

The political consequences of unemployment

Gilles Saint-Paul*

Summary

■ This paper deals with the political consequences (rather than causes) of unemployment. It analyses how a badly functioning labour market distorts public policy making. One consequence may be that labour's incentives for co-ordinated collective action increases. Another likely consequence is increased support for protective measures and resistance to reforms that have re-allocative consequences. The size of the public sector and the persistence of public spending may also increase beyond what would be desirable from a strict welfare viewpoint. Overall, the analysis suggests that the political consequences of unemployment probably reinforce its causes and lock the economy into a "sclerotic" equilibrium. ■

* *Professor of Economics at Universitat Pompeu Fabra, Barcelona, and fellow of the Centre for Economic Policy Research, London. He has worked on the political economy of labour markets and served as an adviser to the Swedish Parliamentary Committee on Labour Market Policy.*

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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 20 years and do not seem able to solve it. This brings the question of whether economic problems are worsened by their political consequences or whether, on the contrary, they automatically generate sufficient support for adequate reforms to be undertaken.

When analysing that issue, one expects various effects to be at work, some positive, others negative. For one thing, a problem generates losers (otherwise it is not a problem) and thus 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.

But other mechanisms may block reform. It is this bleak side that this paper examines. I analyse the channels by which an ill-functioning labour market changes the preferences of the people for public policy and therefore the decisions that are made. I not only discuss labour market reform but also other important aspects of policy making, such as the size and structure of government spending. The class of mechanisms that we highlight can be summarised as the very existence of unemployment generating political support for "sclerosis". This might explain the timid pace of reform, in particular, the fact that any recovery puts reform on the back burner of the political agenda, and that some measures sometimes generate violent opposition such as that seen in France.

I highlight three broad classes of mechanisms that may lead to undesirable political outcomes when unemployment is high. 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 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

The way in which growth benefits are shared between labour and capital depends on institutions and 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 for labour services.

Here I 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 organise 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 need not collectively organise to get it.

Standard economic theory does not treat the two cases separately. It postulates 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, this wage-setting mechanism 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 to reap the benefits of growth rather than letting market forces operate. It is actually possible to extend 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. The interaction between a downward-sloping labour-demand curve and an upward-sloping wage-setting curve determine it. 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 many models of imperfectly competitive wage formation and also a feature of the real world (Blanchflower and Oswald, 1994).

Figure 1. Labour market equilibrium

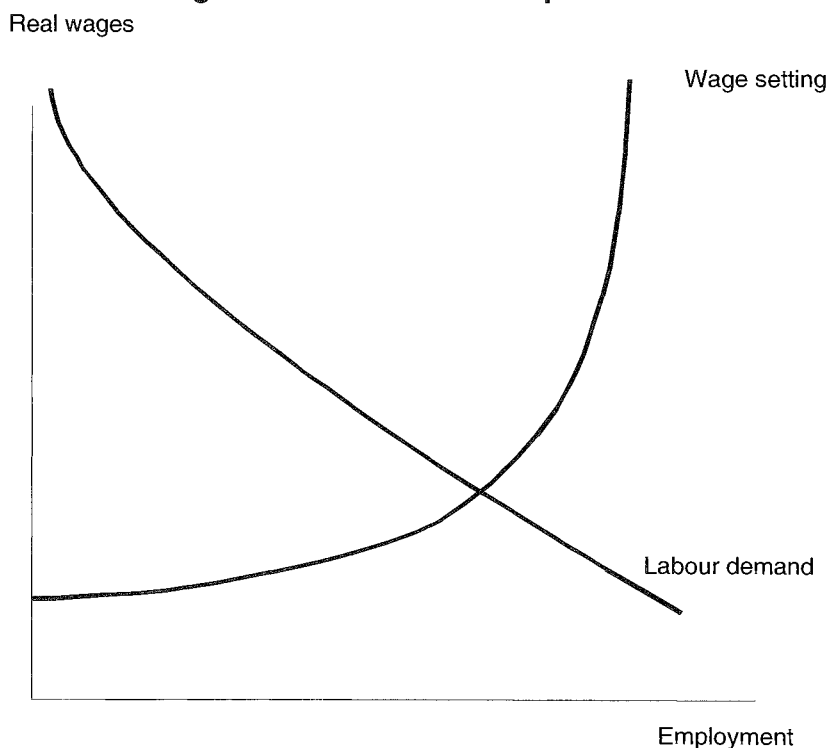
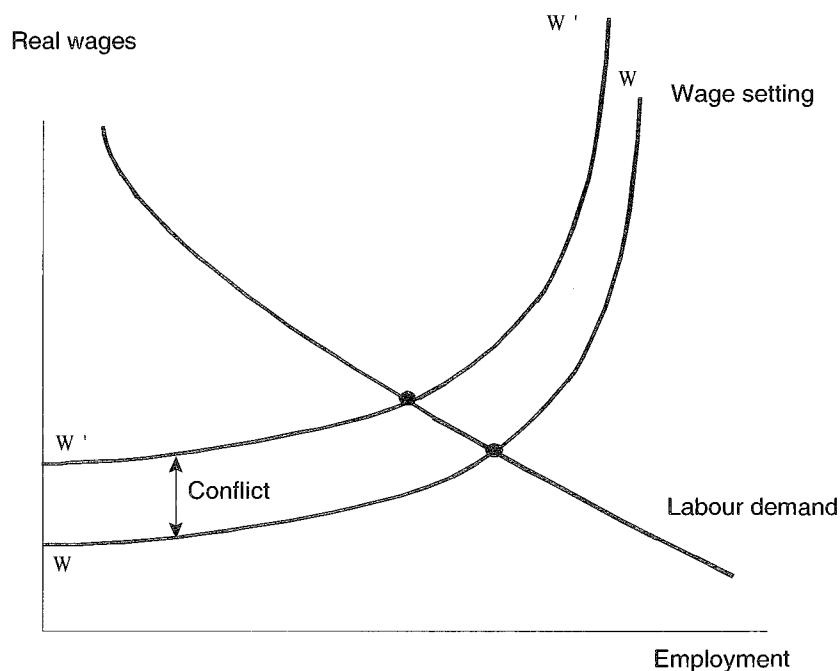


