

# **EUROPE'S UNEMPLOYMENT: CAN THE VICIOUS CIRCLE BE BROKEN?**

Patrick Minford

Cardiff University

November 2005

# 1 INTRODUCTION

Since the early 1980s there has been a large flow of work on the issue of European unemployment. In my own case I first began to think about UK unemployment as a phenomenon not of demand fluctuations but of ‘supply rigidities’ when the ‘monetarist’ policies of the Thatcher government succeeded dramatically in bringing down inflation but equally showed no sign of alleviating unemployment; indeed they plainly contributed a temporary increase in it as entirely expected but after allowing for that still left unemployment in double percentage figures. (Sir Keith Joseph declared about this time that ‘monetarism was not enough’; by which he meant that the government had to tackle supply-side issues too, as well as bringing down inflation.) I wrote a book and an associated more technical article in the early 1980s in order to model just how this could have happened — Minford (1983) and Minford et al. (1983). The argument of it was that the system of unemployment benefits then operating in the UK served to put a floor under real wages and generated a high elasticity of labour supply to work for workers whose productivity real wage was close to those levels — i.e. low-paid workers. The system meant that benefits while modest in size could be claimed indefinitely provided one was unemployed; there were no effective time limits on being unemployed in receipt of benefit — contrary to the spirit of the original insurance system. Unions in turn marked up wages for their unskilled members on the market real wages for non-unionised workers; in a rather similar way minimum wages were fixed by the ‘wage councils’ for particular industries in order to provide a ‘decent return to work’- ie one that exceeded benefits. Thus a whole structure of rigid real wages was piled on top of this real wage floor; in general equilibrium the result would be a rise in the equilibrium (‘natural rate’ in Friedman’s terms) values of the average real wage, the real exchange rate and unemployment, together with a fall in employment and output.

The model I used was as simple as I could make it; there was competition in goods markets but because goods were different in different countries, rises in real costs caused substitution between goods of the home country and those of foreign countries. Most later papers (e.g. Layard and Nickell, 1986; and Layard, Nickell and Jackman, 1991) adopted imperfect competition instead. But the essential mechanisms were unaltered.

The analysis of this type led to the eventual adoption by the Thatcher government of supply-side policies addressed to eliminating these rigidities. Benefits were made conditional on proven search after a limited period of time and became in the end forfeit after six months if all jobs and retraining were refused. Union laws were brought in to limit unions’ power to strike. All wage councils were abolished (there was no general minimum wage at that time). The rates of unemployment benefit were reduced for single men and childless couples but for families they were kept at the previous rates, calibrated

for ability to participate in a basic way in society; they were never generous and the earnings-related element was abolished early on, never to be restored.

At the time of this work unemployment in continental Europe had not yet grown to threatening rates. Hence the focus of this work initially was on the UK, still ‘the sick man of Europe’. But as the 1980s wore on unemployment on the mainland grew and by the end of the 1980s it was hovering around 10% in the big three economies of the continent — in Spain it reached over twenty percent. So naturally studies began to appear from the mid-1980s on applying similar ideas to continental economies — for example, Bean et al. (1986), Burda (1988), Bentolila and Bertola (1990), Forslund and Krueger (1994), Elmeskov et al. (1998), Lindbeck (1993), Paque (1996). Siebert (1997), Nickell (1997) and Ljungqvist and Sargent (1999). What these found was that each country tended to have a slightly different way of causing its own labour market rigidity. Thus for example France had a high minimum wage and weak unions; Germany had a generous benefit system, earnings-related and with little time limitation, and also a few strong unions that enjoyed great political power; Spain had both the ubiquitous regulations left over from Franco and the later interventionism of left-wing governments awarding union powers and generous benefits of all sorts. So it went on, making a general theory of European unemployment that could readily be fitted to the data hard to achieve; one needed different variables, often hard to collect, for each country. By now the OECD has done a great deal to collect the necessary data on the relevant rigidities; and it, with the IMF, has issued uncountable reports calling for ‘reform’ (for example, OECD, 1994a and b, and 1999). Such ‘reform agendas’ have been adopted by the EU on numerous occasions; we have them from Dublin, from Lisbon indeed from most of the European capitals on which the summit cavalcade has descended. These agendas have become the policy cliché of the time.

Yet unemployment has remained stubbornly high in continental Europe with a few exceptions among smaller countries such as the Netherlands, Austria, Sweden and Denmark. Spain has managed to bring its rate down from the high twenty percents into the mere teens; Germany, France and Italy have made no impression on a rate that has stayed around 10%. What is more these unemployment figures understate the non-employment percentage, say as compared with the US or now the UK. Participation is low among the young, those of just after university age, and those over 50; among women of all ages; and especially among all workers above the traditional retirement age of 60 where ageing requires that they do more work. Also hours are low — another sort of reduced participation. Yet this non-employment due to low participation is no accident; when politicians cannot undertake meaningful policies to increase employment by reducing rigidities, they naturally try to reduce measured unemployment by other means. These means are the discouragement of ‘marginal’ (i.e. other than prime age male) workers from joining

the labour market; and the spreading of jobs by limiting working hours.

