

## **FLEXIBILITY, STRUCTURAL CHANGE, AND THE GLOBAL ECONOMY**

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## 1. INTRODUCTION

There is a growing preoccupation with economic flexibility in the industrialised economies, amongst both economists and policymakers. To a large extent the perceived need for 'greater flexibility' derives from a number of challenges which many of the OECD economies have had to face in the last quarter of a century or so, and which seem likely to be on the policy agenda for some time to come.

First, there is the perception that a number of OECD countries, and in particular the Western European economies, have suffered for some time now from some type of 'structural malaise.' This is an ill-defined concept, but it is usually meant to refer to the twin problems of high and persistent unemployment and slow growth.

Second, there is the challenge of those developing countries, or newly industrialising economies (NIEs) which have been able to acquire a substantial manufacturing base. There is a feeling that the continuing rise of economies such as the Asian NIEs, and more recently China, will undermine living standards in the OECD economies. Indeed, some commentators have seen the rise of the NIEs as one of the causes of the European 'structural malaise'.

Concurrently, the current technological revolution, or third-wave industrial revolution, is seen as providing an environment in which those economies that stand still and are unwilling to engage in structural change will suffer even more. In other words, there seems to be a feeling that global economic change is likely, if anything, to accelerate in the next decade, thus exacerbating the problems faced by many European economies so far.

But what exactly do we mean by economic flexibility and how is it to be achieved? Making an economy more flexible presumably means removing rigidities in labour and product markets, but this does not necessarily mean the adoption of a free-market agenda. Indeed, economic flexibility could just as easily be found on an interventionist policy agenda under the heading of 'promoting structural change'.

The purpose of this paper is to look at some of these themes and to examine some of the forces behind global economic change in the next few years, and how this is likely to affect the European economies, and the UK in particular. Any account of this type is likely to be highly speculative, and to avoid an excessive amount of crystal-ball gazing, and to give the paper a basic structure, I would like to organise my arguments around the following key questions.

(1) What is the nature of the evidence suggesting that the OECD economies (in particular the EU countries) are undergoing a period of 'structural malaise', and what are the proposed solutions to these structural problems?

(2) What is the nature of the challenge provided by the newly industrialising economies for the OECD countries?

(3) How is the further integration of the European economies likely to affect the UK's economic prospects?

The first of these is tackled in Section 2, and the other two are taken up in Section 3 of the paper.

Of course, our primary interest in the context of this conference is the likely impact of these changes on the housing market. Although this paper is merely aimed at setting the scene for later conference contributions, I shall briefly discuss some possible implications in the concluding section. As we shall see, there is still considerable disagreement regarding the challenge of foreign competition, and any conclusions regarding the likely impact of changing patterns of comparative advantage on long-run UK economic conditions, and intra-UK economic development, are bound to be tentative.

But some more definite conclusions can be reached as far as the macroeconomic policy environment is concerned, and the likely impact on real interest rates, and hence the UK capital and housing markets. Most economists are increasingly recognising the need for a radical reappraisal of the way in which macroeconomic policy should be conducted, and this has had an influence on policymakers. As far as monetary policy is concerned, there has been a universal shift away from discretionary policy towards mechanisms that ensure a credible anti-inflation policy. In the short-run, the achievement of credibility has implied the pursuit of high real short-term interest rates. It has also shifted attention to the impact of fiscal policy on real interest rates, and hence on the impact of fiscal actions on long-run unemployment and growth. This is the issue which we turn to first.

## **2. Unemployment, Slow Growth and Structural Slumps**

### *2.1 The Evidence on Slow Growth and Unemployment*

There are few policy issues which have received as much attention as slow European growth and high unemployment since the 1970s. After the unparalleled

levels of growth and high employment levels witnessed in the first two decades of the post-war period, European economic performance has been less than satisfactory in a number of areas. The length of the period of crisis has led most commentators to speak of a 'structural malaise'.

**TABLE 1:**  
**GDP Growth, Productivity Growth and Unemployment in Some OECD Economies**

	USA			Europe			Japan		
	GDP	LP	U	GDP	LP	U	GDP	LP	U
1960-73	2.7	2.1	4.8	4.0	4.2	2.4	8.4	7.9	1.3
1973-80	0.8	-0.4	6.7	1.9	1.7	4.5	2.3	2.5	1.9
1981-90	2.0	1.8	7.0	2.0	1.5	8.2	3.7	3.4	2.5

*Data Sources: Penn World Tables, OECD Economic Indicators. The Data for Europe is an unweighted average of data for Germany, France, the UK and Italy.*

But what is the extent of the problem faced by the various European countries? Table 1 shows some data for real GDP growth, labour productivity growth (measured as GDP per employee), and unemployment for the post-war period for an average of the major European economies, the USA, and Japan. Three points are worth making. First, the European economies have never re-experienced the average rates of growth or low levels of unemployment that were common in the period 1945-1973. It is worth remarking that the USA has experienced a similar slowdown in economic growth, but Europe's problems seem to have been more serious in terms of poor unemployment performance. The USA has not experienced upward-trending levels of unemployment over the same period. Second, although productivity growth has slowed down in all the G7 economies since the 1970s, the European economies seemed to be performing worst on this measure of productivity<sup>1</sup>. The data on productivity merely confirms that Europe's performance has deteriorated since the 1970s. Third, the length of time over which the unemployment crisis has lasted, and the fact that Europe has had a unique combination of slower growth and higher unemployment, suggests that we are

<sup>1</sup> The only exception seems to be the UK, whose productivity growth was slower than that of other European countries in the 1960s, and which performed relatively well in the 1980s.

facing a 'structural' problem. What we are witnessing cannot be easily attributed to business cycle episodes or one-off events such as the oil crises of the 1970s.