Figure 1 shows how employment and real wages would be determined absent any collective action. Now, I assume that by agreeing on a certain degree of conflict, the employed workers can shift the wage formation schedule vertically as shown in Figure 2. By conflict, I mean any *co-ordinated* move to impose a policy or institutional change that affects the wage-setting curve. One example is staging

demonstrations to obtain an increase in the minimum wage. Another would be parliamentary lobbying to get a law that automatically extends union settlements to non-unionised workers within the same sector. The important thing to remember is that the move must be co-ordinated across all incumbent employees in the economy. So this does not include a strike at an individual plant. The occurrence of such events and their impact on wages is *already* considered 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 thus does not shift the wage-setting curve. Local conflicts obey a logic opposite to co-ordinated conflicts.

Figure 2. Conflict



While co-ordinated 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 the wage-setting curve is upward sloping). It makes strikes risk-

ier, acting as a disciplinary device. But when unions co-ordinate, there is the additional effect that collective action can lead to a shift in the wage-setting curve.

The vertical distance between WW , the original wage-setting curve, and WW' , its conflict-enhanced counterpart, 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. Of course there is a cost to this collective action. Unions must spend resources to convince their workers to mobilise 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. But it is also true that employment is lower. Some of the insiders will lose their jobs as higher wages reduce labour 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* will lose their jobs. But if layoffs occur by reverse seniority (as is often the case), and decisive voters are not affected, they will be more willing to accept the job losses.¹

This risk of job loss is the reason why conflict is more likely when labour demand is rising. As Figure 3 shows, when the labour-demand schedule shifts up, workers can lift the economy up to point D without employment loss (This is the hysteresis effect of Blanchard and Summers, 1986). This tells us that conflict is more likely in upturns, and that it is one of the mechanisms through which productivity growth (which raises labour demand) is transmitted to wages.

What is the effect of the initial unemployment level on conflict? To answer this question, the key thing to note is that the gain from conflict in terms of wages is larger, the flatter the wage-setting schedule locally.

¹ This is not the end of the story. For once the least senior workers are fired, decisive voters are no longer the same, and the previous decisive voters' jobs may now be at threat. For that reason they may oppose conflict even though they will not lose their jobs immediately.

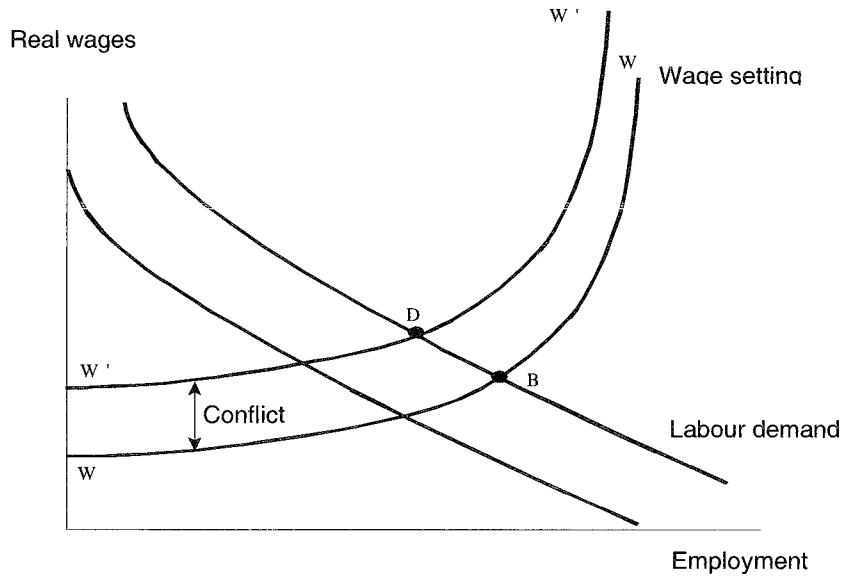
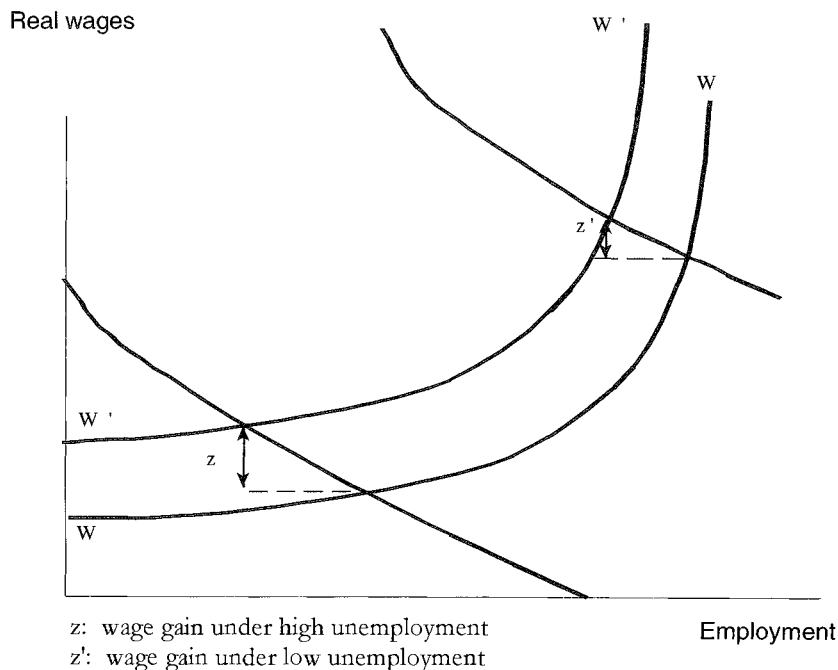
Figure 3. Conflict and shocks

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. But the wage increase reduces employment relative to what it would be in the absence of conflict. This employment fall leads to some wage moderation, which partially offsets the direct effect of conflict. Because wages are more reactive to employment, the tighter the labour market, the offsetting moderation will be stronger in the low-unemployment case than in the high-unemployment case. So the gains from conflict are higher when unemployment is initially higher. The explanation is that the market mechanism for securing higher wages is now very weak.

