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Let's Stop being Gloomy about Europe

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Paul De Grauwe

Abstract

Pessimism has been rampant in many EU-countries over the past decade, largely fed by lagging productivity growth in the EU since the late 1990s and a perception that the US has a superior economic model. This perception has led to the view that the only way to restore higher levels of productivity growth is by introducing deep structural reforms in the EU, making goods and labour markets more flexible. This paper presents the argument that such pessimism is excessive: a significant part of the productivity growth differential between the US and the EU is cyclical, and is already turning around. In addition, there are areas in which the EU is structurally better prepared than the US to face the challenges of globalisation.

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LET'S STOP BEING GLOOMY ABOUT EUROPE

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PAUL DE GRAUWE*

Introduction

The perception about Europe's economy has been almost universally negative during the last ten to fifteen years. Declining productivity, losses in market shares, lagging innovation in hi-tech industries, stubbornly high unemployment, declining population and intractable pension problems; these are the problems that have created a perception that Europe is on the decline. This negative perception has been fed by a positive perception of the US economy: high growth, accelerating productivity growth, low unemployment, flourishing hi-tech industries; these are the US success stories that have provided the contrast against which the dismal economic performance of Europe has been measured.

From this doom and gloom about Europe's economic problems grand theories have been developed as to what Europe should do to stop the economic decline. Invariably, these grand theories have included 'structural reforms' as the magic formula to solve Europe's ills. This suggests that Europe's ills have deep structural causes that can only be solved by deep structural changes.

This focus on the deep structural problems in Europe is, it can be argued, excessive; some of the problems are cyclical in nature and will tend to disappear. The reverse side of this coin is that some of the US successes that are perceived to be the result of deep positive structural features are also the result of cyclical factors that will tend to disappear. With the start of the recession in the US these 'structural strengths' of the US economy may in fact be vanishing rather faster than anticipated.

This does not mean that Europe does not have structural problems. The ageing population, for example, and the ensuing pension problems are structural in nature and are serious. There are rigidities in Europe's goods and labour markets. We will give due attention to these problems but will argue, however, that these structural problems are insufficient in themselves to explain Europe's dismal economic performance over the last ten years.

1. The facts about Europe's dismal economic performance

Per capita income in the EU15 has remained stuck at about 70% of the US level since the 1970s. While per capita income of the EU had been catching up with the US prior to 1970, since that date the catching-up process has stalled. Underlying this phenomenon are quite different trends in productivity and working hours. In order to shed some light on the question we reproduce here a figure from the Sapir report (see Figure 1). The figure first confirms that EU per capita GDP has remained at approximately 70% of US per capita GDP since 1970.

* Paul De Grauwe is Professor of International Economics at the University of Leuven, Associate Senior Research Fellow at CEPS and was a member of the Belgian parliament during 1991-2003. This paper is based on his Julian Hodge Lecture, delivered 25 April 2007 at the Cardiff Business School, Cardiff. The author is grateful to Daniel Gros and Patrick Minford for insightful discussions and comments.

GDP per capita can be decomposed as follows:

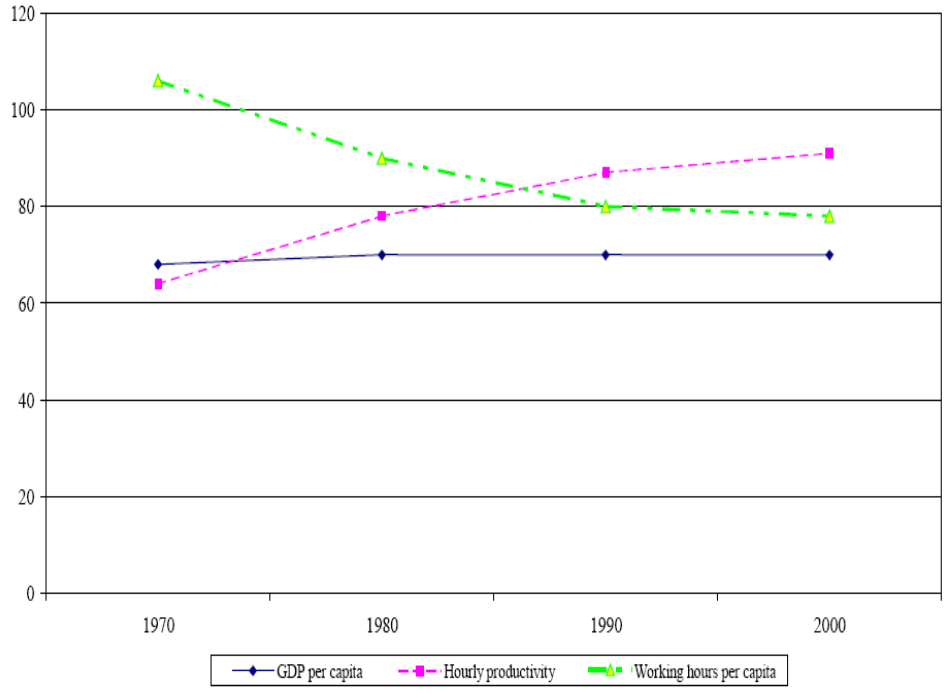
$$\frac{GDP}{N} = \frac{GDP}{H}\frac{H}{N}$$

where $\frac{GDP}{N}$ is per capita GDP (N is the number of inhabitants), H is the total number of hours worked; thus $\frac{GDP}{H}$ is the production per hour worked (hourly productivity) and $\frac{H}{N}$ is to be interpreted as the working hours per capita.

Figure 1 shows the evolution of these variables since 1970, where the US is the benchmark (US=100). We observe that underlying the unchanged per capita GDP of the EU (relative to the US) are strongly opposing tendencies in hourly productivity and hours worked per capita. We see that since 1970 hourly productivity in the EU has continued to increase faster than in the US so that in 2000 hourly productivity in the EU had almost reached the US level. This gain in productivity was almost completely offset by a decline in the number of hours worked by EU citizens. Thus it appears that the EU was quite successful in bridging the productivity gap with the US but that this gain was completely offset by a reduction of the total number of hours worked in the EU.

Before trying to give a welfare interpretation to these trends, it is important to discuss some methodological issues. The first has to do with the measurement of productivity, the second with the hours worked per capita.

*Figure 1. GDP, hourly productivity and working hours per capita in EU15 and the US**



* (US=100).

Source: Sapir et al. (2004).

