the circumstances under which there will be political support for work rationing are similar to the ones under which incumbent employees will support firing costs or inefficient active labour market policies (see Saint-Paul (1998)).

### **3. The growth of government**

One important development since the mid-seventies is the growth of the size of government. This growth is mostly associated with the growth of the transfer programmes, but not only. Since this has coincided with the increase in unemployment, one may wonder whether there is a connection between the two. The facts provide some ground for suspecting that high unemployment and big government are associated. For example, let us partition the OECD countries into three groups. In the first group, let us put the countries with "rigid" labour market institutions: Belgium, Germany, France, Italy, the Netherlands, Denmark, and Spain. In the second group, we put countries with flexible institutions: Australia, Canada, the U.S., New Zealand, the U.K., Switzerland and Japan. The last group consists of so-called "Corporatist countries", that have European-style rigidities but centralized wage setting agreements and other coordination devices that prevent unemployment from rising: Sweden, Finland, Norway and Austria. Figures 6, 7 and 8 depict the evolution of the size of the public sector for each group of countries. It is defined as the share of public employees in total employment. It was re-scaled to be equal to zero for all countries in 1970, in order to filter country-specific preferences for public spending as well as measurement errors due to differences in the allocation of power between local and central government.

As is clear from Figure 6, government size has increased by less in the flexible countries. In no cases is it more than 6 percentage point above the 1970 level, and in the two cases where it grows sharply in the seventies (Australia and the U.K.), it eventually falls to a level comparable or below the 1970 level. By contrast, the rigid countries show a clearer upward trend in government size, with the noticeable exception of the Netherlands, while Belgium shows a period of moderation (due to the burden of public debt) after a sharp increase. Finally, the most dramatic increase in government size has taken place in the corporatist countries, with a steady rise to about 15 percentage points above the 1970 level.

These regularities can represent different causal links. For example, preferences for a more regulated labor market may be associated with preferences for a bigger government. Let us however discuss the extent to which it is the rigidities and the unemployment that they generate that may boost the size of the government. In the previous section we have seen how a *change* in government size (or in government policy) may be blocked in a world of high unemployment because of the associated threat of job loss imposed on the dominant incumbent employees. But is there any reason to believe that unemployment also pushes for higher government expenditures and higher government involvement in society?

Here we want to mention two phenomena that we believe are important.

First, the government is naturally tempted to offset an increase in unemployment by hiring people in the public sector. The question is why and when do governments use that instrument. One possible answer is that unemployment is the result of some market failure that such policies are meant to correct. In that case such policies would be perfectly reasonable. But then it is surprising that countries such as Japan, Switzerland or the U.S. have maintained such low unemployment rates absent these policies. At the other extreme, if it was clear to everybody that structural reforms are needed instead of relief jobs then voters would reward governments to undertake such reforms, and punish them for using relief jobs, even if the benefits of the latter are more quickly and easily seen in national statistics. So, there must be some uncertainty about the relative merits of the two strategies. This uncertainty may especially have to do with delays needed for the benefits (or costs) of each approach to be evident. The "hard" strategy (structural reforms) may reduce unemployment only after several years, the time necessary for insiders' wage-setting strategies and outsider's search

behaviour to adapt to the new rules of the game (This is suggested by the UK experience, where it took ten years between Thatcher's structural reforms and the time a substantially lower unemployment rate was reached). In the short run, the hard strategy may even increase unemployment as a mass of workers is released from activities. By contrast, the "soft" strategy (direct public hirings) may give immediate gains in the form of a boost in demand and a purely statistical decline in unemployment, but no improvement in the long run as the natural rate of unemployment fails to go down and increased wage pressure brings eventually cancels the initial job gains. Indeed, Edin and Holmlund (1997) fail to find any long-run significant effect of public sector hires on unemployment.