My story would seem to contradict the conventional view that labour disputes are more frequent in upturns and thus less likely when unemployment is high. It does not. One must distinguish upturns from high unemployment. The former situation refers to an *improving* situation (falling unemployment), the second to a *bad* one (high un-

employment).² The two are not contradictory: unemployment may be high and yet falling. Indeed, as previously stressed, my story *also* implies that conflicts are more likely in good times. One must also keep the distinction between co-ordinated and uncoordinated conflicts in mind. The argument applies only to co-ordinated ones.

Figure 4. Gain from conflict

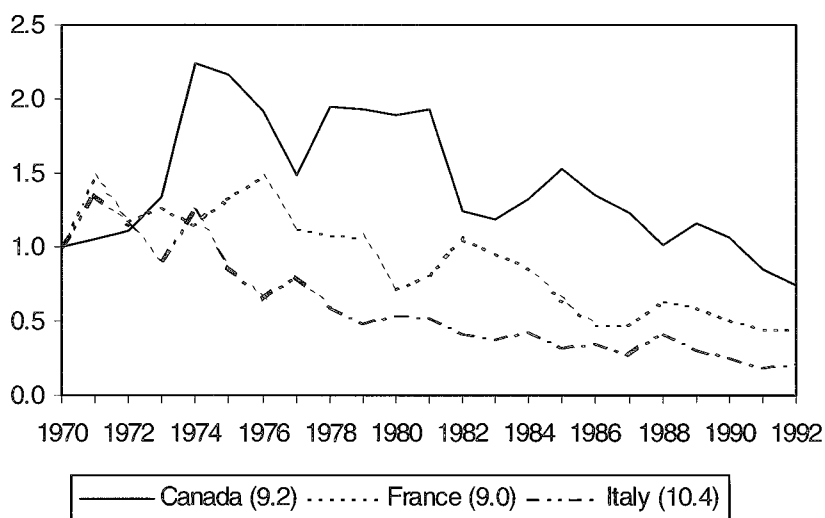


For this reason, one should not expect the empirical evidence to be very illuminating regarding the importance of the effect we have highlighted. Empirically, a decline in union power and a decline in labour conflicts in most countries have characterised the last decades. That this has been accompanied by a rise in unemployment seems to contradict the above argument. But if one makes a comparison across countries, one reaches the conclusion that high-unemployment countries have been less successful at reducing conflicts than low-unemployment ones.

² 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.

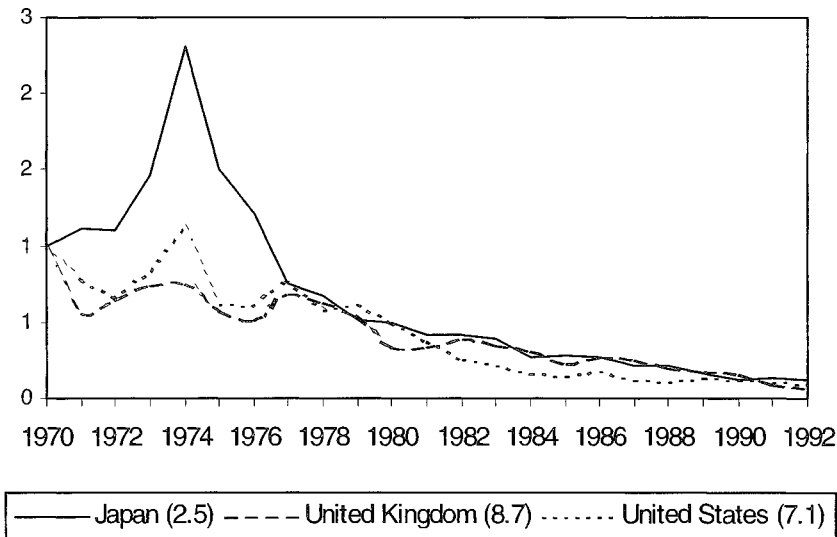
Figures 5a and 5b show the evolution of an index of the number of conflicts, for six of the G7 countries between 1970 and 1992. The index was set to one for all countries in 1970, which controls for country size effects and for country-specific propensity to strike. We find that the decline has been strongest in the US, the UK and Japan, the three countries with the lowest average unemployment rate in the 1980s. The decline has been weaker in Canada, France, and Italy. This gives us some ground to believe that social conflict is worsened by high and persistent unemployment.

Figure 5a. Index of labour market conflict



Note: Parentheses give the average unemployment rate 1980-90.

Note that the theory outlined above is at variance with Marx's views about the unemployed as a "reserve army of labour". The shape of the wage-setting curve captures this view; 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 this reason, labour has greater incentives to collectively organise to obtain what it cannot get by letting market forces operate.

Figure 5b. Index of labour market conflict

Note: Parentheses give the average unemployment rate 1980-90.

2. Unemployment increases the rents associated with the employment status

An important parameter for assessing the efficiency of the labour market is the size of the welfare differential between an employed and an unemployed worker. In a perfectly competitive labour market, this differential should be equal to zero, because any worker looking for a job would find one instantaneously at the going equilibrium wage. So there would be no welfare difference between the employed and the unemployed. In practice, the employed have rents, so they are strictly better off than the unemployed. The size of these rents depends on the employed workers' bargaining power (their ability to prevent the unemployed to underbid them, which itself is affected by labour market institutions) and on how closely employers can monitor their work effort. 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 labour market reform is about eliminating the rent. This is certainly true of any reform of the minimum wage

and the bargaining process or of 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. Analysing these mechanisms would come under the heading "the political *causes* of unemployment". But here, I am dealing with the political *consequences* of unemployment, so I highlight other effects. I take the rent as given and study its implications for policy measures, which have reallocative effects but *do not* affect the rent. The clearest example is a measure unrelated to the labour market such as trade liberalisation or a change in the composition of government expenditure. But some aspects of labour market policy, such as the generosity of unemployment benefits (which improves 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 labour force but does not affect the wage formation process, can also be considered because as a first-order approximation, they do not affect the rent. In general, one could perhaps claim that the determination of rents is so complete that any policy change is likely to affect it. So my exercise is best taken as a controlled thought experiment. I look at the consequences of labour market imperfections on policy determination, and thus take the rent as my measure of such imperfections. So I 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. A simple formula can illustrate this argument.