One might add that another means used by politicians is protection; both trade protection and the protection of existing jobs through firing rules. The politician who is being criticised for high unemployment as a key electoral issue but who is afraid to apply the necessary remedies, is a politician who will be open to any lobby that demands the maintenance of jobs and output. Competition and free trade are anathema to such people. It is hardly surprising then that the EU has become, if not entirely openly, a highly protectionist and regulated economy — see my recent book, ‘Should Britain leave the EU?’ (Minford et al., 2005) for some details of these policies and their effects.

Table 1: Some comparative labour market statistics, 2004, % (except hours)

Countries	US	France	Germany	Italy	Sweden	UK
Unemploymt	5.5	9.8	9.8	8.1	6.6	4.8
Employt/Pop	62.3	51.9*	51.0*	45.1	59.5	60.0
Female Emp/Pop	56.0	45.7*	44.6*	34.2	56.1	53.5
Manufac./E %	11.8	16.3*	22.7 +	21.8	16.0	14.9*
Unemp., age <25	11.8	21.5	11.2*	NA	17.2	12.3
E/Pop, 55-64	59.9	37.1	39.2	31.8	69.5	56.2
Average hours p.a.	1824	1441	1443	1585	1585	1669

**Notes:** source for all except last 2 rows is BLS, Washington DC, all adjusted to US concepts (working population defined as aged 16 and over). For last 2 rows source is OECD.

\*2003

+2002

## 2 WHAT CAN ACCOUNT FOR THESE POLICIES AND THEIR CONTINUANCE?

As economists we are faced with policies which are clearly damaging; the (political economy) question that naturally arises is how could they begin and how could they continue so long?

The first question is not difficult to answer: a shock of some sort could hit a system that otherwise was in equilibrium. In the course of the 1980s the main shock that arose as far as large continental economies were concerned was the rapid industrialisation of mainly S. E. Asian economies, culminating

in the entry of China into the world trading system in the mid-1980s. Continental Europe had a large proportion of GDP devoted to manufacturing production, much of it medium tech — white and brown goods for example. These were the natural industries for emerging economies in the mid-1980s to move into on a large scale.

This shock hit economies with well-developed social welfare systems that assumed the real wages of unskilled workers would not drop but instead would continue to grow steadily. However the shock of emerging market entry meant that the wages of such workers would need to fall to compete in these industries. Given that the welfare systems prevented this, they became unemployed. This was indeed what had happened in the UK when its manufacturing industries came under attack from earlier waves of world competition, not merely from earlier SE Asian entrants but also from European entrants such as Spain and even old competitors such as Germany.

The second question then comes into play: what stops the adjustment, in the form of redeployment of these workers and of workers newly arriving in the workforce, into new (service) industries, initially at lower wages? Here the answer seems to lie in the attitudes of the median voter to such change. In Germany's latest election Mrs. Merkel laid out a programme for such adjustment and the voters were largely unwilling to embrace it. Instead they appeared to be demanding more protection — for government to 'do something' to stop the unwelcome changes. Similar attitudes seem to have motivated France's 'No' to the new EU Constitution — on the grounds that it was a blueprint for 'Anglo-Saxon' capitalist change.

It is interesting to compare the response in the UK in 1979. Having rejected change throughout the 1970s, voters suddenly took a gamble on Mrs. Thatcher's radical policies. A reasonable interpretation of what they did was that things had got so bad, change was less bad, for all its risks, than carrying on with the general slide into stagnation and rising unemployment.

One can perhaps use the same interpretation for the recent victory of Koizumi in Japan in a snap election over the issue of privatising the Post Office and his ensuing plan for sharp change. Japan, as a major medium-tech manufacturing economy, has suffered from the very same competitive entry of SE Asia that undermined continental EU manufacturing; it contained the resulting rise in unemployment mainly by social pressure on firms to hold on to the redundant workers.

The political economy that this suggests is a mechanism whereby the voters 'cling to nurse for fear of something worse' until the worse has got so bad that nurse is no longer reassuring. At this point reform begins. This is a mechanism that places no responsibility on politicians but rather puts the median voter at centre stage; as soon as that voter sees the need for change politicians arise who can lead such

change.

One might ask how it is that institutions preventing adjustment are put in place in the first place. After all, were the institutions of a society basically ‘capitalist’, that is without significant ‘pooling’ of risks, so that individuals had to adjust to survive, then these problems of adjustment would not arise. When shocks hit, those losing jobs would set about finding new ones, their industries would contract and new industries rapidly take their place. Of major rich countries, the US may well be the only example of an economy in which the institutions are predominantly of this kind. In other rich countries, all sorts of pooling mechanisms have been created; these could logically insure people against repeated shocks from two-sided distributions. But when the shocks all started to come from the negative side of the distribution, the systems effectively blocked adjustment.

### **3 A POLITICAL ECONOMY OF UNEMPLOYMENT**

In some recent work Ruthira Naraidoo and I (2005) have tried to turn these ideas into an econometric model of the rise and fall of unemployment in rich economies over long periods of time, movements that could not possibly be due to demand fluctuations but rather must be the result of the interplay of shocks with rigidities and with the political economy of their preservation and ultimately reform (Saint-Paul, 1996, 2000, has written in a similar vein).

We argue that there is some welfare system in place in all rich economies because the median voters find it in their interests, given the risks of unemployment to their human capital. However they are also conscious of the costs of welfare in terms of reduced employment and income creation. They trade the two factors off against each other. With rational well-informed voters, this would lead to a moderately low unemployment equilibrium.