We have to understand what are the incentives not to use the hard strategy, and what are the incentives to use the soft strategy instead. The reluctance to use the hard strategy has to do with the horizon of the government. If there is uncertainty about whether the steps undertaken by the government are the right ones and if it takes several years to observe the outcome then a government with a short horizon will have little incentives to undertake these reforms. Conversely, a government with a short horizon, by using the soft strategy may at the same time "buy votes" and convince part of the public that it is doing the right thing. Hence we expect the rise in the public sector to be associated with the degree of political instability (meaning that the government does not expect to stay long in power and therefore has a short horizon).

Second, a high level of distortionary taxation and of labor market regulation, which themselves are a factor of high unemployment, may induce "multiplier effects" on the size of government through the incentives for public provision of private goods. The government faces fewer constraints than the private sector. For example, in France there is no restriction on temporary hiring by the government and it can get rid of its contractual workers at a much lower cost than the private sector. It is also less likely to be bothered by courts and the administration when reducing its workforce. This is quite general: many taxes and constraints imposed on the private sector are avoided by the public sector, although there are constraints on the public sector (such as budgeting and accounting rules) that the private sector does not have. Thus, rigidities create a situation where the government has a "comparative advantage" in activities where the private sector is most taxed (in a broad sense) relative to the public sector. This leads the government to specialize in the provision

of goods such as child care or theatrical performance that are not public goods but that the private sector is unable to supply due to distortions. From there it is not difficult to see that the economy may find itself in a situation with excess government size: Paradoxically, the economy finds itself in a situation where it is the government that provides flexibility. This would not be the case if the government was a single decision unit, for it could always lower taxes and at the same time release some activities to the private sectors. But in practice, public policy is the outcome of a complex process of competition among pressure groups. For example, as high payroll taxes make child care unaffordable, citizens may organize to put pressure on local government to provide it publicly. Similar pressure may occur in different areas such as culture.

We next provide some empirical evidence on the response of public employment to unemployment, by looking at how public employment reacts to unemployment. Table 4 summarizes the effect of unemployment growth on the growth of public employment the following year, for the four main European countries. We estimate such effect over two samples: 1960-95 and 1975-95. As can be seen from table 4, there is evidence of public employment reacting positively to unemployment only for France and for Italy in the second subsample. By contrast, neither in the UK nor in Germany does the government seem to offset unemployment with public employment. If Scandinavian countries were included the evidence would probably be even weaker as their government grew a lot much before unemployment rose. This evidence is therefore not very strong, although it squares with the role of political instability, as France and Italy have changed governments more often since 1980 than the U.K. and Germany.

## Conclusion

We hope that this paper has shed light on the phenomenon of "Eurosclerosis". Our analysis departs from the simple view that sclerosis is generated by harmful institutions that exist as the outcome of sheer mistake and that to solve Europe's problems one just have to remove them. The approach that I have explored is based on the view that these institutions are the result of a political equilibrium in a power game between different interest groups. Within this approach, the present paper has investigated the causal links from the malfunctioning of the labor markets to political decisions that are likely to aggravate the sclerosis. Thus we have discussed how an ill-functioning labor market may increase social conflict, increase the support for protective measures that further deteriorate labor market performance, and lead to an inadequate size and structure of the public sector. Given the variety of phenomena that we have dealt with, it is not easy to summarize our findings in a quick, general conclusion. However, a common feature is the *epidemic* aspect of sclerosis. If we take the view that the European unemployment problem is intimately associated with high employee rents, then the employed are likely to resist a large number of policy changes and reforms; their desire to stick to their job will distort their preferences relative to any move whose reallocative consequences might threaten their jobs. So, this simple market failure, originally limited to the labor sphere, generates support for rigid institutions in all areas. This is one factor (analyzed in section 2) that contributes to the "spreading of the epidemic". The second factor, present in sections 1 and 3, is the fact that when a market is not functioning well, people use political means to find *substitutes* for the market. In section 1 the substitute is direct pressure ("conflict"), in section 3 it is government involvement. These substitutes are costly, they use up resources that might be better devoted to the market activity, and further weaken the market mechanism by imposing various sorts of distortionary taxation on it. In the case of section 1, for example, it is likely that more conflict reduces the return to private activity as it increases uncertainty and can impose direct physical costs on the stock of capital; in section 3, a bigger government simply requires higher taxes to be financed, and thus imposes higher distortions on the private sector.