Assume incumbent workers vote on a policy measure that implies some labour reallocation, so that they may lose their jobs because of the measure. To fix ideas, assume we are talking about a liberalisation 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 without the reform.

Let W denote the former and W_0 the latter. Then

$$W = (1-P)U + PE \quad (1)$$

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

$$W = U + PQ \quad (2)$$

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

$$U + PQ > W_0 \quad (3)$$

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, so the variable U captures the effects of the reform that are common to 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 the smaller the risk of job loss. 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. So the higher the rent, the more incumbent employees will be concerned about the re-allocative 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. So factors that shift the rent 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 1960s and early 1970s, and contributed to the initial increase in unemployment, which preceded the first oil shock.

In the subsequent sections, I discuss in greater detail the implications of this reasoning. I analyse, 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; with each reason for layoffs, it imposes a set of constraints on the employer. These constraints include severance payments, administrative supervision, obligations to provide the displaced workers with job counselling and to give them priority when the firm hires again, 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. But the direct effect of firing costs is to make it more costly for the firm to adjust its labour force when facing a fall in demand. In this section, I focus on that role, taking the rent as given (we are again in the framework of our previously mentioned thought experiment).

In voting in favour of employment protection, incumbent employees trade 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 showed theoretically that the support for employment protection will arise whenever the rent is above a certain threshold. Three other aspects are worth highlighting:

- 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 labour. If firing costs had such positive welfare effects, one need not worry about the fact that the employed favour them 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, because the two criteria would lead to similar outcomes. But one can show that the conditions that enhance the employee'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.³

- One can show that a higher labour turnover reduces the political support for employment protection. These results may sound paradoxical; wouldn't the employed want *more* job protection when they are 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 more frequently. That makes employment protection more valuable to insiders, because they face a greater risk. But at the same time, higher turnover means that firing costs will artificially maintain a greater fraction of obsolete firms in activity, so that a larger fraction of the economy is preoccupied with 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 the two effects balance each other in such a way that turnover no longer affects the political support for employment protection (Saint-Paul, 1997). That would be the end of the story if employment protection could eliminate any source of turnover. But there are components of turnover, which employment protection cannot reduce. For example, firing costs do not reduce bankruptcies, voluntary retirement, and geographical mobility. When these components of turnover are larger, the political support for rigidity falls because

³ See Saint-Paul (1997) for details.

it is less efficient in reducing the overall probability of losing one's job.

- Employment protection creates its own political support by maintaining a mass of workers in unproductive activities. These workers oppose more flexibility because it would mean that they lose their jobs; they will support it only if they are better off being unemployed in a flexible society than employed in a rigid one. If the workers 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 labour 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 around.

Taken at face value, this analysis does well at explaining why employment protection prevails in Europe and not in the US. Europe has lower turnover and fewer competitive wage-setting institutions (thus higher employee rents). Can we also explain why rigidities arose when they did and why they persisted in the 1980s, although they appeared to be costly in terms of employment? A plausible story would run as follows. In the post-war era, labour demand was increasing in Europe because of extensive reconstruction needs (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 that culminated in 1968-1969.⁴

In the early 1970s, 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 that required prior administrative approval before being able to lay off

⁴ This may appear to contradict the analysis of Section 1, which implies that unemployment leads to more conflict. But remember that this only applies to co-ordinated conflict and to the initial *level* of unemployment, whereas an increase in labour demand makes conflict more likely. For our story to hold, the cumulated effect of the repeated increases in labour demand on co-ordinated conflicts and of the low level of unemployment on uncoordinated conflict must be larger than the opposite-signed effect of the low level of unemployment on co-ordinated conflict.

workers was passed. But in the late 1970s, the rent began to fall because of several factors such as the increase in openness, competition from newly industrialised countries, the reallocation of production toward less unionised sectors, and possibly more biased technical progress, which made the demand for unskilled labour more price-elastic (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 happened to be working in an obsolete job, in which case they would instantaneously lose it should employment protection be removed. So governments tried to reform the law. But 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 to block changes in policy that generates job reallocation across sectors. Under full employment, such reallocation is associated with a rapid move toward a new sector paying the same equilibrium wage. But when unemployment is high, people fear that any shock that reduces employment 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 labour market reforms, trade reforms, and changes in the composition of government expenditure.⁵ The implication is that the more imperfect the labour market, the greater the political sclerosis in all areas.

Take, for example, the case of a country that must reduce the size of its public sector—a situation that 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

⁵ Saint-Paul (1996a) formally studies this phenomenon.

experiencing a long unemployment spell. The larger the public sector initially, the more powerful this lobby and the more difficult it is to reduce government spending. A similar logic applies to sectors heavily dependent on government expenditures and subsidised sectors.

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 organised interests. Such resistance may have to do with the state of the labour 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 US, the 1994 congressional elections favoured an agenda of sharp reductions in public spending, it has proved much more difficult to reduce it in France. Many programmes and subsidies were not removed because they would jeopardise 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 ex-communists back to power, and they have maintained subsidies to the energy and heavy-industry sectors and slowed the privatisation 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, people consider (besides the utility of public good) the effect of government expenditures on their probability of getting a job. In the absence of unemployment, there is no such effect, and the true or intrinsic preferences of the median voter, regarding the public good, determine government spending. In particular, an individual will vote for the same spending level whether he works in the public or the private sector (in the public sector, I 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 public-sector employees

will have different preferences from private-sector employees. An increase in government spending increases public-sector employment at the expense of the private sector, so that public employees have a higher probability of keeping their jobs and private employees a lower probability. Accordingly, public employees will be more in favour 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 larger political support for a high spending level, and hence more spending tomorrow.