When long-lasting shocks hit employment, these voters if fully-informed about the nature of these shocks would rationally want extra protection for as long as they lasted but as they faded would allow this protection to revert back to a position where it allowed new jobs to grow up in place of the old. Hence we would have a model of fluctuations around that same moderately low unemployment equilibrium; these fluctuations would consist partly of the direct effects of the shocks themselves and partly of the voter-led response demanding enhanced protection for the duration.

However, our argument continues, workers are not perfectly informed; instead they face a difficult signal extraction problem when disentangling the effect of the long-lasting shock on unemployment from the effect of their own demands for protection. They solve this problem, in optimal signal extraction mode, by applying the past share of shocks in unemployment to the latest level of unemployment. Hence

as unemployment rises they assume that a constant share of it is due to these shocks. They react by demanding more protection but at a steadily diminishing rate because the marginal costs of protection rise relative to the marginal benefits.

This means that when long-lasting shocks hit an economy, raising unemployment, the effect is to lead to demands for protection which worsen the unemployment; these in turn lead to further demands for protection and so on, until eventually a new equilibrium is reached. At this point a further negative shock can push the economy beyond this high equilibrium; if it is bad enough, it can trigger demands for reform (less protection) and the process can reverse, back to the low equilibrium.

This interaction therefore produces a dynamic behaviour of unemployment that has two stable equilibria, high and low, and one intermediate unstable equilibrium. One can therefore attempt to fit a model of this sort to the data for unemployment and test whether the dynamics are of this type. Of course there has been a large literature of ‘hysteresis’ in unemployment; in a sense this work joins that literature (see e.g. Blanchard and Wolfers, 2000; Roed, 1996). It is another model of hysteresis. However we would argue that this literature has not been at all clear about why unemployment equilibria might shift and whether such shifts were permanent or not. Some of it hinted at mechanisms of the sort we are describing but none to our knowledge set one out in the political economy set-up of a rational median voter.

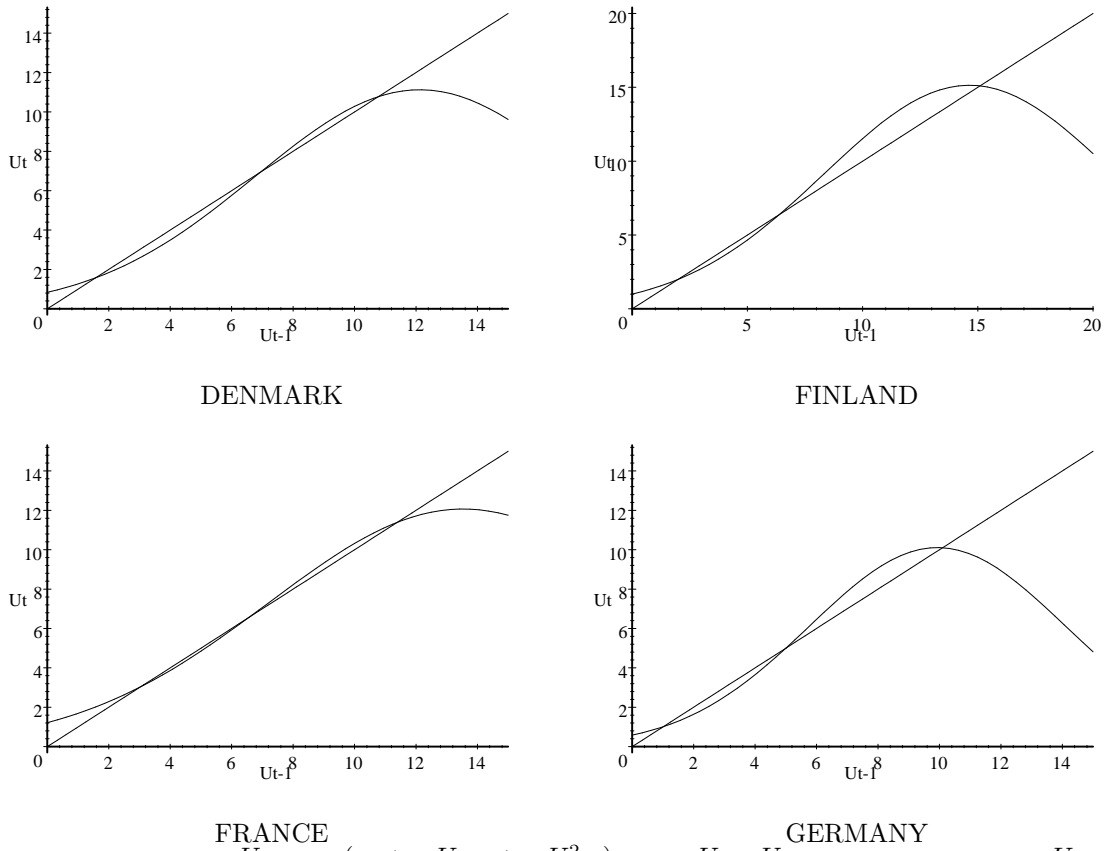
Testing the model at the level of structural equations is rather hard. We have two structural equations in our model: that in which unemployment depends on the ‘benefit/wage’ ratio and shock factors, some of them long-lasting; and that in which the benefit/wage ratio is altered by the optimising demands of the median voter. However it is plain from our account of the supply-side causes of unemployment above that the benefit/wage ratio is shorthand for the whole vector of policies that create and worsen rigidities in the labour market; the particular policies in this vector vary from country to country and are hard to measure in any one country, let alone in every country. In the case of the UK we have made an attempt to test the structural model using merely the benefit/wage ratio; and we report some results for this that are not dreadful. However, in the UK the benefit/wage ratio is merely one variable from the complete vector which in theory we should use; we are exploring this further.