While we have insisted on the negative aspects, ideally the analysis should also provide guidelines on how to engineer such reform. In previous work I have discussed some aspects of that

question, but a lot of research remains to be done. In particular, we still need clear guidelines with respect to the *timing* of reforms, as well as about *complementarities* across reforms. Much previous work (like Coe and Snower, 1996) has emphasized that labour market reforms are complementary, but one can think of substitutability as well; for example severance payments and unemployment benefits are two ways of compensating workers for job loss. Lowering one may imply increasing the other. Similarly, it is often stated that "good times" are better for reform (see Bean (1998), Calmfors et al. (1998)), but there are conflicting mechanisms and it all depends on which reform is being considered (See Saint-Paul, 1996b).

Throughout the paper we have provided some empirical evidence about the phenomena that we discussed. This evidence goes in the right direction, but it is quite weak and merely indicative. This is somewhat inevitable. Political economy wishes to explain economic institutions, and there are far fewer observations, and many more underlying determinants, than when one tries to explain stock prices or individual consumption. Once the mechanisms (that often conflict with each other) are clearly spelled out, at the end of the day one must resort to judgement in order to assess which is most relevant and to make predictions and recommendations.

## Appendix: the model

Here we briefly describe the model that we use to assess the support for working time reduction (see Saint-Paul, 1998a for details).

There are two goods, represented by an index  $i=1,2$ . Working time in sector  $i$  is  $h_i$ . The instantaneous utility function is a CES aggregate of each good, so that demand for each good is isoelastic in the price of that good. In particular one has  $c_1/c_2 = K(p_1/p_2)^{-\sigma}$ , where  $K$  is a relative demand shift factor and  $c_i$  is consumption of good  $i$ . Wage formation is determined by incentive considerations as in Shapiro and Stiglitz (1984). The incentive wage, which is the same in both sectors, must be such that the present discounted value of being employed exceeds that of being unemployed by a fixed amount  $Q$ , equal to the "rent".  $Q$  captures the distance between the labor market we consider and a competitive labour market. We consider a steady state where workers face an exogenous separation probability  $s$  and unemployed workers have a constant probability per unit of time of finding a job  $a$ , which is endogenous and determined by the conditions that (i) workers are paid their marginal product and (ii) the unemployed's utility is lower than that of the employed by an amount  $Q$ . Each sector is populated by a large number of firms that are wage takers. In equilibrium the price of good  $i$  must therefore satisfy  $p_i = w/h_i$ , where  $w$  is the wage. Given the wage, the price of good  $i$  must increase when the workweek is reduced only in that sector. This induces a reduction in the demand for good  $i$ , but employment increases if that reduction is smaller than the reduction in the workweek. Like many other models, in equilibrium there is a negative relationship between wages and unemployment. A reduction in working hours in all sectors simultaneously would not affect relative prices, but would reduce the feasible wage in terms of the basket of goods. Thus unemployment must unambiguously rise, which means that employment must fall in each sector, since, as relative prices have not changed, the intersectorial allocation of employment is unchanged. This establishes that there will be support for working time reduction only if it takes place in just one sector.

We then consider a situation where both goods are initially symmetrical ( $K=1$ ,  $h_1=h_2=1$ ), so that workers are evenly allocated across the two sectors. We then assume that a shock affecting the relative demand for the two goods occurs ( $K<1$ ). Noting that  $c_i = h_i l_i$ , we see that given working hours in the other sector employment may rise in sector 1 if hours are reduced in that sector,

provided  $\sigma$  is not too large. The implication is a general fall in real wages (but not one for one as hours have not been reduced in sector 2) and therefore a rise in unemployment in the long run; but sector 1's workers' exposure to unemployment at the time of the shock is lowered. If the rent is high enough the gain from that will exceed the cost in terms of lower wages. If  $s$  is low enough support is more likely, as endogenous firings due to lower demand represents a larger proportion of the total likelihood of job loss.