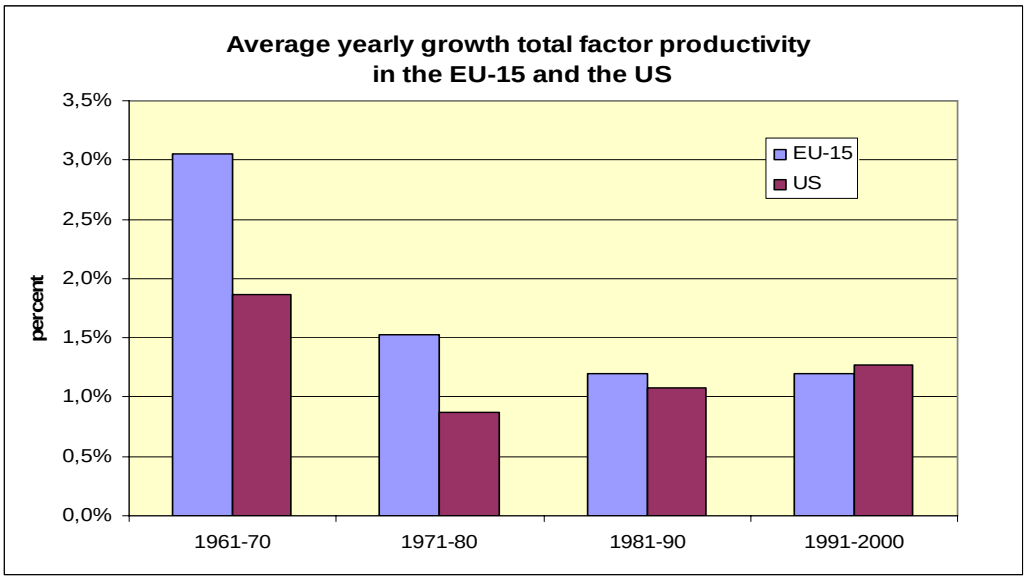
1.1 Productivity

It is clear that measuring productivity is not an easy matter. Its interpretation is even more hazardous. Two problems have been stressed in the literature (see Blanchard, 2004) for a more extensive discussion). A first problem is that the productivity growth numbers of the EU may overestimate the true productivity growth. The reason is that minimum wages, which are very prevalent in the EU, tend to keep the low skilled (low productivity) workers out of jobs, and thus outside the statistics used to compute average productivity. Minimum wages work like Olympic minima. When the minimum Olympic qualifying jump is raised, the average of the high jumpers attending the Olympics will be higher, even if none of these participants now jumps higher. While certainly a problem, the quantitative importance of the existence of minimum wages on measuring productivity is likely to be small. This can be seen as follows. Unemployment in the EU is around 7.5% while the US unemployment rate is about 4.5%. Assume that the extra EU unemployment is all due to the existence of minimum wages that are too high. This means that 3% of the EU labour force is out of work because of excessively high minimum wages. Thus, to compare the EU productivity average correctly with the US one should add these 3% of low productivity workers to the EU employed workers and recompute the average productivity. The latter would now be lower, but by how much? The effect must be very small. Assume that the 3% low skilled workers that are added to the workforce realise a productivity that is half of the average productivity of those employed. In that case we find that the average EU productivity level would be reduced by 1.5%. Thus instead of achieving an hourly productivity level of 92% of the US level (in 2000), the EU productivity level would have to be scaled down to 90.5%. This recomputing of EU productivity levels would hardly affect the yearly growth rates that have been systematically higher in the EU than in the US since 1970.

There is a second problem with the productivity numbers. This has to do with the fact that higher wage costs in the EU give incentives to EU firms to use more capital intensive production processes. As a result, EU workers are endowed with a larger capital stock raising their productivity. In order to deal with this problem one can compare the evolution of total factor productivity between the EU and the US. We show these numbers in Figure 2. We observe that until the end of the 1980s total factor productivity was increasing faster in the EU than in the US, until the 1990s when these growth rates in the EU and the US converged.

From the preceding evidence it appears that after a period of catching-up the EU total productivity growth figures have settled to levels comparable to the US (we will focus on the post-2000 period in the next section). In some EU countries (Belgium, France, Italy and the Netherlands) the average productivity per hour exceeds the US level.

Figure 2.



Source: http://ec.europa.eu/economy_finance/indicators/annual_macro_economic_database/ameco_applet.htm

1.2 Hours worked per capita

We saw earlier that the EU productivity growth was compensated by a reduction in total working time per capita. How do we interpret the latter phenomenon? Is this the result of a choice of European citizens to transform the productivity growth into more leisure time, in contrast to the US citizens who decided to transform the productivity gains into more production of goods and services? Or alternatively, is it due to high labour taxes in the EU that distort the choice between labour and leisure, as has been argued by Prescott (2003)?

After careful analysis, Blanchard (2004) comes to the conclusion that high labour taxes explain only a small fraction of the decline in total labour time in the EU. In addition, labour taxes do not simply fall out of the sky. They are the outcome of a democratic process that, like the market system, reveals preferences on the part of the citizens. Very much like the low labour taxes and low social security benefits in the US reveal the preferences of US citizens. It is therefore quite legitimate to conclude that the declining labour time observed in the EU is the result of choices made by EU citizens.

The question that arises here is why have EU citizens made such drastically different choices from US citizens? After all they live in countries with comparable institutions and levels of economic development. One possible answer is the following. The utility of leisure time has a collective component. For most individuals extra leisure time spent alone does not add much utility. The utility of extra leisure time for one individual increases when others (spouse, family, friends) also have extra leisure time. The reason is that the greatest benefits of leisure time for most individuals are obtained when this leisure time is spent with others. This collective good component of leisure time creates a problem of collective action. If leisure time were purely a private good, an individual desiring more leisure time could decide on his/her own to take more leisure and that would be it. Given the collective good nature of leisure time an individual's desire to enjoy extra leisure can only be fulfilled if many others decide to take more leisure at the same time. Collective action is necessary. But collective action is costly.

This is where the role of trade unions comes to the fore. Trade unions, encompassing as they do a large part of the labour force, are institutions that can overcome the collective action problem in the demand for leisure. They are capable of organising individual's desire for more leisure time into collective action. European trade unions have typically been willing and capable of doing so. As a result, they have successfully translated the individual's desire for more leisure time into a collective demand for more leisure time. The contrast with the US is great. The weakness of US labour unions has not made it possible to overcome the collective action problem of the individual desires of US workers for more leisure time (see Alesina et al., 2005).