What are the explanations for this apparent structural malaise? In this section I shall focus on a number of potential explanations for the two phenomena of slow growth and high unemployment, focusing on each in turn, before discussing potential linkages between them, and finally turning to macroeconomic policy implications. We shall leave aside explanations based on changing patterns of trade and comparative advantage in the world economy, which will be analysed in Section 3.

### *2.2 Explanations for Europe's unemployment performance.*

Under this heading we find a number of explanations. Perhaps the most popular in recent years has been the argument that Europe's labour markets have exhibited an excessive short-run real wage rigidity due to inflexibility in our labour markets compared to the labour markets in countries such as the USA and Japan. I don't want to say too much about these types of approaches to explaining unemployment, partly because a number of these issues will be picked up in tomorrow's session on Labour Market Change. However, a brief summary of the real wage rigidity story is necessary, in order to understand the causes of Europe's problems. The new approach to understanding macroeconomic adjustment in labour markets has been pioneered in the UK by a number of researchers, particularly at the LSE's Centre for Economic Performance, and the recent collections and overviews of this work have received much publicity and acclaim (Layard, Nickell and Jackman, 1991, 1994).

The main theme of this approach is that events in the late 1960s and early 1970s have led to the emergence of 'real wage gaps' in Europe (a gap between the actual real wage and the long-run full employment real wage) and hence to involuntary unemployment. The almost synchronous real wage pressure from greater trade union militancy in the 1960s and the reduction in labour demand (and the real wage available for labour) due to the oil shocks meant that labour priced itself out of the market in the 1970s, generating higher levels of unemployment (higher levels of the NAIRU, the rate of unemployment that is consistent with no acceleration in inflation).

The story does not end there, however, as those pressures that led to an original increase in the NAIRU in the 1970s have since subsided. The explanation for Europe's *continuing* high unemployment relies on so-called hysteresis

mechanisms. These imply that temporary recessions tend to cause an increase in the NAIRU as the creation of unemployed workers (and particularly the long-term unemployed) and the exit of firms during a recession reduces competitive pressures in the labour market: surviving workers and firms are more willing and able to reach 'excessive' wage bargains and/or build up profit margins. Consequently, the real wage tends to settle at a level at which the unemployment rate is higher than when the recession began.

The hysteresis models provide convincing explanations of the lack of flexibility in European labour markets which results in less flexible real wages over the business cycle than in, say, North America. They have also been verified empirically on numerous occasions, for a number of countries. However, some economists are beginning to doubt that they represent the whole story, and attempts have been made to develop theories which complement the imperfect competition approach to labour markets. The reason why this might not be the whole story is that hysteresis effects are unlikely to be permanent: there is no evidence that a growing labour force leads to increasing unemployment. Manning (1995) remarks that, as 25 years have now elapsed since Europe last experienced low levels of unemployment, we should probably look towards more structural explanations of the increase in the NAIRU, rather than relying on theories of short- and medium-run labour market disequilibrium.

There are a variety of structural explanations for the high unemployment in Europe. Some rely on changes in the macroeconomic policy environment, whilst others look more narrowly once again to the performance of the labour market alone.

Recently, Fitoussi and Phelps (1986), Newell and Symons (1987), and Lal and Van Wijnbergen (1985) have focused on the link between higher real interest rates and high unemployment, and this has formed the basis for a more complete 'structuralist' account of recent macroeconomic events in Phelps (1995). The overall theory allows for complex interactions between macroeconomic policy, exogenous productivity and technology shocks and employment. But for our current purposes, it is useful to focus on a sub-set of these linkages. In particular, Phelps emphasises the link between progressively expansionary fiscal policies in the world economy and higher real interest rates, and from higher interest rates to higher unemployment. The fact that expansionary fiscal policies cause high real interest rates will not seem controversial to any economist who does not espouse an

extreme Ricardian view of government debt<sup>2</sup>. Indeed, one attraction of the fiscal policy-real interest rate linkage is that it has an international dimension: one of the main sources of fiscal imbalance in the 1980s was the Reagan administration's expansionary policy, which helped to raise world interest rates.

Rising real interest rates will then impact negatively on labour demand through a variety of channels. One can think of a reduced rate of physical investment<sup>3</sup>, as real prices of capital assets fall, but one can also think of a reduction in less visible, more subtle types of investment, such as work-force training. Thus, the equilibrium rate of unemployment (the NAIRU) can be expected to rise in those economies (such as in Europe) where there is considerable real wage rigidity. Where real wages are less rigid, the fall in labour demand will be partly accommodated by a fall in real wages. Phelps (1995) provides some formal econometric evidence of the strength of this link.