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**Table 1**

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*Unemployment before large changes in government consumption*

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<b>Threshold (%)</b>	<b>u(-1)</b>	<b>t-statistic</b>	<b>Obs.</b>
0	0	0	490
0.5	-0.88	-6.6	280
0.7	-1.26	-7.9	179
0.9	-1.32	-7.2	133
1.0	-1.41	-6.9	98
1.2	-1.55	-4.7	50
1.4	-1.86	-5.0	27

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Legend: **Average unemployment** (deviation from country average) for episodes where government consumption changes more, in absolute value, than some threshold.

**Source:** OECD Economic outlook database.

**Table 2**

<i>Macroeconomic determinants of government changes</i>			
<b>Variable</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
u(-1)	-0.096	-0.1	-0.096
	(-2.1)	(-2.4)	(-2.7)
pi(-1)	2.66		
	(1.1)		
s(-1)	-7.18	-7.6	-5.0
	(-1.9)	(-2.1)	(-1.5)
d(-1)	-0.27	-0.42	
	(-0.4)	(-0.7)	
Log Likelihood	-181.93	-185.6	-232.37
Obs.	353	356	441

Legend: Probit estimation of the likelihood of a political change between t-1 and t. u: unemployment rate. pi =GDP deflator inflation rate. s= government budget surplus (net lending) divided by trend GDP. d= gross government debt, divided by trend GDP. Trend GDP was computed using a Hodrick-Prescott filter with lambda =100.

Source: OECD Economic Outlook database for macroeconomic variables. Alesina and Roubini (1997) for political variables.

Unemployment	Turnover	sigma	Utility	Wages	Employment
0.1	0.05	-1	-0.89	-0.99	2.17
0.1	0.1	-1	-0.98	-0.97	2.27
0.1	0.15	-1	-1.00	-0.97	2.22
0.2	0.05	-1	-0.81	-0.97	2.00
0.2	0.15	-1	-1.05	-0.97	2.11
0.1	0.05	-5	-0.24	-0.44	3.21
0.1	0.15	-5	-0.44	-0.44	3.33
0.2	0.05	-5	0.01	-0.47	3.33
0.2	0.15	-5	-0.35	-0.50	3.19

**Table 3:** Effect of working time reduction in sector 1 on welfare, wages and employment in sector 1 for different values of unemployment, turnover, and substitutability across sectors (Effect per hour of working time reduction in sector.1)

*Table 4*

<i>Country</i>	<i>Sample 1</i>	<i>Sample 2</i>
<i>Italy</i>	0.37 (1.04)	0.65 (2.14)
<i>France</i>	0.61 (2.4)	0.97 (3.3)
<i>Great Britain</i>	-0.64 (-1.1)	-0.65 (-0.8)
<i>Germany</i>	-1.1 (-0.7)	-0.8 (-0.4)

*Table 4: Effect of an increase in unemployment on the growth of public employment*

Note: dependent variable: growth rate of public employment. Independent variables: growth rate of public employment lagged once and twice, change in unemployment lagged once and twice. Source: OECD Economic Outlook database.