So in what follows I concentrate on the reduced form tests across all countries. We fit a dynamic equation of the necessary form to be capable of generating more than one equilibrium. The question then arises whether this estimated equation then exhibits one or three equilibria. This boils down to whether it cuts the 45 degree line in a graph of unemployment on lagged unemployment more than once and hence has a slope of greater than unity at any point (in its middle range). This can be tested neatly

as it turns out using the distribution of errors from the reduced form equation; we can by bootstrapping generate the distribution of this slope parameter. What we find is that this slope is with 95% confidence greater than unity for every country except the USA. For the USA the estimate lies more or less on unity and its status is ambiguous.

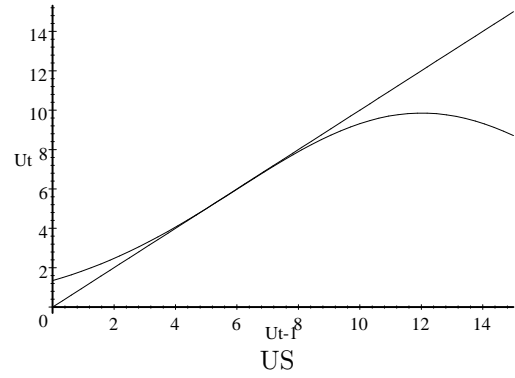
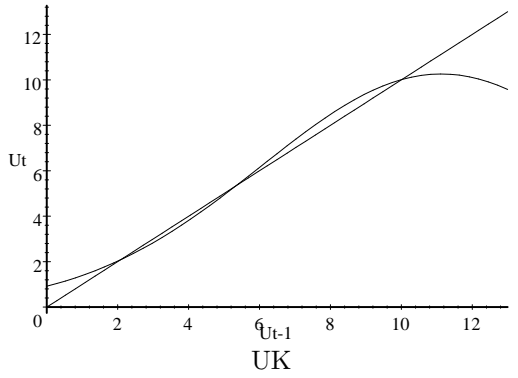
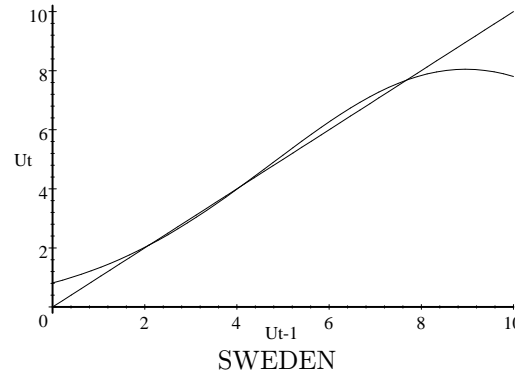
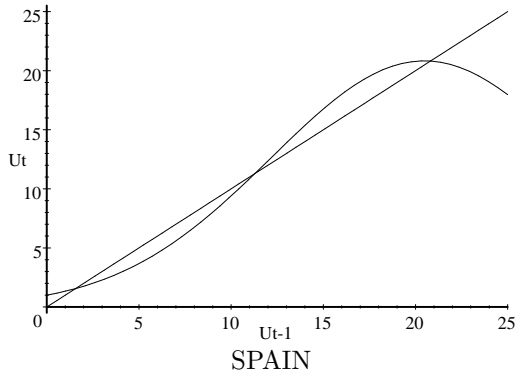
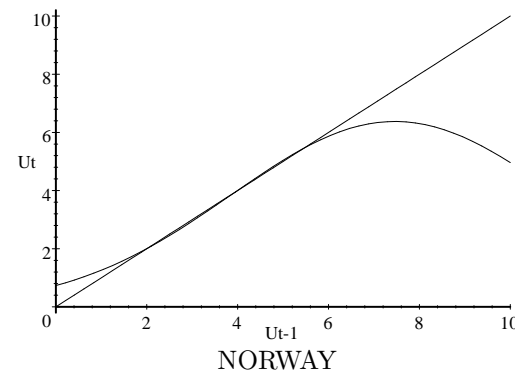
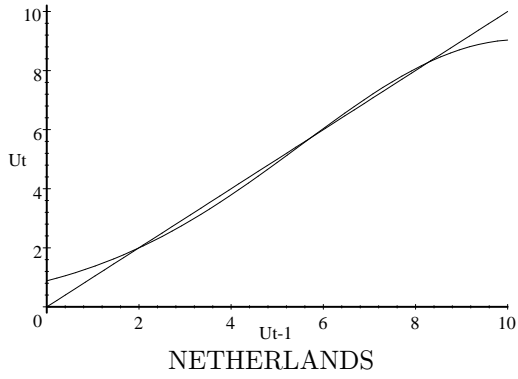
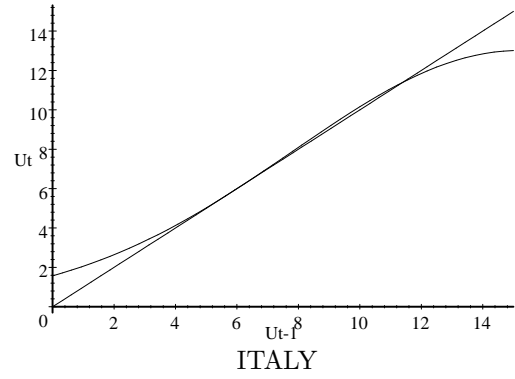
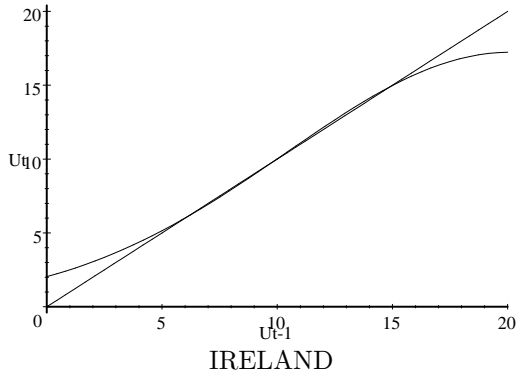
The empirical work is for 12 OECD countries in the post-war period. The corresponding estimated functions are given in Table 2 and the numerical calculation of the unemployment equilibria (low, middle and high) are shown in Table 3.