For the purposes of some simple illustrations, in Table 2 I report the average real interest rate<sup>4</sup> in some key countries and a net measure of government indebtedness for various periods of time. This shows that most of the major economies have accumulated debt over the last 25 years (the UK is an obvious exception), and that this has coincided with the worldwide rise in real interest rates. In addition Figure 1 shows a simple cross-sectional plot of average real interest rates and levels of unemployment for the G6 economies in the 1960s (1960-1970) and the 1980s (1981-1992). There is clear evidence that the rise in unemployment, and slow-down in growth is positively correlated with higher real interest rates in the 1980s. The major implication of this theory is that high real interest rates took over the role of depressing employment levels once the adverse effect of the oil shocks began to dissipate.

**FIGURE 1 here**

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<sup>2</sup> The Ricardian view reformulated, *inter alia*, in Barro (1974) argues that permanent increases in government spending funded by debt issue will not have an impact on interest rates because the private sector discounts the future taxation increases required to finance and pay back the debt, and correspondingly adjust its savings behaviour.

<sup>3</sup> For an analysis of the role of capital shortage in the European economies see also Dreze (1987).

<sup>4</sup> The real interest rate is simply measured as the nominal long-term rate minus inflation. This makes the heroic assumption that actual inflation equalled expected inflation, but averaged over several years this is likely to be an unbiased measure.

**TABLE 2:**  
**Fiscal Policy and Real Interest Rates**

	1960-70		1971-80		1981-92	
	Net Debt as Share of GDP	Real Interest Rate	Net Debt as Share of GDP	Real Interest Rate	Net Debt as Share of GDP	Real Interest Rate
USA	27.8	1.9	18.6	1.0	34.9	5.6
Japan	-65.4	0.8	17.3	-0.1	5.5	4.9
UK	76.0	2.9	47.0	-1.7	35.0	4.9
Germany	-8.2	3.2	14.4	2.8	24.5	4.7
France	9.7	1.5	14.3	-0.2	25.6	5.2
Italy	36.8	1.3	54.0	-3.2	101.0	3.9

*Data Sources: Datastream, OECD Economic Outlook. The Data for Net Debt is taken at the end-point of the sub-period. The data on the real interest rate is an average for the period.*

There are potential objections to the Phelps thesis. One obvious counterargument is that high real interest rates coincided in the 1980s with a period of booming stock markets. This contradicts aspects of the theory, and rising stock markets should have had an offsetting effect on the cost of capital (see Barro, 1990, 1991). But most firms do not rely on stock market issues, and hence on balance there are still good reasons for believing the cost-of-capital argument.

One can amplify the linkage between macroeconomic policy, capital markets and investment by appealing to other important effects. Greenwald and Stiglitz (1993, 1995) suggest that any reductions in firms' net worth will increase their risk aversion and hence will make them less likely to risk hiring labour where there are significant hiring and firing costs. Labour adjustment costs are notoriously high in Europe, and hence this fits the pattern quite well. Greater uncertainty in the economic environment will bring forth a similar response on the part of firms. Stiglitz and Weiss (1985) and others have also stressed that credit rationing, along with cost-of-capital considerations, is likely to be important in capital markets.

One interesting aspect of the interest rate link is that the emphasis in monetary policy in the OECD economies has decidedly shifted towards the targeting of inflation as the sole or main objective of policy. They have sought to achieve greater credibility in anti-inflation policy through various reputation-enhancing devices, such as greater central bank independence, or in the UK's case, greater transparency in the process whereby the Treasury and the Bank of England reach decisions regarding Base Rate movements (see King, 1995). Whether a tough,

credible, anti-inflation stance necessarily implies a less flexible approach to stabilising business cycles is still an open theoretical and empirical question (see Rogoff, 1985, Alesina and Summers, 1992, De Long and Summers, 1992, Muscatelli, 1995, Leiderman and Svensson, 1995). What is undeniable, however, is that traditionally high-inflation economies in the 1970s and early 1980s such as France, Italy and the UK have had to pay the price of higher real interest rates whilst they tried to acquire a reputation for being tough on inflation. Figure 2 shows how high nominal interest rates in most OECD economies are positively correlated to their past inflation performance. Consequently, this does not augur well for an improved employment performance in the future. For the purposes of our argument it does not matter whether the current high real interest rates have been caused by a slow adjustment in inflationary expectations as monetary policy has become tighter, or due to a lack of co-ordination between monetary and fiscal authorities<sup>5</sup>.

**FIGURE 2 here**

Besides emphasising the role of real interest rates since the 1980s, structural theories look at the impact of Europe's social policies on the workings of the macroeconomy. Some economists see the whole edifice of social welfare arrangements in Europe as a root cause of structural problems. An early exponent of this notion of 'Eurosclerosis' was Giersch (1985). Some of these effects have now been incorporated in modern theories of the labour markets. Economists now pay much more attention to the incentive effects of welfare benefits, and indeed the duration of unconditional benefits is seen as an important source of real wage rigidity (see Layard et al. 1991, Phelps, 1995).