Figure 1: labor demand

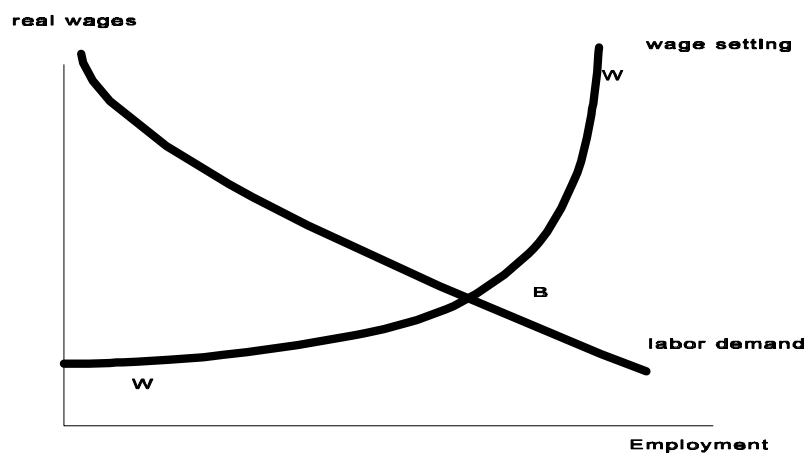


Figure 2: conflict

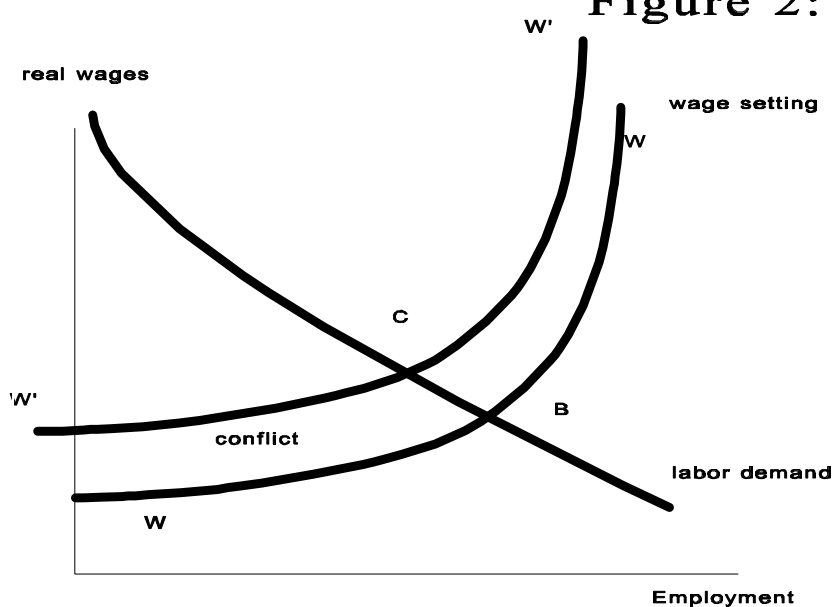


Figure 3: conflict and shocks

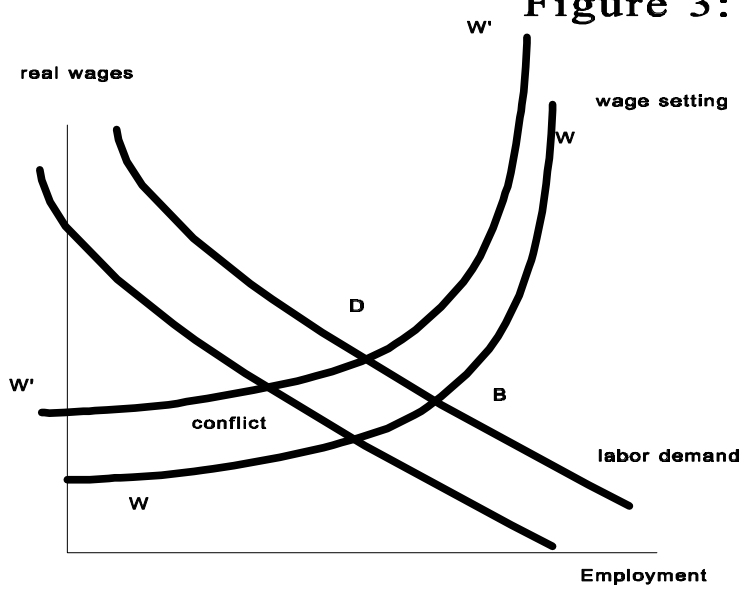
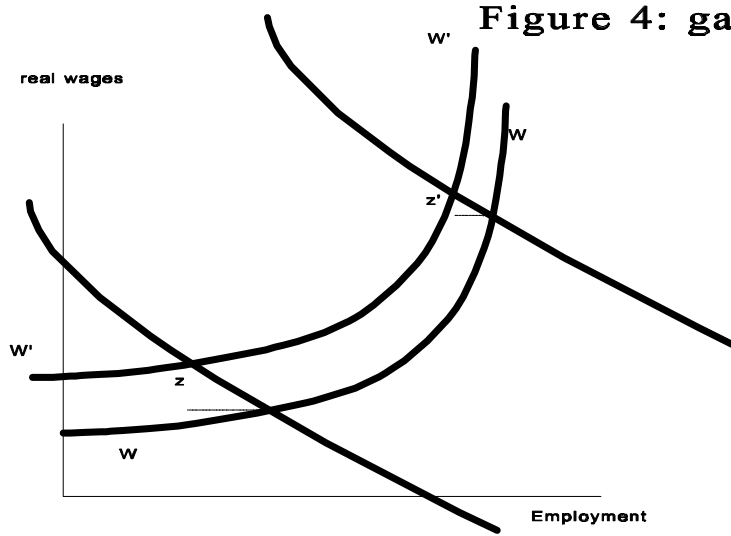