2. Some preliminary welfare implications

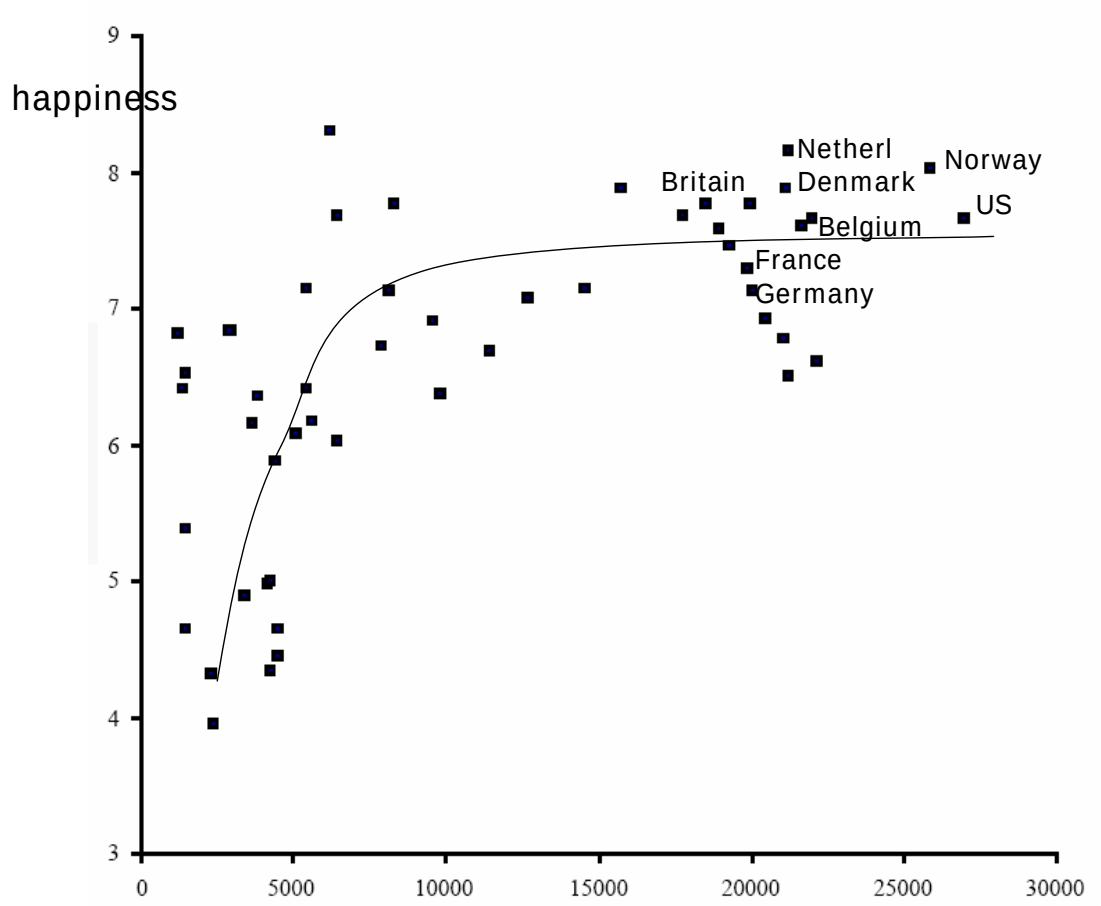
There is a widespread view that the US has developed a superior economic model compared to the European model (if such a single model exists, but that is the topic of a later discussion). The single most important indicator used in this evaluation is the fact that the EU has been unable to catch up with the US as far as per capita income is concerned. Thus, the US with a per capita income that exceeds the EU's by more than 30%, has delivered more goods and services to its citizens than the EU, and thus more welfare.

Economists have learned that what matters for welfare is neither GDP nor per capita GDP. The analysis of the previous section teaches us that the simple comparisons of per capita GDP cannot be used to make valid welfare comparisons. The US has achieved higher per capita income levels than the EU not because of superior productivity achievements but primarily because US citizens have decided to work more and to take less leisure time. EU citizens have made other choices and have used the productivity gains not so much to increase the production of extra goods and services but to take more leisure. There is no way one can conclude from this evidence that the US has produced more (or less welfare) for its citizens than the EU.

This conclusion is confirmed by studies that measure happiness ("satisfaction in life") across countries (see Layard, 2005) and Frey & Stutzer, 2002). These measures are of course fraught with methodological difficulties. Yet the striking fact emerging from numerous studies is that (after some threshold value) increasing per capita income does not seem to affect happiness of individuals (the 'Easterly paradox'[1]). The following graph is illustrative of a phenomenon that is widely observed in happiness studies comparing different countries. After a threshold value of about $10,000, increases in per capita income cease to affect measures of happiness anymore. These studies also indicate that the superior level of per capita income of the US does not appear to have raised levels of happiness above the levels observed in the EU.

[1] This is the finding by William Easterly that when income increases above a certain threshold, happiness ceases to increase.

Figure 3. Happiness and per capita income ($)



Source: World Values Surveys and World Bank, World Development Report.

There is therefore no reason to conclude that the US economic model is in any way superior to the EU models. The greater choice of goods and services it provides for its citizens does not seem to have made US citizens happier on average than EU citizens. One reason could be that in order to enjoy these extra goods and services (a source of happiness) US citizens have to toil harder (a source of unhappiness).

There are other dimensions of welfare (income distribution, unemployment, social security, life expectancy) that should be drawn into the analysis. The Human Development Index as produced by the World Bank is an attempt to do this. It shows that despite its superior per capita GDP the US development index is only average among the most highly developed countries, and does not surpass the EU average.

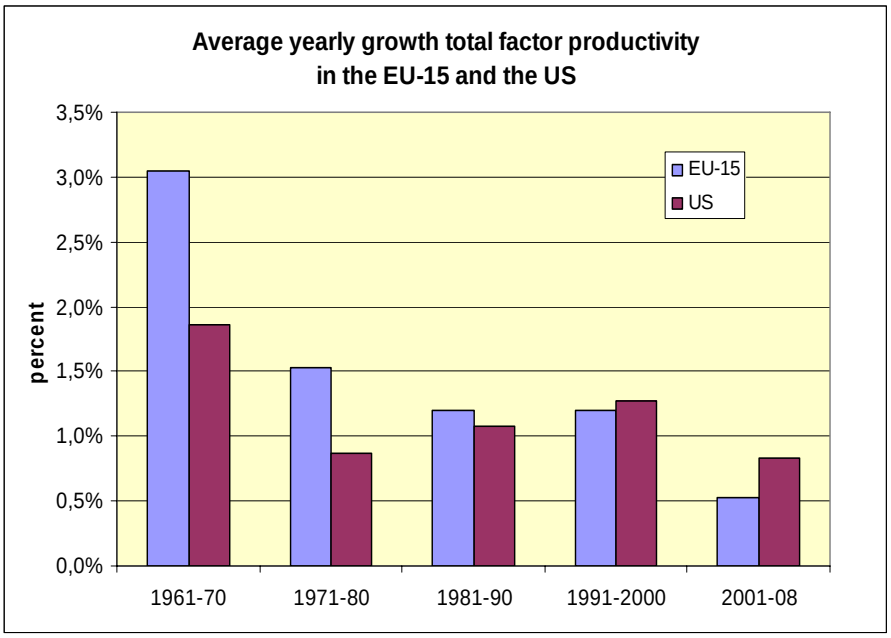
3. The post-2000 productivity developments: structural or cyclical?

Since the late 1990s productivity growth in the EU has stalled. We show this in Figure 4, which is a follow-up of Figure 2 extending the period to 2008. We observe that the slowdown of total

factor productivity growth in the EU since 2000 has been significant.[2] This has led many observers to speculate that this reflects a long-term downward trend in EU productivity growth. Grand theories are now popular – explaining that Europe is a lost continent, full of structural rigidities incapable of reforming itself and unable to face the competitive forces of a globalised economy. However, the same figure also shows a significant decline in the US productivity growth. Yet this does not seem to have entered the perception of many analysts, nor led to grand theories of the inevitable decline of the US economy.