But this cannot by itself explain the dynamic of Europe's unemployment problems. After all, most of Europe's welfare state measures were in place well before the crisis began in the 1970s, and some of the more extravagant parts of these welfare states have already been trimmed back. To explain the timing and persistence of Europe's crisis, Assar Lindbeck (1985, 1994, 1995) has appealed to notions of 'welfare-state dynamics', whose effects only become entrenched over long periods of time. Lindbeck's argument is that it took considerable time for the welfare state to have an impact on attitudes to work, due to slowly changing social norms and habits. Similarly the emergence of problems of moral hazard and

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<sup>5</sup> This is a by-product of greater central bank independence which is often ignored in the literature on credibility. Yet, as the Volcker-Reagan era in the US has shown, it is a matter of some importance. For a recent account of these problems in the context of international policy co-ordination, see Muscatelli (1996).

cheating in the welfare state is seen as the gradual evolution of a system in which the less privileged in society see the exploitation of 'the system' as an acceptable mode of behaviour. At the same time, the existence of such disincentive effects and moral hazard will lead to resentment amongst taxpayers who will object to increasing taxation<sup>6</sup> to fund the welfare state. Lindbeck's warnings about declining 'Protestant ethics' and 'Prussian discipline' may seem rather frivolous to some observers. But the idea that social norms and economic behaviour may be altered by the emergence of a 'critical mass' of people with new behaviour patterns, and that this vicious circle could have been triggered by the problems of the early 1970s, is worth considering as an explanation for the persistence of Europe's problems.

**TABLE 3****Growth in Public Spending by Category of Expenditure in Europe**

	Current Transfers (Change as % of GDP in 1981-1993)	Govt. Consumption (Change as % of GDP in 1981-1993)	Capital Spending (Change as % of GDP in 1981-1993)
Germany	2.0	-0.3	-0.4
UK	0.8	-0.2	0.5
France	3.2	0.3	0.3
Italy	3.6	1.3	-0.9

*Source: European Economy, 1994. Amounts shown are changes in the proportion of GDP dedicated to different categories of expenditure.*

What is undoubtedly true is that the growth of government expenditures in the European countries in recent years has been weighted towards transfers (social security and welfare measures) and general government consumption, and away from capital spending. Table 3 shows that capital spending has fared less well than transfers of consumption spending, with the possible exception of the UK. In terms of a structuralist perspective this is the worst of all possible worlds as the increase in government spending and indebtedness will force up the cost of capital. In contrast, increased government investment could have offset the decline in private investment, but this has so far failed to happen.

One final, and popular, explanation for high unemployment in Europe has been based on the notion that greater 'automation', the substitution of capital for labour, has displaced labour in Europe (see Rostow, 1983, Drucker, 1986). At first

<sup>6</sup> Which in some countries with inefficient public administrations have also led to massive problems of tax evasion (e.g. Italy, Greece).

sight, this explanation looks reasonably attractive. Inflexibilities in the labour market might have led employers to engage in capital-deepening, and real wage rigidities in the face of this could explain higher unemployment. A telling problem with this theory is that, as we noticed in Table 1, European labour productivity has also been growing slower since the 1970s, which does not fit well with a story of capital-labour substitution. Also, arguments based on capital-deepening would need to be reconciled with the view that a capital shortage, and slow investment (see Table 4), was also an important element in Europe's crisis, and indeed this position underpins the Phelps thesis. Reconciling these various observations empirically is not a straightforward matter, as it involves taking into account simultaneously the effects of changing technology, factor substitution, as well as price and wage-determination. Artus (1974) and Dreze and Bean (1990) provide some interesting insights into these issues, including the extent to which slower investment co-existed with capital-deepening. In particular, Dreze and Bean calculate the impact of the incorporation of productivity gains into real wages. This in turn induced capital-labour substitution, thus making it impossible for employment to grow. The reduction in employment growth in Europe was calculated at about 2-2.5% until the late 1970s and 0.5-1% between the late 1970s and 1986 - a significant amount in the context of Europe's overall unemployment problem.

**TABLE 4:****Growth in the Productive Capital Stock**

	1950-73	1973-87
USA	3.8	2.6
Japan	10.2	6.7
Germany	7.7	2.7
UK	5.7	3.3
France	6.4	3.7
Italy	6.5	3.5

*Source: Maddison (1991), Own computations on World Bank Data.*

However, it is important to stress that a key factor in the above mechanism is still labour market inflexibility. After all, it would be hard to blame exogenous improvements in technology and total factor productivity for unemployment<sup>7</sup>.

<sup>7</sup> However, a literature is emerging which is seeking to explore the linkages between unemployment and growth. Aghion and Howitt (1994) suggest that productivity growth may have an impact on the level of unemployment through its effects on search behaviour.

Historically, from the industrial revolution onwards, there is no evidence that technological change creates unemployment; it might generate temporary structural unemployment problems (and problems of shifts in income distribution between different types of workers) but these problems should subside over time, if relative prices and wages are allowed to adjust.

This is not to say that capital-deepening is not an important issue, and that technological change will not affect unemployment patterns in the future; it would be dangerous to dismiss the potential role of technological change in the midst of a technological revolution! And even if unemployment is not a concern because of sufficient overall increase in real wage flexibility, as I have already remarked the distributional issues are likely to be important. Davis (1992) reports a rising wage differential between more and less educated workers in the 1980s in most countries except Japan (see Table 5), and similar differentials might be emerging between skilled and unskilled workers. Certainly the evidence points to greater overall income inequality, not only in the case of the United States, but also in other OECD countries (see Figure 3, which reports data from Katz et al. 1993), which might reflect an increased skills mismatch, even though the existing evidence on mismatch (occupational and regional) is fairly mixed (see Blanchard, 1990). It seems indisputable that, even when we eventually manage to tackle Europe's unemployment problem, the current pace of technological change might require a sufficiently flexible labour force to adapt to sudden changes in relative sectoral demands. In the short run this might produce even higher wage premia for education.