Figure 4: gain from conflict



z: wage gain under high unemployment  
z': wage gain under low unemployment

# Figure 5

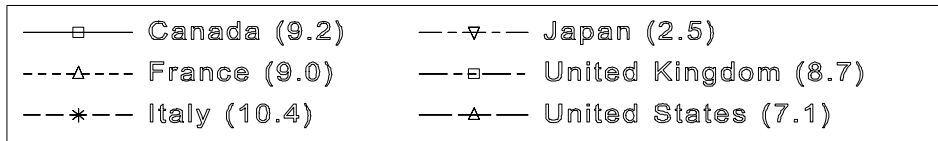
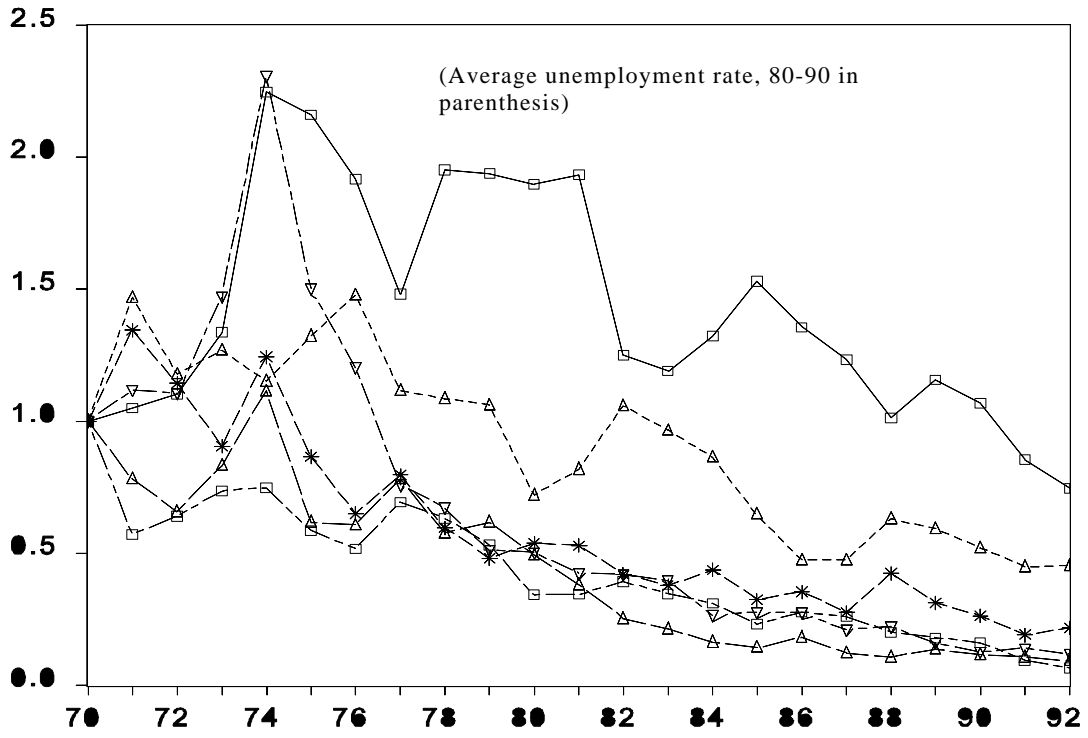