Sometimes just a different presentation of the same figures can change the perspective. Here is a new graph presenting the same productivity figures as indices over the period 1961-2008. The visual impression obtained from this picture is quite different from the one obtained from Figure 4. It appears that most of the catch-up phase of EU productivity ended at the start of the 1980s. From then on productivity growth has been pretty much the same in the EU15 and in the US. But there are quite significant cyclical movements.

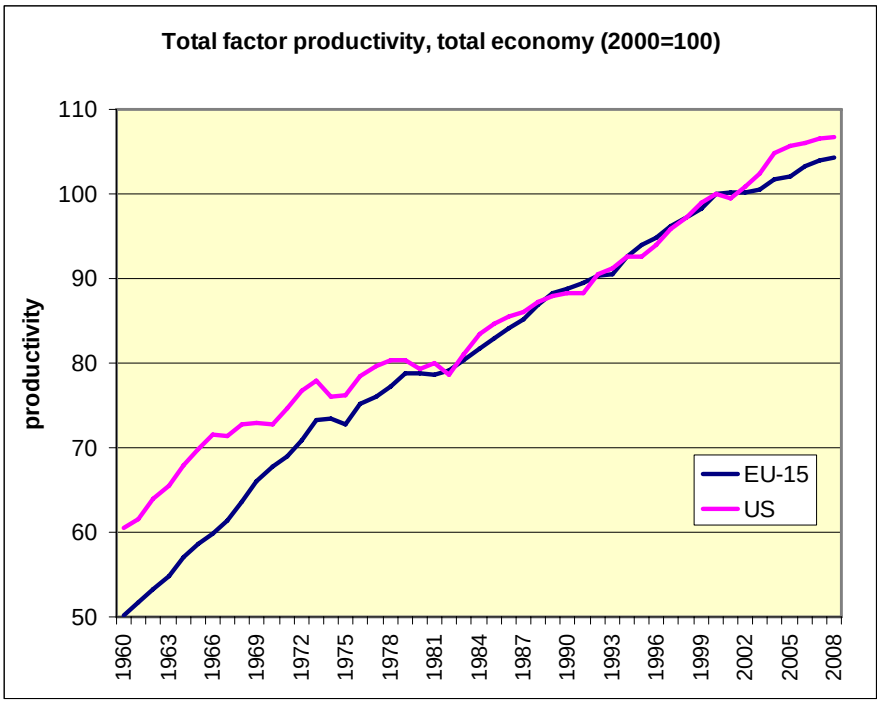
Figure 4. Productivity growth in the EU and the US



Source: http://ec.europa.eu/economy_finance/indicators/annual_macro_economic_database/ameco_applet.htm

[2] In fact the slowdown came a few years before 2000. The fact that during the 1990s average yearly productivity growth in the EU was at the same level as in the US has to do with the low productivity growth in the US during the early 1990s.

Figure 5. Productivity growth in the EU and the US



Source: http://ec.europa.eu/economy_finance/indicators/annual_macro_economic_database/ameco_applet.htm

We illustrate these cyclical movements in productivity growth for different periods in the US and contrast these with recent EU developments. In Figure 6 we show the yearly productivity growth numbers for the US during 1976-91. Figure 7 shows the productivity growth numbers in the EU15 during 1995-2008. It is striking to find how cyclical these movements are. Between 1976-82 there was a pronounced slowdown in US productivity that certainly matches the recent slowdown in the EU15 in intensity. A similar slowdown occurred in the US from 1984 to 1991. Note also that the whole period 1976-91 was one of low productivity growth in the US (0.9% per year) that matches the one observed in the EU15 during 1995-2008 (0.85% per year). (The comparison of Figures 6 and 7 also shows that the US figures are more variable in the short run than the EU figures.)[3]

This comparison of different historical episodes suggests that there is some hazard in interpreting the recent productivity growth decline in the EU as a structural phenomenon. It brings to mind the stories that were told about the US at the end of the 1980s and the early 1990s that the slow productivity growth in the US reflected deep structural problems in American capitalism. These were the days when well-known economists like Paul Krugman wrote best sellers predicting the long-term decline of American capitalism[4] illustrating how risky it is to extrapolate what was a cyclical phenomenon into the indefinite future, and to develop theories explaining these so-called 'structural developments'.

[3] See also Robert Gordon (2003) who has claimed for a long time that a significant part of the US productivity growth of the last ten years has an important cyclical component.

[4] See his *The Age of Diminished Expectations*. He was not the only one. Lester Thurow predicted in his 1993 *Head to Head: The Coming Economic Battle among Japan, Europe and America* that Europe under the leadership of Germany would be the winner.

Many analysts commenting on Europe risk making the same mistake. Based on the evidence of the slowdown in EU productivity growth since the late 1990s, theories have been developed to explain this slowdown. The most popular one is that the EU suffers from structural rigidities, both in the goods and the labour markets. The rigidities in the goods markets are particularly relevant in the framework of these theories. Excessive regulation, protectionism, and barriers to entry prevent EU-firms from moving into the new hi-tech industries and from developing new products and new technologies. As a result, productivity is negatively affected. This theory is now repeated so often that it has become a universally held belief in the EU. It has become part of the conventional wisdom.

Figure 6. Productivity growth in the US

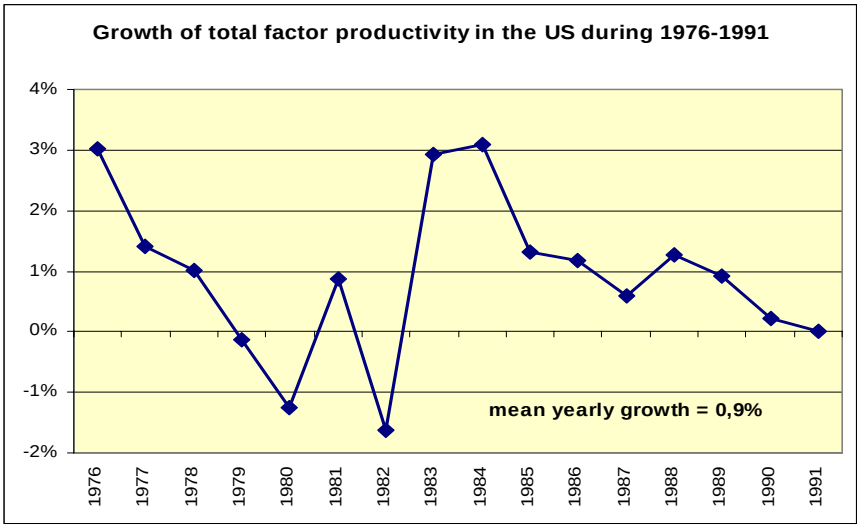
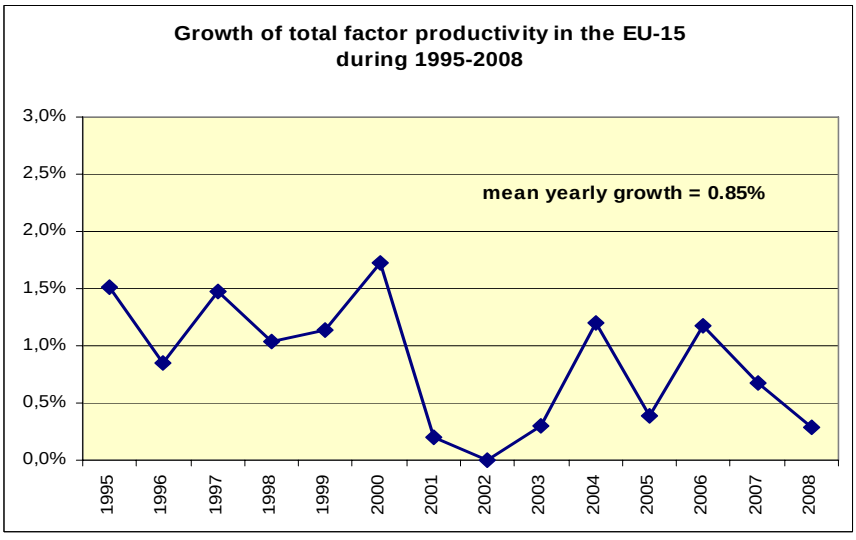