Table 2: Unemployment and lagged unemployment



Note: The diagrams depict  $U_t = \exp(a_0 + a_1U_{t-1} + a_2U_{t-1}^2)$  against  $U_t = U_{t-1}$ . In all diagrams we set  $U_{t-1} \in [0, \max 25]$ , i.e., the x-axis corresponds to the interval  $[0, \max 25]$ .

Table 2 continued Unemployment and lagged unemployment



Note: The diagrams depict  $U_t = \exp(a_0 + a_1 U_{t-1} + a_2 U_{t-1}^2)$  against  $U_t = U_{t-1}$ . In all diagrams we set

$$U_{t-1} \in [0, \max 25], \text{ i.e., the x-axis corresponds to the interval } [0, \max 25].$$

Table 3: The estimated equilibria

	Denmark	Finland	France	Germany	Ireland	Italy
low $\bar{u}$	1.58	2.00	3.04	1.02	6.08	5.46
middle $\bar{u}$	6.95	6.39	6.55	5.00	9.76	6.27
high $\bar{u}$	10.75	15.1	11.4	10.11	14.92	11.4
	Netherlands	Norway	Spain	Sweden	UK	US
low $\bar{u}$	1.99	2.01	1.57	2.10	2.08	5.01
middle $\bar{u}$	5.74	3.95	11.27	4.10	5.33	
high $\bar{u}$	8.29	5.45	20.82	7.69	10.02	

Note: Low and high equilibria are stable, the middle unstable

We can interpret the dynamics and equilibria of unemployment by inspecting the phase diagrams. There are basically two groups of countries here.

1. those which move between a low and a high equilibrium unemployment rate as suggested generally by our theory (Denmark, Finland, Sweden, France, Germany, Ireland, Italy, the Netherlands, Norway, Spain and the UK).
2. those which have one low equilibrium rate; the US being the only case.

A-countries behave very much in the mainstream suggested by our theory, moving between a low and high unemployment equilibrium (the middle being unstable). It is striking that all of them have a ‘mixed’ ideological history, having adopted both relatively ‘capitalist’ and ‘socialist’ policies during their post-war history. Thus for example the UK, starting from low unemployment, pursued socially interventionist policies for virtually all the post-war period, then carried out a determined reform programme in 1979. Similar swings have occurred in the Netherlands, Spain, Denmark, Sweden and Ireland. In the case of Norway, the dominant ideology favours active labour market intervention to maintain full employment: thus high benefits for the unemployed are matched by active pressure back to work. This expensive programme has been facilitated by Norway’s relatively large oil and gas revenues from the North Sea. Countries which have not (yet at least) pursued the last, reform, leg of this pattern are France, Germany, Italy and Finland.

B-countries are the exceptions where voters’ social demands appear to be fairly insensitive to shocks. It would appear that (perhaps after its interwar experiment with the New Deal) US voter opinion is hostile to labour market intervention in line with its general espousal of free markets. What our theory suggests is that such a country’s unemployment is dominated by purely cyclical movement and that

this in turn induces voters to assume that there is no movement in ‘permanent’ unemployment to be protected against. Plainly such cycle-dominance can only occur in labour markets which are either highly flexible or where active government policy substitutes for this flexibility (in the latter case, the expensive programme can only be facilitated by countries having huge reserves).

Thus there seems to be a general picture of unemployment responding to political pressures, with only one exception in which, mechanisms exist to make unemployment mean-revert quickly to its equilibrium-mechanisms that avoid the ‘circles’ we are focusing on.

### 3.1 A BOOTSTRAP APPROACH TO DISTINGUISH BETWEEN ONE-EQUILIBRIUM AND THREE-EQUILIBRIUM MODELS

The key issue is whether a country is or is not subject to vicious/virtuous circles, in the sense of having three equilibria (the middle one being unstable) rather than merely one. The central results imply that only the US is a 1-equilibrium country and the rest 3-equilibrium. We wish to develop a statistical test on the joint values of the 3 parameters determining the number of equilibria. We carry out two sorts of test based on the bootstrapped parameter distributions.