The voting behaviour of the unemployed mitigates this sluggishness. They will vote in a radical way, i.e., they will favour high spending if it is initially low and conversely. The reason is that they want large job reallocations to occur—to increase their likelihood of getting jobs. So while voting by the employed may lead to sluggishness and positive persistence, voting by the unemployed may lead to instability and negative persistence. And the unemployed are probably less well represented politically than the employed, so, on balance, we should expect resistance to change to be stronger when unemployment is higher.

Besides unemployment, labour mobility is another important parameter that affects the magnitude of the effects highlighted here. When mobility is high, i.e., when people move frequently between employment and unemployment, the above effects are small because current labour 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. This means that their employment probability will be very sensitive to the employment level of their own sector. This insider effect 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. But our main argument certainly does not apply to routine changes in government spending, which are typically very small and thus 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 incumbent governments, which do not face an election, routinely implement most of these changes.

I therefore concentrate on events where substantial changes occur. I do this in two ways. First, I ask: how high is unemployment at times of *large* changes in public spending? The answer is that, in general, it is 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 . I use a panel of OECD countries, with yearly data on spending and unemployment rates between 1960 and 1993.⁶

Table 1. Unemployment before large changes in government consumption

Threshold (%)	Unemployment in preceding year	t-statistic	Number of observations
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

Note: Average unemployment (deviation from country average) for episodes where government consumption changes more, in absolute value, than some threshold. The threshold is defined as changes in government consumption in percent of GDP.

Source: OECD *Economic Outlook* database.

We see that unemployment is significantly lower than average for these episodes, regardless of the threshold chosen. The higher the threshold, the lower average unemployment for the episodes being

⁶ The countries are: Australia, Austria, Belgium, Canada, Germany, Denmark, Finland, France, UK, Italy, Japan, the Netherlands, Norway, Sweden, and the US. The unemployment and spending variables are from the *OECD Economic Outlook* database, the spending variable is the change in government spending divided by trend GDP, where trend GDP is defined using a Hodrick-Prescott filter with the usual parameter of 100.

selected. This suggests that substantial reforms are more likely to occur at low unemployment rates, which is in accordance with the above discussion—provided the employed are politically more influential than the unemployed. But this may not be true of reforms that are specifically designed to alter labour market institutions, which may be more viable when the employed are exposed to unemployment; see Saint-Paul (1993, 1996b).

A 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.⁷ Table 2 reports estimates from a probit model of the probability of a change in the political orientation of the government.

Table 2. Macroeconomic determinants of government change

Variable	(1)	(2)	(3)
U (-1)	-0.10 (-2.1)	-0.10 (-2.4)	-0.10 (-2.7)
Pi (-1)	2.66 (1.1)		
S (-1)	-7.18 (-1.9)	-7.60 (-2.1)	-5.00 (-1.5)
D (-1)	-0.27 (-0.4)	-0.42 (-0.7)	
Log Likelihood	-181.93	-185.60	-232.37
Obs.	353	356	441

Notes: 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.

Besides the unemployment rate, I used variables describing macroeconomic conditions as controls. These include inflation, budget surplus, and gross government debt in the year preceding the political change. Fixed country effects were included.

⁷ I 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.

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

So 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 labour market. These measures may include early retirement schemes, training programmes, and working-time reduction, now popular in a country such as 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 rhetoric is concerned, it is based on the fallacy that total hours (or sometimes total output) are exogenously fixed, so that to give work to somebody one must take work away from somebody else. It is 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. But 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 fewer hours.

So one cannot deny that part of the popularity of this recipe hinges on utopia (a free lunch), misunderstanding, and ideology. But once it is recognised that workers are heterogeneous, it may be rational for at least part of the workforce to support working-time reduction, as it will—just like other measures—create winners and losers. Here, I discuss this rational aspect of working-time reduction, although my belief is 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 working-time reduction, because everything else equal workers are better off if they work shorter hours. But when one thinks a bit more about it, there is somewhat of a puzzle. If people want to work shorter hours because they consider that the workweek is too long *given* the hourly wage, i.e., if they would prefer to work less in exchange for an equi-proportionate reduction in earnings, then this is an individual's decision. 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 UK 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.

A reduction in working hours without an equi-proportionate fall in earnings, which happened in France in 1982 and should happen again in 2000, may be interpreted as the outcome of union activity to boost the welfare of its members. The question is then: why do union members want to reduce working time 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 work-sharing agreements have been *defensive*. That is, they prevail as a substitute for layoffs in situations where labour 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 French social security system employees 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. So instead of freeing resources from red tape to more productive activities, this technological breakthrough is being dissipated as leisure for incumbent employees of the French social security system.

Such defensive practices are characterised by the fact that before adjustment occurs, 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:

- They cannot prevail simultaneously in the entire economy. This is because to the extent that they lead everybody to work less, they reduce demand. So 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.⁸ Workers in declining sectors want to reduce working time but workers elsewhere do not, and workers in declining sectors 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 law. But 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 manufacturing than in services (because 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 occurs because of the effect of asymmetric changes in working time on relative prices.
- As in the two preceding subsections, the existence of rents to the employed 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 labour 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 fewer 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 summarise, the less competitive the wage formation process, the higher the employee's rents, the higher the political support for working-time reduction.

⁸ 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.

- 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 need not occur in the entire 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, where there is no scope for price increases.
- 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 jeopardising their jobs, because they have only a negligible impact on that sector's total supply of hours.⁹ To put it differently, no small individual firm would sign such an agreement on shorter hours. It would increase its cost without affecting the price of its output, which would jeopardise jobs further rather than protecting them (because the small firm's output is a 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. So a superior authority, either a strong representative union or the legislator, must enforce the agreement.
- In principle, work rationing should not be forever. When a positive shock hits the sector, insiders will choose to go back to a normal workweek instead of hiring more people. But in practice, this phenomenon may not be apparent in the data because of the secular trend toward a shorter workweek.