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Innovations can destroy jobs and will require labour reallocation between sectors. Thus faster growth increases the job separation rate and costly search discourages firms from opening new vacancies. Hence unemployment and growth might be positively related. However, this 'creative destruction' effect could potentially be more than offset by the fact that higher growth raises the present discounted value of the profits from new jobs (a capitalization effect), which might encourage firms to post vacancies. For an alternative model linking productivity growth and unemployment, see Manning (1992).

**TABLE 5**  
**Earnings and Education Differentials: Wage Premia to Education**

	late 1970s-early 1980s	late 1980s
USA	1.37	1.52
UK	1.53	1.65
Japan	1.26	1.26
Germany	1.36	1.42

*Data Sources: Davis (1992), OECD (1995). The observation points are as follows: USA (1979, 1987), UK (1980, 1988), Japan (1979, 1987), Germany (1981, 1984). The ratio shown is the ratio of earnings between the following education groups: US (college-high school leavers), UK (University-no qualification), Japan (College-upper high school leavers), Germany (14-18/11-13 years of education).*

**FIGURE 3 here**

*2.3 Slow Growth in Europe and Links between Unemployment and Growth.*

To some extent slow growth in Europe could be attributed simply to a slowdown in capital accumulation. From the 1970s onwards, investment growth in Europe has slowed down relative to those witnessed in the 1950s and 1960s (see Table 4). Some explanations for this are straightforward and follow from our discussion in the previous section: a high cost of capital, combined with advanced scrapping of capacity during the deep recessions of 1970s and early 1980s, and with the fall in profitability in the 1970s as real wage rigidity and rising primary commodity costs squeezed profits, can explain the slow-down in investment. Increased uncertainty about future economic conditions possibly also played a part, especially where firms have to rely on loans as a source of finance. Thus the events that triggered the increase in unemployment had concurrent effects on European investment and growth.

But the potential interactions between unemployment and productivity growth might also have had a role to play. Evidence on this is far harder to come by, but some potential channels of interdependence have been identified by economists in recent years. Essentially the debate here is between those economists who hold a neo-Schumpeterian position by arguing that recessions actually stimulate economic growth because they push less efficient firms out the market, and because the opportunity cost of reorganisation is lower at a time when firms are not operating at full production capacity (see Caballero and Hammour, 1991, Hall, 1991, Aghion and St. Paul, 1991). Against this view, some economists

argue that recessions are periods of lost opportunity in terms of productivity enhancement because of the importance of 'learning-by-doing' effects in innovation (that is, cumulative experience is likely to be an important force in driving productivity growth). (See Bahk and Gort, 1993, Stadler, 1990, Muscatelli and Tirelli, 1995). The macroeconomic evidence to date probably favours the second hypothesis, partly because of the dominant effect of the post-1970s data. However much empirical work still needs to be done at a microeconomic level to verify whether these forces are at work at the micro-level, and whether either of them is dominant.

The potential policy implications of this debate are not trivial: in the previous section we suggested that a regime of less flexible monetary and fiscal policies might be on the cards for the foreseeable future. If that is the case, recessions will be less easy to offset, and it would be interesting to be able to gauge the effects of this on long-run productivity growth.

#### *2.4 Some Policy Implications*

There are a number of wide-ranging explanations for Europe's economic difficulties, and especially the persistence of the high unemployment problem. We have seen that most of them hinge on some version of the real wage rigidity and medium-run story as at least a part of the explanation. But at the same time there is the suspicion that other forces, more structural and deep-rooted, may also be playing an increasing role. These range from increasing skills mismatch, to a high cost of capital, to an intrusive welfare state which is increasingly changing social norms and attitudes. Some of these structural explanations would require a considerable degree of fiscal retrenchment, or at the very least a switch from consumption to capital spending on the part of governments, especially in education and infrastructure which might help to bolster future productivity growth (see Aschauer, 1989, Munnell, 1990). Others would not necessarily look to a reduction in fiscal interventionism, but merely an adjustment of taxation and welfare measures to reduce real wage rigidity and improve incentives in the labour market.

However, these various supply-side policies might be severely limited by the macro-policy environment. With monetary policy measures almost entirely dedicated to the control of inflation, and many European countries still looking towards European Monetary Union, governments will find little room for manoeuvre on the fiscal side as well. This does not augur well for growth if we believe that one of the

key causes of slow investment, slow growth and high unemployment has been an increasingly uncertain economic environment, and if we believe that some degree of government intervention is necessary to ensure a less painful process of structural change as the technological revolution continues.

### **3. STRUCTURAL CHANGE, GLOBALIZATION AND THE INTERNATIONAL ECONOMY**

In this section we turn our attention to the likely impact of changes in patterns of trade in the world economy. As explained in the introduction, there are two issues relating to economic flexibility which have attracted the attention of commentators and policymakers (see European Commission, 1993, OECD, 1994). The first is the impact of the emergence of the newly industrialised economies (NIEs) on the OECD countries. For the European economies this provides a further element to the structural malaise story: as developing countries become major manufacturing producers, the argument is that the OECD economies will experience a deterioration in its terms of trade vis-à-vis the NIEs, and a reduction in welfare. There is no doubt that over the last 25 years, the OECD economies have become more open to trade, with trade ratios rising considerably. Furthermore, since 1970 the percentage of total imports from developing economies has risen from 14 per cent to about 35 per cent in the US, and from 5 per cent to 12 per cent in the European Union.