First, we use these distributions to generate the percentage of 3-equilibrium joint-values for our single 1-equilibrium country; and the percentage of 1-equilibrium joint-values for our 3-equilibrium countries. We found the following: our 1-equilibrium country, the US, generated 50% 1-equilibrium, 50% 3-equilibrium outcomes. Our 3-equilibrium countries (Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Sweden, Spain and the UK) generated only 3-equilibrium outcomes. These bootstrap distributions give us some information about the likelihood that 1-equilibrium countries could be 3-equilibrium ones and vice versa. For example, the US clearly could not be a 3-equilibrium country with parameters as estimated for all the other countries since their distributions do not include any 1-equilibrium cases. On the other hand, since 50% of the US parameter distribution are 3-equilibrium cases, we cannot be at all sure that our 3-equilibrium countries are not 1-equilibrium.

We would obviously like to generate more precise confidence statements. To this end we use a second test based on the slope of the  $U_t$  function at its mean. This can be understood as follows:

Table 4 illustrates Finland and the US phase diagrams for example, together with the calculated slope of their respective functions in the lower panel. Considering a 3-equilibrium model, we can see that the slopes at the low and high stable equilibria are necessarily less than one and a prerequisite to having a 3-equilibrium model is the presence of a middle unstable equilibrium with a slope greater than one. Thus a 3-equilibrium model requires:  $\partial U_t / \partial U_{t-1} > 1$  over some central range of values which

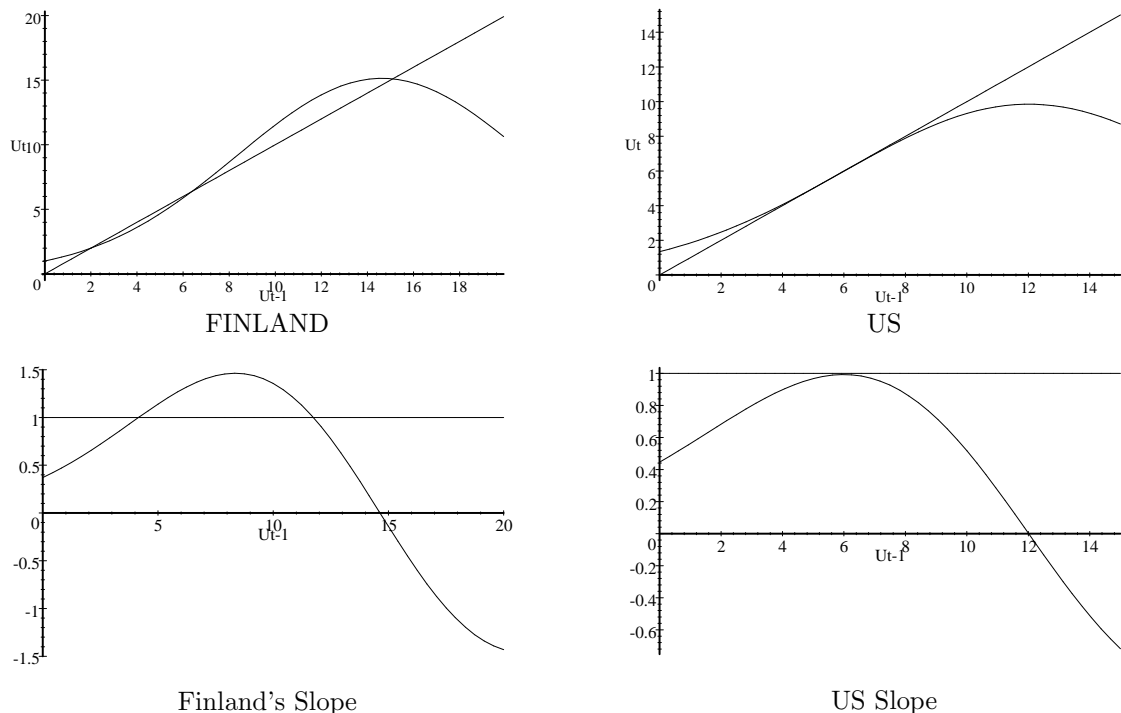


Table 4: Features of 1-equilibrium and 3-equilibrium models

we represent by the mean, whereas the slope of a 1-equilibrium model never exceeds 1. If the slope is 1 exactly over some range, then it implies a degree of ambiguity in the equilibrium state since in effect the whole of that range is in equilibrium; such a country is on the borderline of being the 1- and the 3-equilibrium type. This as we see is the case for the US.

In the Figure 1 we show various countries distributions over  $\hat{\sigma}$ , the (estimated) slope at that country's mean unemployment rate. The figure enables us to make pairwise comparisons of countries. Thus, for example, we can say that Germany's  $\hat{\sigma}$  could not belong to a US style distribution nor the US's belong to a German-style one.