Further insight about the determinants of the support for work rationing can be obtained by using an analytical model, which is

⁹ This is just Olson's (1965) argument about the logic of collective action.

briefly described in the Appendix and in more detail in Saint-Paul (1998).¹⁰ The exercise that I performed is as follows.

I consider a two-sector economy, which is initially in a steady state. A certain level of the employee's rent, a certain degree of complementarity in consumption between the two sectors, and a certain degree of labour turnover characterise the economy. I then assume that a shock hits this economy so that employment would fall by 10% in one sector (to be reallocated to the other sector), absent any rationing measures. Before the shock actually occurs, the employed in the sector, where employment would fall, vote on whether or not to reduce working time to protect their jobs. I compute the impact of a reduction in working time in that sector on the employed worker's welfare and on equilibrium wages. I do this for two alternative values of the degree of complementarity between the two sectors (as measured by the elasticity of substitution in the utility function of consumers), two alternative values 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 when:

1. The initial unemployment rate is higher (because this is associated with a higher rent for the employed);
2. Turnover is lower (because controlling for the unemployment rate, lower job destruction is associated with lower job creation, and hence higher rents to the employed); and
3. The two goods are more complements (because consumers' demand is less sensitive to the cost hikes triggered by a reduction in hours worked).

So 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 (Saint-Paul, 1998).

¹⁰ The effect of working-time reduction has already been analysed in the context of imperfectly competitive labour markets by Calmfors (1985); recent analysis includes Marimon and Zilibotti (1998).

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

Unemployment	Turnover	Elasticity of substitution	Utility	Wages	Employment
0.1	0.05	-1	-0.89	-0.99	2.17
0.1	0.10	-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

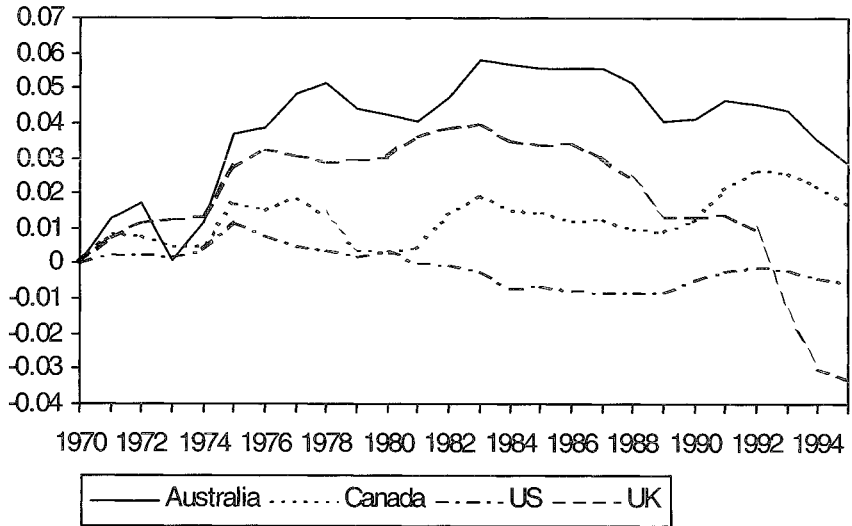
3. The growth of government

One important development since the mid 1970s is the growth of the size of government. This growth is mostly associated with the growth of transfer programmes, but also of government consumption. Since this has coincided with the increase in unemployment, one may wonder whether there is a connection between the two.

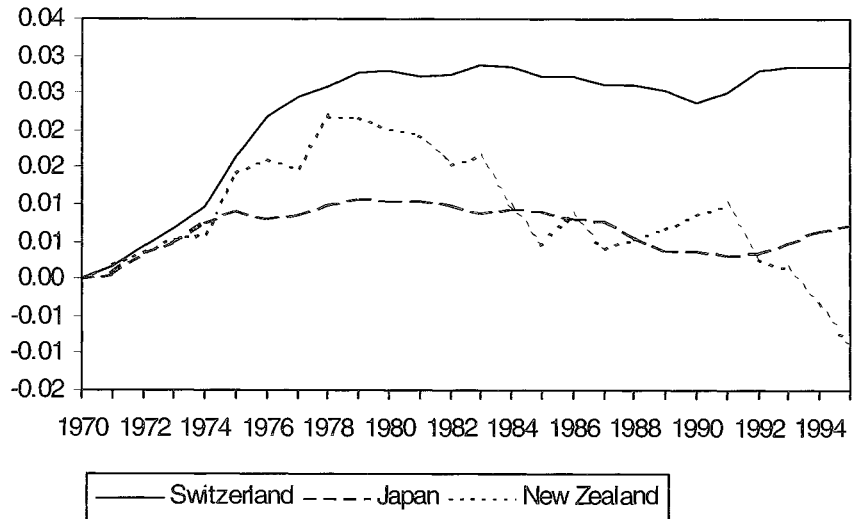
The facts provide some ground for suspecting that high unemployment and big government are associated. For example, let us partition the OECD countries into three groups. In the first group, let us put the countries with rigid labour market institutions: Belgium, Denmark, Germany, France, Italy, the Netherlands, and Spain. In the second group, I put countries with flexible institutions: Australia, Canada, Japan, New Zealand, Switzerland, the UK, and the US. The last group consists of *corporatist* countries, which have European-style rigidities but centralised wage-setting agreements: Austria, Finland, Norway, and Sweden.

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, to filter country-specific preferences for public spending and measurement errors due to differences in the allocation of power between local and central government.