The second major event of note is the process of European integration that is and will continue to take place in Europe, and which might begin to alter its economic geography over time. We now look at each of these issues in turn.

#### *3.1 the impact of the NIEs on the Industrialised Economies*

The 'problem' of increased import penetration from the NIEs into the came to the fore in the 1980s, as the shares of world trade from the Asian NIEs in particular began to rise sharply. More recently, this economic success has not been confined to the original Asian NIEs (South Korea, Taiwan, Singapore and Hong Kong), but has spread to the rest of East Asia, with larger economies like China joining the race to industrialisation. So is economic development in Asia a 'threat' to Europe?

If one takes a conventional, neoclassical approach to analysing international trade, then economic development in one region cannot be detrimental to another

region. The reason is simple: higher productivity in the world economy as a whole actually benefits consumers everywhere by reducing the prices of goods and services, thus opening up the way for efficiency gains. Thus, if the OECD economies (the North) tend to specialise in the production of high-technology goods, whilst the NIEs tend to specialise in the manufacture of goods lower down the technology ladder, an increase in labour productivity in the NIEs will further lower the world price of low-technology goods. This improves consumer welfare in the OECD, and merely means that the North has to shift its production even further away from low-technology towards high-technology products. This restructuring process may not be painless, especially in the presence of wage inflexibility, and we shall return to this issue below.

However, newer approaches to international trade can produce a richer range of results, depending upon the assumptions made about the nature of economies of scale in production and the nature of the process of innovation. For instance, Krugman (1986) develops a 'technology gap' model of international trade in which a narrowing of the technology gap by the developing countries (an improvement in labour productivity) pushes them further up the technology ladder and can make the developed economies worse off. This happens because the productivity gains in the NIEs raise their wages and the developed economies now have to pay more for the lower-tech goods which they import from the NIEs. Alternatively, one can appeal to models with economies of scale and with dynamic comparative advantage in manufacturing whereby once NIEs begin to acquire Northern technologies and penetrate in world markets, a self-reinforcing mechanism is created tending to shift manufacturing from the developed economies to the NIEs. Unless the developed economies are able to innovate at a reasonable pace, consumers in the developed economies might become worse off. Again the reason for this stems from higher wages in the developing economies and hence a shift in the terms of trade against the North<sup>8</sup>.

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<sup>8</sup> In an alternative more sophisticated framework, Krugman and Venables (1995) demonstrate how globalization (the progressive integration of world markets through lower transportation and communications costs) can actually shift the distribution of incomes in different directions at different points in time. The mechanism here is once again a self-reinforcing advantage through external economies of scale both in the use of manufactures as intermediate goods and in the production of manufactures for final consumption. These forces tend to create a natural tendency toward agglomeration of manufacturing, thus explaining the creation of a core-periphery set-up in world manufacturing (the industrialised economies and the Third World), resulting in much higher wages in the industrialised economies. But the progressive integration of world markets (lower transportation/communication costs or lower trade barriers) implies that at some stage lower

However, these alternative models have to be interpreted with care, and even some of their proponents are sceptical that the development of the Asian NIEs are really at the heart of slower growth in the Northern economies. For instance Krugman (1994) argues that there is little evidence that the developed economies are suffering such an adverse impact on their terms of trade from the emergence of the NIEs. The terms of trade of the OECD economies relative to the rest of the world actually improved in the 1980s by 12-15% due to falling primary commodity prices. Also, in terms of success breeding success, one has to remark that total factor productivity growth in some Asian NIEs has actually been unremarkable by Northern standards (see Young, 1992), suggesting that investment has more to do with these countries success than a closing of the 'technology gap'.<sup>9</sup> Indeed, the real issue is again one of the distribution of benefits and losses *within* the OECD economies. Whilst the industrialised economies will gain in the longer run from an increase in productivity in the world economy, in the short run it will require them to transform their industrial structure, moving out of those sectors which are being taken over by the NIEs and developing new sectors in their place. Given the problems with labour market rigidities experienced in Europe in the last 20 years, a rapid pace of change could present us with considerable macroeconomic adjustment problems, and it is likely to exacerbate any skills mismatch which is present.

Can the size of this potential macroeconomic adjustment problem be quantified? One of the difficulties with the theoretical models of international trade discussed above is that they are not readily amenable to empirical testing. Instead, macroeconometric models, which are not particularly useful to analyse major structural change, can at least be used to offer insights into the likely impact effects of increased import penetration by the NIEs.

To give an idea of the possible impact of an acceleration in NIE penetration I report some projections that were obtained using the National Institute's GEM model of the world economy<sup>10</sup>. The shock to which the European economies were

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Third World wages might be sufficient to offset the cost advantage of the core thus causing a redistribution of world manufacturing towards the periphery.

<sup>9</sup> Although it has to be said that measurements of TFP growth are fraught with difficulties in these countries due to problems in constructing useful measures of the capital stock at a time of rapid economic change (see Young, 1992, Griliches, 1994).