Figure 7. Productivity growth in the EU15



Source: http://ec.europa.eu/economy_finance/indicators/annual_macro_economic_database/ameco_applet.htm

There is no doubt that there are structural rigidities in the EU. The question, however, is whether they explain the recent productivity slowdown. One way to find out is to exploit the fact that the productivity developments within the EU have been very different. If the source of

the slowdown is to be found in goods market rigidities one should find that countries with fewer goods market rigidities have been less prone to the productivity slowdown than countries with more rigidities. Put differently we test whether differences in product market regulations are good predictors of different productivity developments.

The OECD has constructed an index of product market regulation. We will use this here. This index synthesises different indicators of product market regulations (e.g. price regulations, barriers to entry, protectionist measures, etc.). These indicators are described in more detail in the appendix. We show the index computed for the year 2003 together with the average productivity growth during 2001-08 in Figure 8. On the horizontal axis the index of product market regulation (PMR index) is shown. The higher the index the more regulated are the product markets of the country in question. On the vertical axis we present the average growth rate of labour productivity (GDP per employee) during 2001-08.

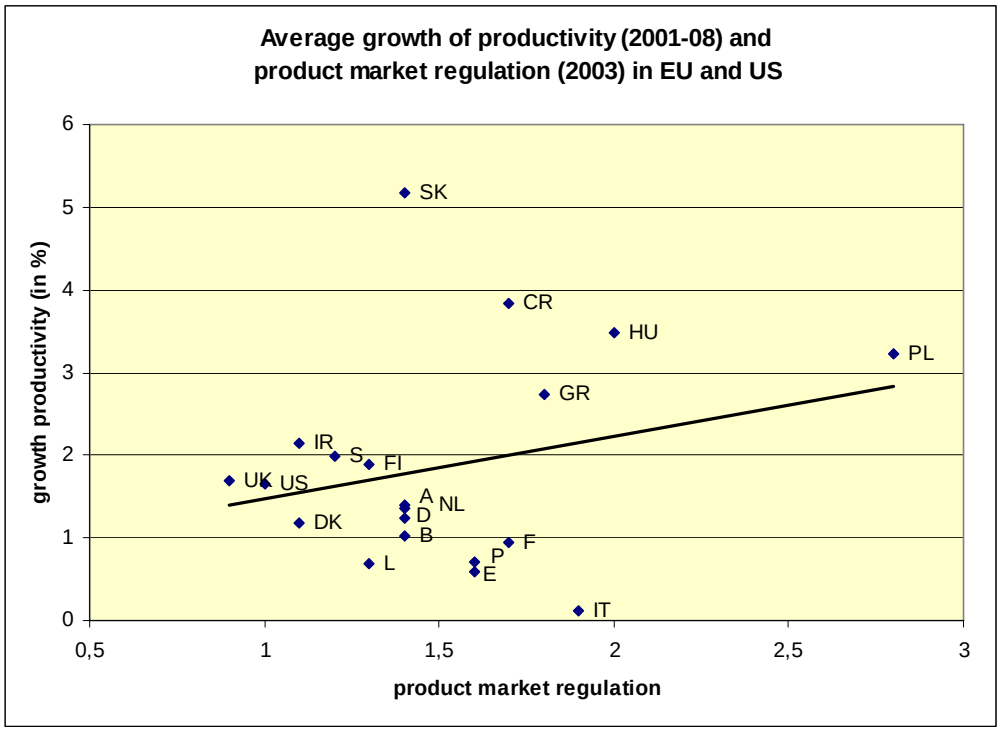
The most striking feature of this figure is that the index of product market regulations does not seem to have any relevance in predicting the wide divergence in productivity growth developments. In fact it seems to predict the sign wrongly. A simple regression analysis (see Table 1) reveals that the sign of the PMR index is positive, predicting that countries with higher product market regulations have higher productivity growth. Since the coefficient is not statistically different from zero the correct conclusion at this stage is that the PMR index has no significant effect on productivity growth.

The previous analysis suffers from a potential bias due to the omission of an important explanatory variable, i.e. the initial level of GDP per employee. Countries with a low level of economic development (low GDP per employee) tend to have a lot of product market regulations. They nevertheless grow fast because they are in the catch-up phase of economic development. Thus the PMR index correlates with the omitted variable, GDP per employee.

We therefore ran a regression adding the initial level of GDP per employee as an explanatory variable. The results are shown in Table 2. We find that adding the initial level of per capita GDP dramatically raises the explanatory power of the regression. We now explain 65% of the cross-country variation in productivity growth compared to only 6% when initial per capita GDP was not included (Table 1). Second, we observe that the PMR index now has the correct sign and that it is statistically significant.

Statistical significance, however, does not tell the whole story. We would also like to know about economic significance, i.e. how quantitatively important is product market regulation in explaining differences in productivity growth across countries. In order to know this we compute the effect of a one standard deviation change in the PMR index on productivity growth differentials. The standard deviation of PMR = 0.43. We multiply this number with the coefficient of PMR in Table 2 and obtain the number 0.56. This means that a one standard deviation increase in the PMR index reduces productivity growth by 0.56%. On the whole one can conclude that although the PMR index has a statistically significant effect on productivity growth, its economic significance is weak. Most of the inter-country variation in productivity growth differentials is explained by the initial level of development.

Figure 8. Productivity growth as against product market regulation



Source: For the PMR index, Conway et al. (2005) and for the productivity growth, http://ec.europa.eu/economy_finance/indicators/annual_macro_economic_database/ameco_applet.htm.