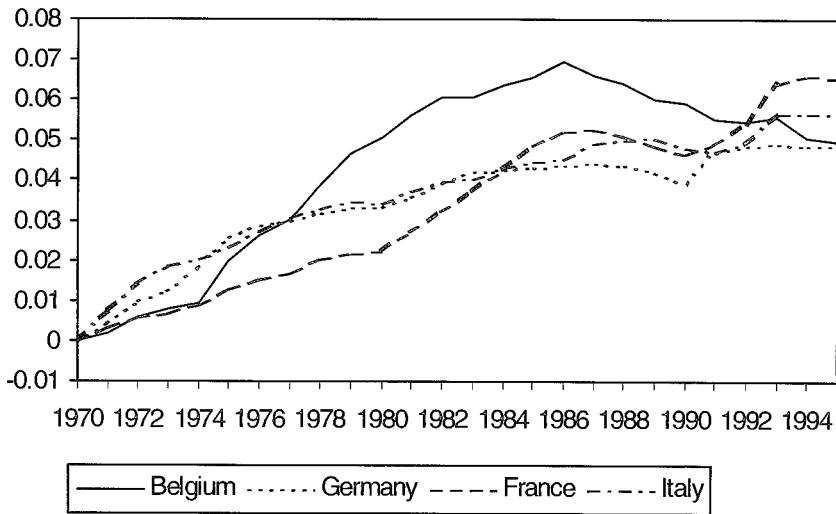
**Figure 6a. Government size in flexible economies
(the share of public employment in total employment)**



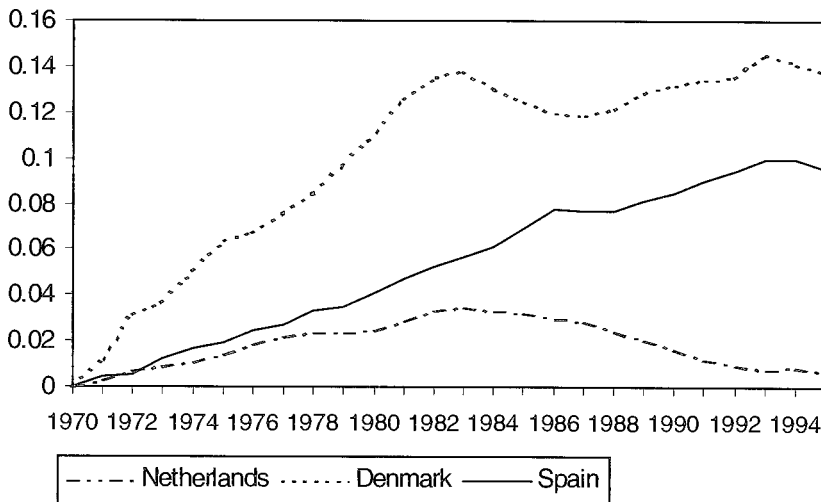
**Figure 6b. Government size in flexible economies
(the share of public employment in total employment)**



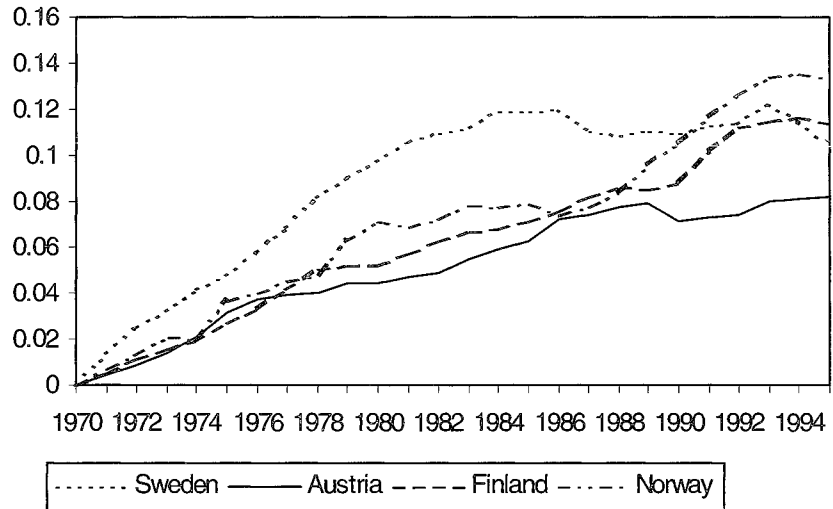
**Figure 7a. Government size in rigid economies
(the share of public employment in total employment)**



**Figure 7b. Government size in rigid economies
(the share of public employment in total employment)**



**Figure 8. Government size in corporatist economies
(the share of public employment in total employment)**



The figures clearly show that government size has increased by less in the flexible countries. In no cases is it more than 6 percentage points above the 1970 level, and in the two cases, where it grows sharply in the 1970s (Australia and the UK), 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 occurred 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 labour 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. The previous section explained 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 that is imposed on the dominant incumbent employees. But is there any reason to be-

lieve that unemployment also pushes for higher government expenditures and higher government involvement in society?

Here, I focus on two important phenomena. *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 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 US have maintained such low unemployment rates without these policies. At the other extreme, if it was clear to everybody that structural reforms are needed, then voters would reward governments that undertake such reforms, and punish governments that instead expand government or use 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, because this is the time necessary for insiders' wage-setting strategies and outsider's search behaviour to adapt to the new rules of the game. (The UK experience suggests this, where it took 10 years between Thatcher's structural reforms and the attainment of substantially lower unemployment.) 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 hiring) 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 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 must 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 incentive 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 (in which case the government does not expect to stay long in power and thus has a short horizon).

Second, a high level of distortionary taxation and of labour 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: the public sector avoids many taxes and constraints imposed on the private 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 could lead the government to specialise in the provision of goods such as child-care or theatrical performance that are not public goods but which the private sector is unable to supply due to distortions. The outcome may be an excessively large government sector.

Paradoxically, the economy finds itself in a situation where the government provides flexibility. This would not be the case if the government was a single decision unit, because 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 organise to put pressure on local government to provide it publicly. Similar pressure may occur in different areas such as culture.

I next provide some empirical evidence on the response of public employment to unemployment, by looking at how public employment reacts to unemployment. Table 4 summarises the effect of unemployment growth on public employment growth the following year, for the four main European countries.

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

Country	Sample 1 (1960-95)	Sample 2 (1975-95)
Italy	0.37 (1.04)	0.65 (2.14)
France	0.61 (2.4)	0.97 (3.3)
Great Britain	-0.64 (-1.1)	-0.65 (-0.8)
Germany	-1.1 (-0.7)	-0.8 (-0.4)

Note: Dependent variable: public-employment growth rate. Independent variables: public-employment growth rate lagged once and twice, change in unemployment lagged once and twice.