<sup>10</sup> These simulations are reported from some unpublished joint research with Jonathan Ireland (University of Strathclyde), Patrizio Tirelli (Catholic University, Milan), T.G. Srinivasan (The World Bank) and David Vines (Balliol College, Oxford), as part an EC-funded research project on EC-NIE trade (grant no. SPES-UK-0007). I am of course solely responsible for any errors, omissions, and misinterpretations.

subjected was equivalent to what would occur if the original four Asian NIEs had managed to double their export growth to Europe. This might seem excessive, but one has to remember that the four NIEs involved have relatively small shares of world trade, and that the degree of increased penetration by these countries of US and Japanese markets was roughly equivalent to this in the decade 1976-1986. We looked at the effects of the import shocks under various policy response scenarios, but Table 6 shows the impact on some key indicators after 2 and 4 years under the assumption that the G7 economies stabilise their real interest rates and do not have the foresight to react to the shock. The figures are given as percentage differences from base,( i.e. from the projected path of these economies in the absence of the shock).

**TABLE 6**  
**Effects on GDP, Inflation and Import Volume of NIE Shock**

	GDP after 2 years	GDP after 4 years	Inflation after 2 years	Inflation after 4 years	Import Vol.after 2 years	Import Vol. after 4 years
USA	0.03	0.12	0.00	0.03	0.29	0.71
Japan	0.01	0.10	0.00	0.03	0.04	0.21
Germany	-0.14	-0.25	-0.03	-0.07	0.84	2.21
UK	-0.48	-1.50	-0.09	-0.46	1.95	5.58
France	-0.20	-0.52	-0.07	-0.13	1.06	3.09
Italy	-0.33	-1.08	-0.07	-0.21	1.33	4.49

*Notes: The GDP and import volume figures are shown as percentage differences from base level; the Inflation figures as difference from base annual growth rate.*

The nature of the shock is asymmetric, because certain European economies have been more traditionally more open to NIE imports (e.g. the UK), and the nature of the shocks considered amplifies this effect. The other main reason for the asymmetry between different European countries is of course the differences in the speed of adjustment of their supply side. But the main point to note is the fact that for some of the European economies, the deflationary shock is reasonably large and persistent. In the case of the UK, GDP is 1.5 % below the baseline after 4 years and inflation is 0.5% lower. Even if one is sceptical about the ability of the four original NIEs to deliver such a major import surge, the dimension of some of the newer NIEs (e.g. China) suggests that the macroeconomic adjustment problem considered here is not too unrealistic.

An alternative perspective on the impact effects of greater developing import penetration has come from Wood (1994, 1995), which examines the factor content of imports. The argument deployed by Wood is relatively straightforward, and focuses on the labour skill content of different sectors. One of the key problems in examining the impact of greater imports on factor demand in the importing country is to quantify the factor content of these goods: but should one use the labour input coefficients in the importing (developed) country, or that of the exporting (developing) country to compute this impact when there are differences in the nature of imported goods and import-competing goods? Traditionally studies have taken the former, but Wood argues that this underestimates the impact on labour demand because in the absence of such import penetration, the developed economy might have produced different goods, using more labour-intensive methods. Wood (1994) also argues that trade induces labour-saving technological progress in import-competing sectors, which further reduces the demand for unskilled labour.

All this evidence rests on the adjustments made on factor content by Wood (1994) in his study, which provides an interesting alternative approach. However, it has been subjected to considerable criticism by those who feel that the magnitude of these trade effects have been exaggerated (see Lawrence and Slaughter, 1993, Krugman and Lawrence, 1994)<sup>11</sup> because the relative prices of labour intensive goods have not declined in the case of the US. Furthermore, the impact of total factor productivity growth on sectors with different labour skill intensity does not show the differential labour-saving innovation effect claimed by Wood (see Sachs and Shatz, 1994).

### *3.2 European Integration and the Geography of Manufacturing Activity*

Our last question for discussion relates to the impact of further European integration on the UK. The study of the distribution of economic production in space is of course a well-established discipline, but recently it has attracted many trade theorists who have sought to analyse the impact of greater integration on individual regions. Using exactly the sort of models which are normally employed to analyse international trade, they look at the impact on the distribution of economic activity as barriers to factor mobility are removed and nations become regions of a bigger economic entity.

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<sup>11</sup> For a more detached comment, see Freeman (1995) and Richardson (1995).

Krugman (1991a, 1991b) studies some of the effects of a removal of barriers to mobility in the presence of economies of scale in the production of manufactures<sup>12</sup>. Not surprisingly, the models tend to show that a variety of equilibria are possible but that generally, in the presence of transportation costs, agglomerations are likely to occur because of the presence of external economies of scale and/or technology spillovers, so that firms choose to be closer to each other and to larger markets. Krugman notes how this tendency for agglomeration in manufacturing, and regional specialisation has been much more extreme in the US than in Europe due to the existence until very recently of barriers to trade, and the permanence of many barriers to factor mobility. Table 7, taken from Krugman (1991b), shows the shares of manufacturing employment in four different manufacturing sectors in two European countries and two US regions.