Figure 6: Public sector weight in Flexible economies

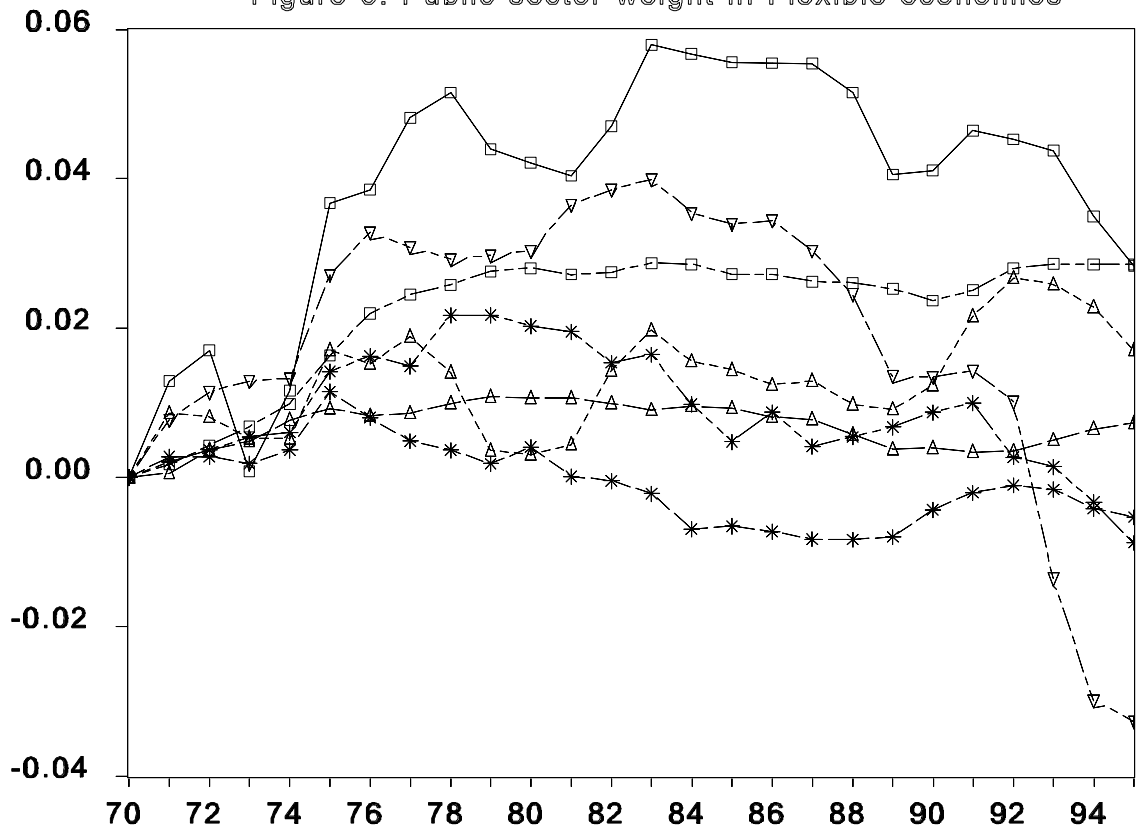


Figure 7: government