Table 1. Simple regression analysis

Dependent Variable: productivity		
Variable	Coefficient	t-Statistic
C	0.73	0.69
PMR	0.75	1.10
R-squared	0.063	

Table 2. Regression analysis plus GDP per employee

Dependent Variable: PRODUCTIV08		
Variable	Coefficient	t-Statistic
C	18.70	5.48
PMR	-1.34	-2.32
GDPCAP	-3.30	-5.37
R-squared	0.653	

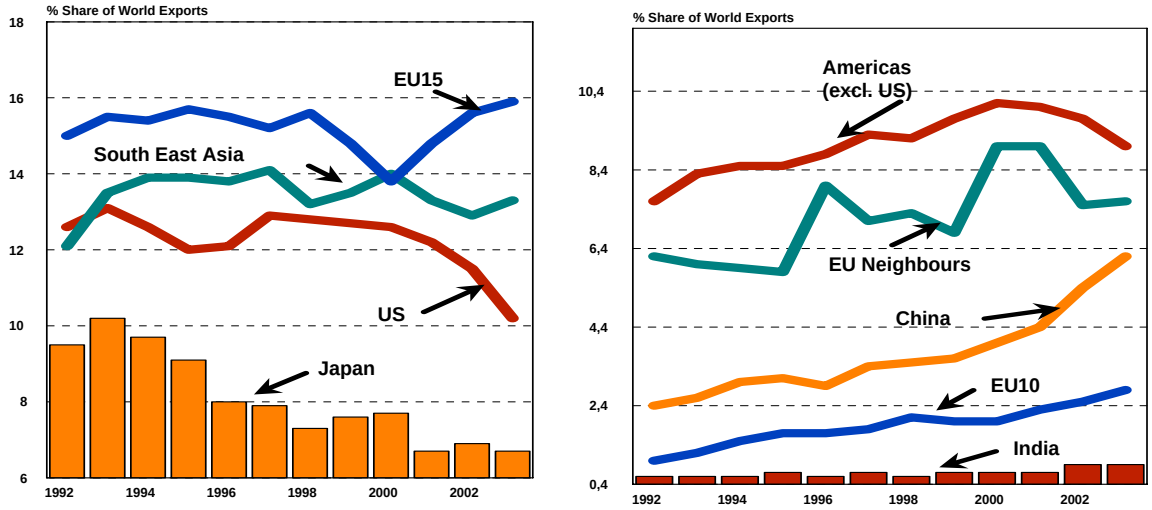
Note: The initial level of per GDP per employee (GDPCAP) is expressed in logarithms.

We conclude that the widely different levels of product market regulations across countries have relatively little power in predicting the different productivity growth experiences of the same countries.[5] As a result, the recent slowdown in productivity growth in the EU countries is only loosely related to the existence of structural rigidities in product markets.

4. Is the EU15 losing competitiveness?

The grand stories about the inevitable economic decline of Europe that results from deep-seated rigidities have created the perception that the EU is losing out in the worldwide competitive battle for market shares. Again the impression is created that the greater dynamism and the freer product markets in the US have allowed this country to be more successful in adapting to the pressures of globalisation. As so often, these perceptions are not based on facts. Let us look at the trends in export market shares of the US and the EU15 since the early 1990s. We show the evidence in Figure 9 that is reproduced from *The EU Economy: Annual Review 2005* issued by the European Commission. The striking fact is that the US has lost market share in world exports during 1992-2003 while the EU15 has been able to maintain its share. There are undoubtedly cyclical factors in these developments (the recent strong decline of US market shares especially, may be partly due to valuation effects resulting from the depreciation of the dollar). Yet it is surprising to find that the economy that is universally considered to be the most productive and efficient in the world does such a poor job in maintaining its market share in world exports, while the EU15, which is perceived to be an economic failure, has kept its market share relatively intact during the last fifteen years.

Figure 9. World export market shares for different countries/country groupings



Source: European Commission, *The EU Economy: Annual Review 2005*.

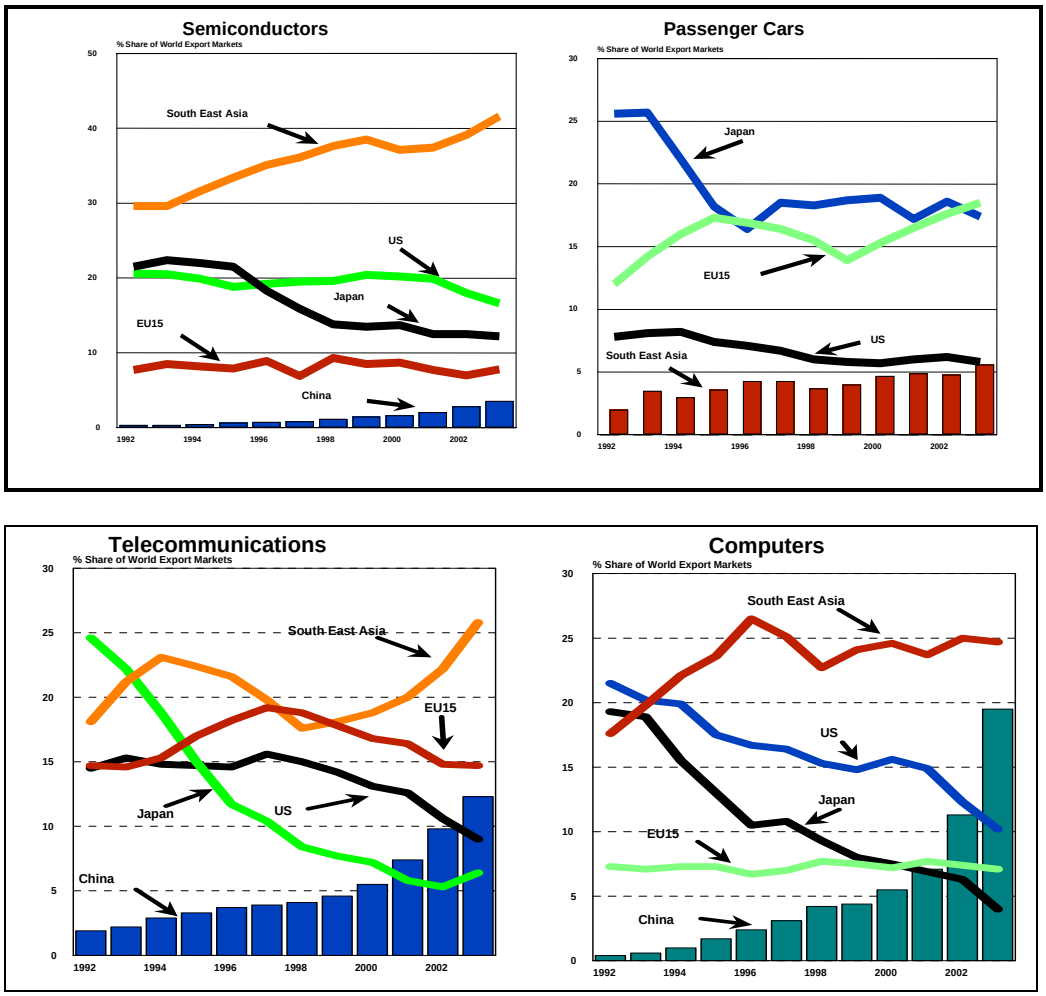
The next figure shows the evolution of the market shares for different product categories during the same period. The product categories shown here are mostly in the high- and medium tech categories. Again it is striking to find that the EU15 has been more successful than the US in maintaining market shares, especially in high-tech product categories. This confirms again that the popular view of a weak Europe unable to compete in a globalised environment is not based

[5] A similar result was obtained by Griffith et al. (2006).