**TABLE 7**  
**Industrial Specialisation in the US and Europe**  
**(Share of Manufacturing Employment)**

	Germany	Italy	US Midwest	US South
Textiles	3.7	9.1	0.3	11.7
Apparel	2.6	5.6	2.4	10.6
Machinery	15.8	12.9	15.0	7.1
Transport Eq.	13.2	10.4	12.8	5.9

*Notes: Source Krugman (1991b), Table 3.2, p.78. Data shows share of manufacturing employment.*

What are the implications of this for greater European integration? If one were to take the simplest of these models at face value one might conclude that, if the gradual process of European integration will lead to a gradual increase in factor mobility, then it will have the following effects:

(a) First, there might be a tendency for geographically more remote parts of Europe like the UK to find it difficult to hold on to some of its industries<sup>13</sup>, as external economies of scale and technological spillover effects begin to exert a centripetal force towards the industrial heartlands of Europe.

(b) With the UK having already experienced a reduction in its manufacturing base relative to some other European countries, e.g. Germany, it would be difficult for us

<sup>12</sup> Some of these themes were of course central to Marshall's (1920) analysis of localization.

<sup>13</sup> As Krugman (1991b) notes, it might be argued that the welfare implications of these major regional shifts are not easy to work out in any case, as factor mobility would imply major shifts in population as well as in capital.

to hold on to retain a presence in a number of sectors which are already well-established elsewhere in Europe.

Does this still happen without complete factor mobility? After all, one could argue that factor mobility, and in particular labour mobility, is unlikely to increase much in Europe for the foreseeable future. Already mobility *within* the EU countries is limited (see McMaster and Pissarides, 1990, for a study on UK regional migration) and language and cultural barriers will be formidable for some time to come (see Ermisch, 1995). Unfortunately, without labour mobility, as shown by Krugman and Venables (1995), one might yet get a considerable degree of specialisation, but this will now translate into the emergence of larger real wage differentials in favour of those economies which are attracting manufacturing industries<sup>14</sup>.

But there could be important offsetting effects. For one thing, provided transportation costs are relatively low, if relative wages are sufficiently low, or if labour markets are sufficiently flexible, this might more than offset the disadvantage of being on the periphery and away from the main European markets and suppliers. The relatively large foreign direct investment flows into the UK seems to confirm this. Second, although the discussion so far has tended to focus on manufactures, technological change might actually have a greater impact on the provision of services in the next decade. Indeed, it is arguable that whilst 'transportation costs' (the driving force behind agglomeration) are likely to fall little, if at all, in manufacturing, the ability to transmit information is likely to grow much faster and thus the greatest drive towards concentration is likely to be in services<sup>15</sup>, where the UK might be in a better position to establish a dominant position.

#### 4. CONCLUSIONS

We have looked at some of the challenges that are likely to face the OECD, and in particular the European economies over the next few years. Having failed to adjust fully to the macroeconomic shocks which hit them in the late 1960s and 1970s, Europe now has to face the challenge and uncertainty of rapid technological change. Most economists seem to be agreed that one of the major causes of the

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<sup>14</sup> One further interesting possibility would emerge if different types of labour (e.g. labour with a high degree of human capital) found it easier to move in such an integrated economy than low-human capital labour. In this case, the wage differentials would emerge mainly amongst low-human capital workers between different countries, creating wide ranges of income distribution patterns across Europe.

<sup>15</sup> Indeed, the concentration in services in the Southeast of the UK is probably an example of this (see Krugman, 1991).

problems of the last two decades, labour market inflexibility, needs to be tackled in order to face future supply-side shocks, which might include major changes in the pattern of trade.

There are different schools of thought on the role that the state should play in the process of structural change. Whilst some economists see Europe's welfare state as a potential asset in a period of rapid structural change in reducing social tensions, others have pointed to this social buffer as one of the very sources of inflexibility, delaying adjustment and perpetuating the problem of unemployment and slow growth. One area where there does seem to some degree of consensus is in the necessity to look more to public investment rather than government consumption as a way to improve the supply side of the economy. Thus investment in education and infrastructure may be more productive in improving the flexibility of labour markets and the attractiveness of the UK as an industrial location in the face of increasing foreign competition.

However, one major constraint here is the current macroeconomic policy environment. After two decades of struggling against volatile inflation, most OECD countries are understandably reluctant to take any action that might threaten a resurgence of inflation. With monetary policy dedicated to the achievement of low and stable inflation, and fiscal policy in Europe and the UK undergoing if anything a certain degree of consolidation (see European Commission, 1994), it seems unlikely that any adverse macroeconomic shocks could be easily offset, or that major fiscal policy initiatives could be taken by any future government to achieve a rapid transformation of the supply side of the European economies. The process of change might at times be frustratingly slow.

The implications for markets such as the UK housing market should be apparent. After the remarkable effect of the cyclical boom in the 1980s, many commentators are now wondering whether a recovery can really be labelled such until the ephemeral 'feelgood factor' becomes more apparent. But it seems inevitable that, if the UK government is very serious about keeping the lid on inflation, these types of cyclical phenomenon cannot recur in the future. Housing might also begin to lose its value as a hedge against inflation. On the positive side, any supply-side success, either through fiscal retrenchment, or through changes in the overall structure of fiscal policy will be beneficial, both through the reduction in unemployment levels and through the likely spillover effects from capital markets to other asset markets such as housing. Finally, a period of major structural change, in

which wage differentials open up between skilled and unskilled workers or between different social groups will undoubtedly also be a period in which we might expect the performance of the housing market to become much more fragmented, both between regions and between different types of housing.

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