Source: OECD Economic Outlook database.

I estimate such effect over two samples: 1960-95 and 1975-95. As can be seen in the table, there is evidence of public employment reacting positively to unemployment for France and for Italy in the second subsample (which may be the most relevant one because it excludes the 1960s when unemployment was very low). By contrast, neither in the UK nor in Germany does the government seem to offset unemployment with public employment. If the Scandinavian countries were included the evidence would probably be even weaker because their government sectors grew mainly before unemployment rose. This evidence is therefore not very strong, although it gives some support for my hypothesis. The results also square with the role of political instability, because France and Italy have changed governments more often since 1980 than the UK and Germany.

4. Conclusion

This paper has hopefully shed light on the phenomenon of “eurosclerosis”. My 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 unemployment problem one must just 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.

The paper has investigated the causal links from the malfunctioning of the labour markets to political decisions that are likely to aggravate the sclerosis. I have discussed how an ill-functioning labour market may increase social conflict, increase the support for protective measures that further deteriorate labour market performance, and lead to an inadequate size and structure of the public sector.

If one takes the view that the European unemployment problem is intimately associated with high employee rents, then the employed are likely to resist many policy changes and reforms; their desire to stick to their jobs will distort their preferences relative to any move whose re-allocative consequences might threaten their jobs. So, this simple market failure, originally limited to the labour sphere, generates support for rigid institutions in all areas.

When a market is not functioning well, people use political means to find substitutes for it. This substitute could be direct pressure (conflict), but it could also be more of government involvement in the economy. These substitutes are costly because they use up resources that might be better devoted to market activity. For example, it is likely that more conflict reduces the return to private activity as it increases uncertainty and can impose physical costs on capital. A bigger government requires higher taxes to be financed, and thus imposes more distortions on the private sector.

While the analysis has stressed the negative aspects, ideally the analysis should also provide guidelines on how to engineer 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 regarding the timing of reforms and about complementarities across reforms. Much previous work (such as Coe and Snower, 1996) has emphasised 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 (Bean, 1998; Calmfors et al., 1998), but there are conflicting mechanisms and it all depends on which reform is being considered (Saint-Paul, 1996b).

I provided some empirical evidence on the phenomena under discussion. This evidence goes in the right direction, but it is quite weak and merely indicative. This is somewhat inevitable. Political economy seeks to explain economic institutions, and there are far fewer obser-

vations, and many more underlying determinants than when one tries to explain, for example, 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 to assess which is most relevant and to make predictions and recommendations.

Appendix. The model in section 2.3.

The model underlying the assessment of the support for working-time reduction is taken from Saint-Paul (1998).

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 . Incentive considerations determine wage formation 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 labour market I consider and a competitive labour market.

I consider a steady state where workers face exogenous separation probability s and unemployed workers have a constant probability per time unit of finding a job a , which is endogenous and determined by the condition that workers are paid their marginal product. Many firms that are wage takers populate each sector. 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. So unemployment must unambiguously rise, which means that employment must fall in each sector, since, as the relative price has not changed, the intersectoral allocation of employment is unchanged. This establishes that there will be support for working-time reduction only if it occurs in just one sector.

I then consider a situation where both goods are initially symmetrical ($K=1$, $b_1=b_2=1$), so that workers are evenly allocated across the two sectors. I then assume that a shock affecting the relative demand for the two goods occurs ($K < 1$). Noting that $c_i = b_i l_i$, we see that given working hours in the other sector, employment may rise in sector 1 if hours are reduced in that sector, provided σ 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, because endogenous firings, due to lower demand, represent a larger proportion of the total likelihood of job loss.

References

- Alesina, A. and N. Roubini (1997), *Political Cycles, Theory and Evidence* (MIT Press, Cambridge).
- Bean, C. (1998), *The Interaction of Aggregate Demand Policies and Labour Market Reform*, Swedish Economic Policy Review 5.
- Blanchard, O. and L. Summers (1986), *Hysteresis and the European Unemployment Problem*, NBER Macroeconomics Annual 1986, 15-77.
- Blanchflower, D. and A. Oswald (1994), *The Wage Curve* (MIT Press, Cambridge).
- Calmfors, L. (1985), *Work Sharing, Employment, and Wages*, European Economic Review 27, 293-309.
- Calmfors, L., Manning, A. and G. Saint-Paul (1998), *A Balanced Approach to Employment Policy in Europe*, mimeo, HM Treasury, London, UK.
- Coe, D. and D. Snower (1996), *The Case for a Comprehensive Labour Market Reform*, IMF Staff Papers 44, 1-35.
- Edin, P.-A. and B. Holmlund (1997), *Sectoral Structural Change and the State of the Labor Market in Sweden*, in: H. Siebert, ed., *Structural Change and Labor Market Flexibility* (Tübingen: Mohr Siebeck) 89-122.
- Marimon, R. and F. Zilibotti (1998), *Employment and Distributional Effects of Restricting Working Time*, mimeo, IIES and EUI.
- Olson, M. (1965), *The Logic of Collective Action* (Yale University Press).
- Saint-Paul, G. (1993), *On the Political Economy of Labor Market Flexibility*, NBER Macroeconomics Annual 1993 (NBER) 151-186.

- Saint-Paul, G. (1996a), Voting for Jobs: Policy Persistence and Unemployment, CEPR Discussion Paper, No. 1428.
- Saint-Paul, G. (1996b), Exploring the Political Economy of Labour Market Institutions, *Economic Policy* 23, 263-300.
- Saint-Paul, G. (1997), The Rise and Persistence of Rigidities, *American Economic Review* 87, 290-294.
- Saint-Paul, G. (1998), A Note on the Political Economy of Working Time Reduction, mimeo, UPF.
- Shapiro, C. and J. Stiglitz (1984), Equilibrium Unemployment as a Worker's Discipline Device, *American Economic Review* 74, 433-444.