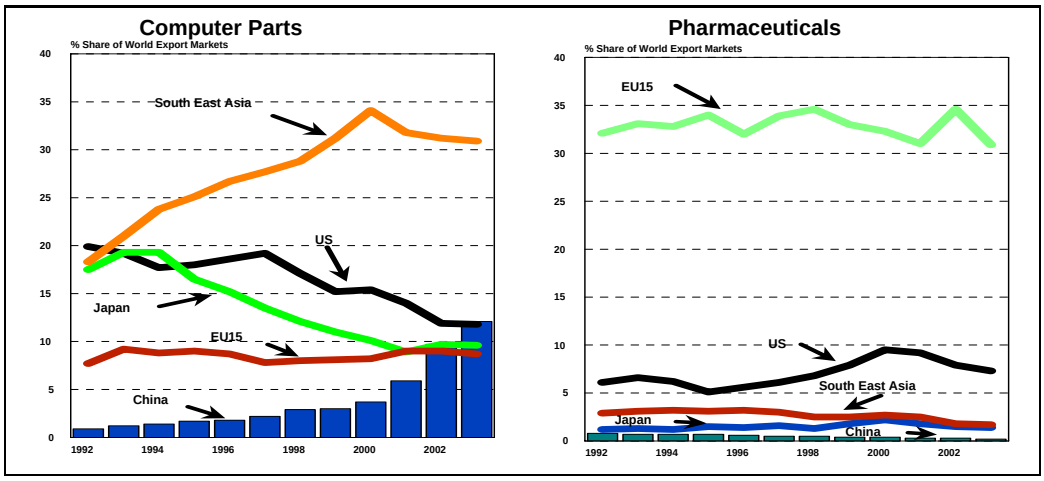
on fact, and that the corollary of this view i.e. that the US economic powerhouse is successfully competing in world market places is equally based on fiction.[6]

One can conclude that the EU15 compares favourably with the US as far as the competitiveness and the productivity of its open sector is concerned. Things are somewhat different where the non-traded (service) sector is concerned. Work by van Aark et al. (2007) and the OECD (2007) shows that in the retail sector EU productivity growth lags behind US productivity growth. There is a wide consensus that this is due to the significantly higher level of government regulations in the EU that aim at protecting the typically small shopkeepers. As a result, the introduction of more efficient distribution systems is retarded (van Aark et al., 2007).

Figure 10. Evolution of market share for different products



[6] See also Havik & McMorrow (2006) on this.



Source: European Commission, *The EU Economy: Annual Review 2005*.

5. Two tales about the US and Europe

Two opposing views can be formulated to explain the contrasting recent developments of the US and the EU economies. These two views originate from two very different theories of the business cycle. The first view runs as follows. The IT revolution led to major technological changes that had the effect of boosting US productivity growth. US consumers saw this happening and correctly inferred that their permanent income had increased. This led to a boom in consumption. It was quite rational for US consumers to do so because the increase in the growth rate of productivity increased their 'permanent income', allowing them to borrow in the expectation that the much higher future income would make the debt (including the foreign one) easy to service.

In this view, the recent economic slowdown in the US is a temporary phenomenon. The consumption boom had the effect of raising inflation and the US Fed correctly reacted by hiking the interest rate. Once inflation is brought back on track, the US economy can return to its long term growth rate, which has permanently been increased by the IT revolution. A soft landing will result.

This optimistic view is steeped in the 'real business cycle' theory that is nowadays the dominant academic theory. According to this theory, productivity shocks drive the business cycle. A positive productivity shock allows agents to borrow on their future expanded income. A boom ensues. A negative productivity shock lowers permanent income, inducing consumers to borrow less.

This theory can also be used to explain the low growth in the eurozone countries since the late 1990s. The source of this slow growth is a decline in productivity growth, which resulted from 'structural rigidities' that hinder Europe from riding on the waves of the IT revolution. The decline in productivity growth lowered consumers' permanent income and reduced their willingness to consume. As a result, economic growth in the eurozone was lethargic.

From this perspective, the recent upsurge in economic activity in the eurozone should be seen as a temporary phenomenon. As long as structural reforms are not undertaken, productivity growth will remain low, and the eurozone will have to return to its lethargic rate of economic growth.

Thus the dominant economic theory of the business cycle predicts that both the recent downturn in US economic growth and the upturn in eurozone growth that started in 2006 are temporary phenomena. Good news for the US; bad news for the eurozone.

There is an alternative view, though, with very different implications for the future. This view starts from the idea that economic agents find it difficult to understand how the economy functions. For example, when the IT revolution sets in, it is not clear in consumers' minds what this will mean for their future pay checks. This ignorance makes agents susceptible to herding behaviour, both as consumers and investors. They follow the lead of opinion-makers who claim to know the truth. In such an environment a wave of excessive optimism can easily develop. This optimism has a self-fulfilling character: because of their optimism consumers consume more and investors invest more, thereby validating the prevailing optimism.

An important feature of this wave of optimism is that the additional investment increases productivity thereby adding an extra self-validating feature. The economy appears to move to a new and permanent 'optimistic equilibrium'.

Nothing is permanent, though. The excessive optimism is unsustainable and leads to a correction. Doubts about the rosy picture set in. This easily degenerates into pessimism about future economic developments. A reverse movement is set in motion with the same self-fulfilling features. Pessimism induces consumers and investors to spend less, thereby validating the existing pessimism. Productivity growth declines. The economy appears to settle into a 'pessimistic equilibrium'.

The important feature of this alternative theory of the business cycle is that productivity growth is only partly an exogenous variable. It is, of course, influenced by technological and structural factors. There is, however, also an endogenous component to productivity growth that is driven by the willingness to invest, and this in turn is driven by the state of optimism or pessimism.

What does this theory imply for the future? If the business cycle is driven by waves of optimism and pessimism, it is much less clear that the slowdown of the US economy is a short-term phenomenon to be corrected soon, nor that the eurozone recovery will quickly peter out and turn back into lethargy. Instead, it is not inconceivable that the US economy gets stuck for a while in a 'pessimistic equilibrium' while the opposite occurs in the eurozone. The latter may very well enjoy staying in an 'optimistic equilibrium' for a while.

Far-fetched? Remember the 1980s and early 1990s when pessimism and low productivity growth prevailed in the US economy. It was followed by a period of euphoria and high growth. It seems more far-fetched to believe that the US will continue to enjoy such a pleasant period indefinitely.