We can go further and test the hypothesis that  $\sigma = 1$ , the cross-over point between the 1- and 3-equilibrium cases. Thus for each country's  $\hat{\sigma}$  we can compute the chances of it being generated by a  $\sigma = 1$  distribution and define the 95% and 99% confidence intervals for  $\sigma > 1$  and  $\sigma < 1$ . This enables us to classify countries into three groups: 1- and 3-equilibrium with 99% confidence and ambiguous. The US estimated slope is more or less just on unity (the summary statistics is given in Table 5), so its bootstrapped distribution is the critical one, i.e., it is the distribution of estimated parameters that occurs if the true parameter is 1. Thus it turns out that the chances of getting an estimated parameter of 1.04 or above is 0.5% when the true value is unity. The other countries have estimated parameters

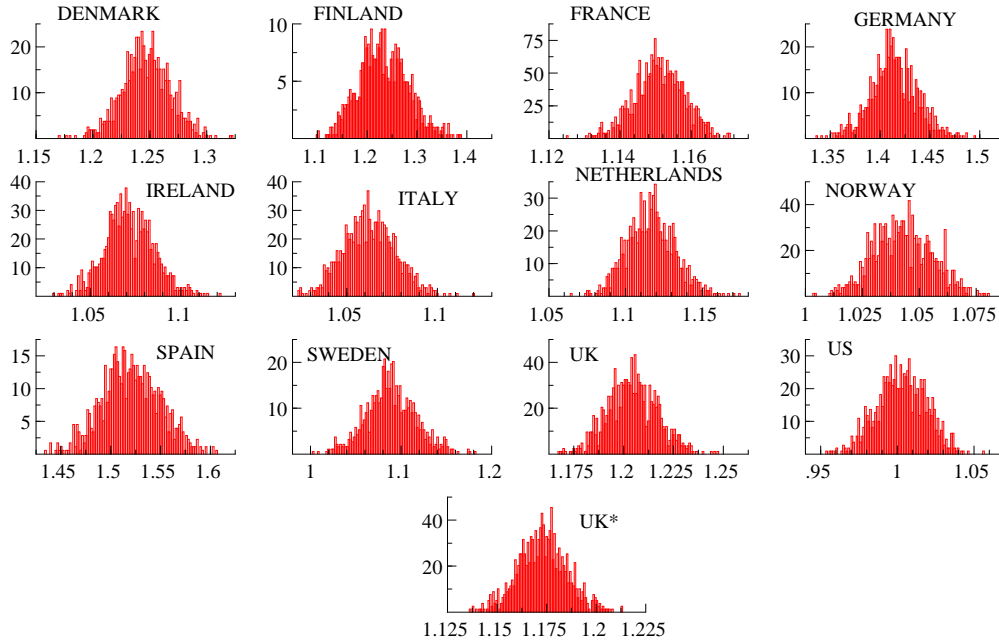


Figure 1: Countries Distribution over  $\hat{\sigma}$

of over 1.04 in all cases (some of them have values massively greater, e.g, Spain) and these countries reject the *null* hypothesis ( $H_0$  :slope = 1) at the 99% level. Hence we can be extremely confident that all countries other than the US are 3-equilibrium cases. For the US however we cannot be at all sure whether it is 1- or 3-equilibrium: indeed, as we have seen, it lies precisely on the borderline of the two, so that we could say it is equally likely to be either.

## 4 POLICY ISSUES ARISING FROM THIS ANALYSIS

Suppose for purposes of argument that the analysis set out here is accepted. What implications does it have for people advising on future policy?

The first thing that seems to emerge is the role of public education in economics. Were people to understand the dangers to their economy of demands for greater protection, they would give greater weight to the risks of excessive demands against the risks of unemployment to their human capital.

Furthermore, were they to understand better the extent to which in a flexible economy unemployment tends to revert rapidly to a low natural rate, they would want institutions to embody such flexibility, rather in the way that electorates have supported institutions like an independent central bank that

Table 5: Summary Statistics for the Slope

Countries	Denmark	Finland	France	Germany	Ireland	Italy
Mean	1.247	1.233	1.151	1.414	1.072	1.063
Std Deviation	0.021	0.0496	0.007	0.024	0.017	0.015
95% <i>C.I</i>	1.204,1.288	1.145,1.335	1.137,1.165	1.366,1.462	1.045,1.100	1.035,1.091
99% <i>C.I</i>	1.192,1.300	1.120,1.365	1.325,1.168	1.352,1.480	1.036,1.110	1.025,1.099
Countries	Netherlands	Norway	Spain	Sweden	UK	US
Mean	1.117	1.043	1.520	1.089	1.204	1.002
Std Deviation	0.016	0.013	0.029	0.027	0.012	0.016
95% <i>C.I</i>	1.088,1.148	1.017,1.068	1.464,1.578	1.033,1.147	1.181,1.229	0.970,1.034
99% <i>C.I</i>	1.076,1.160	1.012,1.074	1.446,1.592	1.020,1.158	1.170,1.236	0.960,1.040

make it hard for demands for ‘reflation’ to be acceded to.

Governments also could improve the available information on the state of the equilibrium unemployment rate. If they did so and electorates believed them, then the signal extraction problem would be diminished and as unemployment rose due to natural rate reasons they would not demand protection but would rather recognise the need to bring it down.

In short, it would appear that just as good economic education persuaded electorates not to demand inflation so it could succeed in persuading them not to demand protection.

The second thing that appears to emerge is the need for entrenching labour market flexibility in national institutions, rather on the US model. While ‘pooling’ is rational in models of rational agents, it has damaging effects on individual behaviour in practice because of moral hazard; in other words it cannot be administered in practice because of monitoring costs.

Clearly such changes in institutions cannot take place until public opinion has been educated. In that respect it is like inflation; the institutions that entrenched low inflation only came into play once societies had discovered the dangers of inflation. This occurred early in Germany for example with the hyperinflation of Weimar and again of the post-war period. In the UK it came late, not really until the 1970s.