size in rigid countries

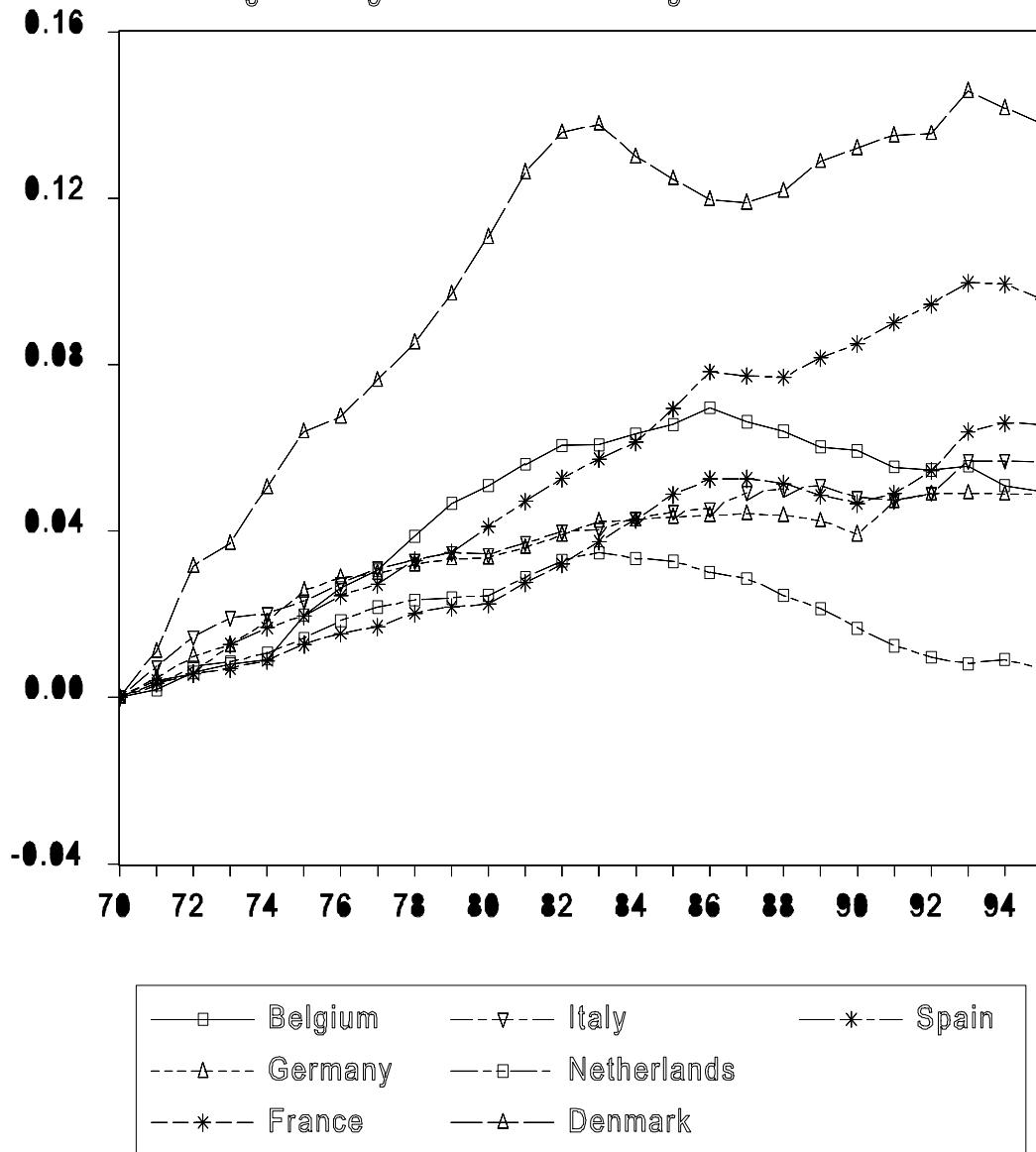


Figure 8: government weight in corporatist countries.