Thus the third thing to emerge is a sense of fatalism. Public education cannot be produced by economists when times are bad and institutions flawed. This is because these things would not be hap-

pening if public opinion was educated. It follows that matters can only carry on getting worse until the crisis is sufficient to trigger political change in institutions and policies. At that point public education will have occurred via the learning given by failure; economists can then build on that willingness to persuade politicians to entrench new flexibility and, as with independent central banks, give up the use of protectionist levers.

The implications of this analysis for the future of the EU are pessimistic in the near term — say for the next decade at least. The ‘reform’ demanded in the Lisbon and other agendas will be resisted by voters in the three major countries on the continent. Furthermore these voters may well demand yet further protection and regulation. Through the mechanisms of the EU these demands are likely to spill over into those for similar protectionist and regulative measures across the whole of the EU. Such measures cause costs for other countries where reform has been undertaken already; and these countries’ voters will be faced with a dilemma. Should they put up and shut up, having failed to stop this rising tide of protection, or should they ask for opt-outs or in the last analysis should they leave? This dilemma is acute for the UK but not just the UK; the newly entering eastern bloc countries are none too happy with the EU’s approach on these matters and smaller countries like Ireland, Austria and the Netherlands, while generally euophile for other reasons, are likely to feel a strain too.

It is hard to resist the conclusion that the EU’s institutions are likely to be subject to fissiparous tendencies, with countries increasingly going their own way in economic matters. At the same time no end is in sight for the high unemployment and low participation in the big EU countries of mainland Europe.

## References

- [1] Bean, C. R., P.R.G. Layard and S.J. Nickell, 1986, ‘The Rise in Unemployment: A Multi-Country Study’, *Economica*, 53(210), S1-S22..
- [2] Blanchard, O., and J. Wolfers, 2000, ‘Shocks and Institutions and the rise of European Unemployment. The Aggregate Evidence’, *Economic Journal*, 110(1), 1-33.
- [3] Bentolila, S. and Bertola, G, 1990 ‘Firing costs and labour demand: how bad is Eurosclerosis?’, *Review of Economic Studies*, 57 (191), 381-402.
- [4] Burda, M. (1988) ‘Wait unemployment in Europe’, *Economic Policy*, 7, Oct , 391-416.

- [5] Calmfors, L. and A. Forslund, 1991, 'Real-wage adjustment and labour market policies: the Swedish experience', *Economic Journal*, 101(408), 1130-48.
- [6] Elmeskov, Jorgen, J. Martin, and S. Scarpetta, 1998, 'Key Lessons for Labour Market Reforms: Evidence from OECD Countries' Experience', *Swedish Economic Policy Review*, 5(2), 205-52.
- [7] Forslund, A. and A. Krueger, 1994, 'An evaluation of the Swedish active labour market policy: new and received wisdom', National Bureau of Economic Research, Working Paper No. 4082.
- [8] Layard, P.R.G., and S.J. Nickell, 1986, 'Unemployment in Britain', *Economica*, 53(210), S121-S170.
- [9] Layard, P.R.G., and S.J. Nickell, and R. Jackman, 1991, 'Unemployment: Macroeconomic Performance and the Labour Market', Oxford: Oxford University Press.
- [10] Lindbeck, A., 1993, 'Unemployment and macroeconomics', Cambridge, Mass : MIT Press.
- [11] Ljungqvist, L., and T. Sargent, 1999, 'The European Unemployment Dilemma', Working Paper, Federal Reserve Bank of Chicago, 95-117.
- [12] Minford, P., 1983, 'Labour market equilibrium in an open economy', *Oxford Economic Papers*, 35(0), S207-S244.
- [13] Minford, P., Ashton, P., Peel, M., Davies, D., and A. Sprague, (1983, 2nd edition 1985), 'Unemployment: Cause and Cure', Oxford: Basil Blackwell.
- [14] Minford, P. and Ruthira Naraidoo (2005) 'Vicious and virtuous circles- the political economy of unemployment', mimeo Cardiff University, latest version available on Minford Cardiff webpage.
- [15] Minford, P., V. Mahambare and E. Nowell (2005) 'Should Britain leave the EU? An economic analysis of a troubled relationship', Edward Elgar and IEA, Cheltenham and London.
- [16] Nickell, S., 1997, 'Unemployment and Labour Market Rigidities: Europe versus North America', *Journal of Economic Perspectives*, 11(3), 54-74.
- [17] OECD, 1994a, *Employment Outlook*, Paris: OECD.
- [18] OECD, 1994b, 'The OECD Jobs Study: Evidence and Explanations. Part II: The Adjustment Potential of the Labour Market', Paris: OECD.
- [19] OECD, 1999, *Employment Outlook*, June.

- [20] Paque, Karl-Heinz., 1996, 'Structural Unemployment in Europe: A Bird's-Eye View', Kiel Working Paper No. 756.
- [21] Roed, K., 1996, 'Hysteresis in unemployment', *Journal of Economic Surveys*, 11, 389-418.
- [22] Saint-Paul, G., 1996, 'Exploring the Political Economy of Labour Market Institutions', *Economic Policy*, 22, 263-315.
- [23] Saint-Paul, G., 2000, 'The Political Economy of Labour Market Institutions', Oxford University Press.
- [24] Siebert, H., 1997, 'Labour Market Rigidities: At the Root of Unemployment in Europe', *Journal of Economic Perspectives*, 11(3), 37-54.