6. So what's wrong with Europe?

We have argued that Europe's weakness does not lie in lagging productivity (apart from productivity in the retail sector) and poor competitiveness. The recent slowdown in productivity is likely to have a strong cyclical component. In addition, the evidence suggests that European firms continue to perform at least as well as their US counterparts in facing the pressures of a globalised environment. This does not mean that Europe does not face structural problems. These problems, however, are to be found elsewhere. We identify two areas here. The first one relates to the financial implications of Europe's choice for more leisure. The second one has to do with Europe's inability to integrate relatively large segments of the population into the labour force.

6.1 Who pays for leisure and pensions?

We have seen that EU citizens have chosen to convert part of the productivity growth into extra leisure time. There is nothing inherently wrong with such a choice. The problem is that this choice has coincided with major increases in the longevity of EU citizens during the last few

decades. The latter is of course good news. However, as the increased longevity coincided with a trend to fewer working hours and early retirement, it created an unexpected budgetary problem. It now appears that the reduced working time and the simultaneous increase in longevity of the EU citizens has created an unsustainable budgetary problem in many EU countries.

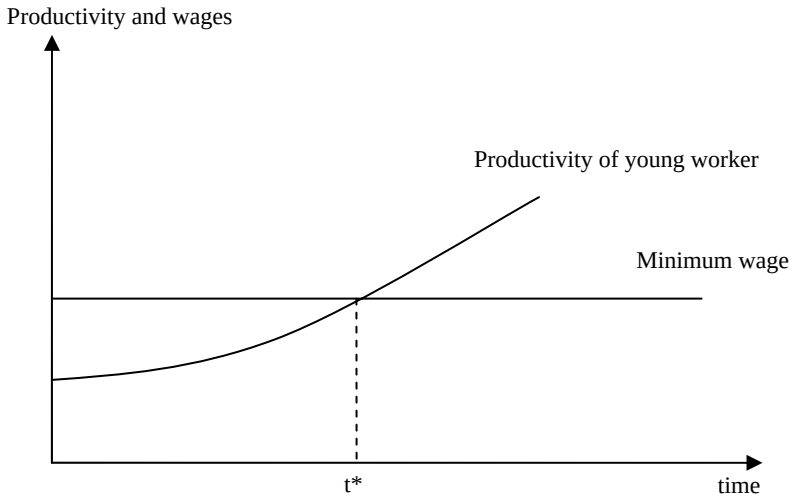
This budgetary problem creates the need to confront the EU citizens with the financing implications of their choice for more leisure time. The choice they now face is to keep their leisure time intact (including the early retirement schemes). In that case taxation on those who work will have to increase and/or pension payments will have to be reduced. The alternative choice EU citizens face is to reduce their leisure time again (reducing or eliminating early retirement schemes), which will allow the avoidance of higher taxation of those who work and/or to maintain more generous pension payments.

This choice has not yet been spelled out sufficiently clearly in many EU countries. As a result, decisions are made by default. And these imply that the existing early retirement schemes are kept in place, so that inevitably a combination of higher labour taxes and lower pension payments will be the outcome. This is unfortunate as it will tend to increase the tax burden on the working population, reducing their welfare.

6.2 Insiders and outsiders

The social protection schemes developed in many continental EU countries combine two features that have the effect of creating serious obstacles for newcomers to enter the labour market. These are minimum wages and employment protection legislation. The combination of the two is a deadly weapon aimed against the young who try to find a place in the job market. It is easy to see why this is so. Young workers typically have a productivity that is temporarily low because of a lack of experience. Their human capital and thus their productivity can only be increased by working. Given a chance to work their productivity will increase over time. We show this in Figure 11 by the upward sloping curve showing how over time the productivity of a young worker increases. We show the minimum wage by the horizontal line. It has the feature that it exceeds the initial level of productivity. As the worker gains experience on the job, his productivity increases and at some point (t*) exceeds the minimum wage, making the employment of the young worker profitable for the firm.

Figure 11. Effect of minimum wages

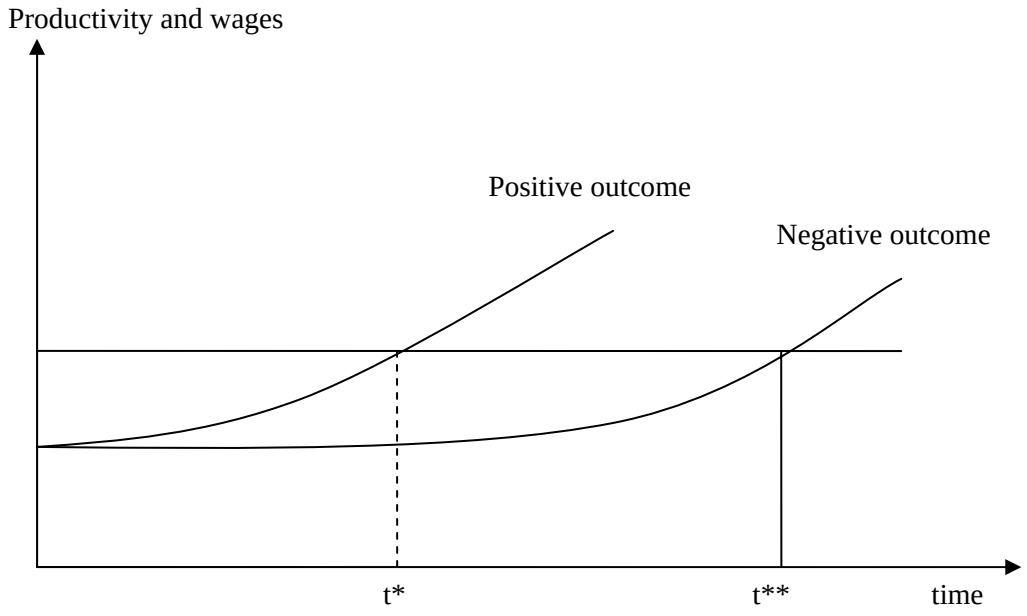


Thus the minimum wage per se does not necessarily discourage the hiring of young workers. There is a period during which the productivity is below the minimum wage. The firm will then be making losses employing the young worker, but this can be seen as an investment that will earn a profit in the future.

The problem for the firm is that at the moment of hiring, the future productivity development of the young worker is not known with certainty. For example, the productivity curve can be stretched longer shifting t* to the right, making the investment in the young worker unprofitable (see Figure 12). As a result, firms will only be willing to hire the young worker if they have the option of firing the worker when it turns out that his/her productivity schedule does not meet the minimum wage fast enough.

Now comes the employment protection legislation. In many countries, (France is a good example), the law imposes on the hiring firm that the worker be given a permanent contract that can only be rescinded after paying a very high penalty. It is easy to see that under those conditions many firms will be reluctant to hire workers whose future productivity schedule is unknown to them, while they know with certainty that there will be an initial period during which the employment of the worker will be loss-making. In this sense the combination of minimum wages and tight employment protection is a lethal weapon aimed at the young and prevents them from finding a job.

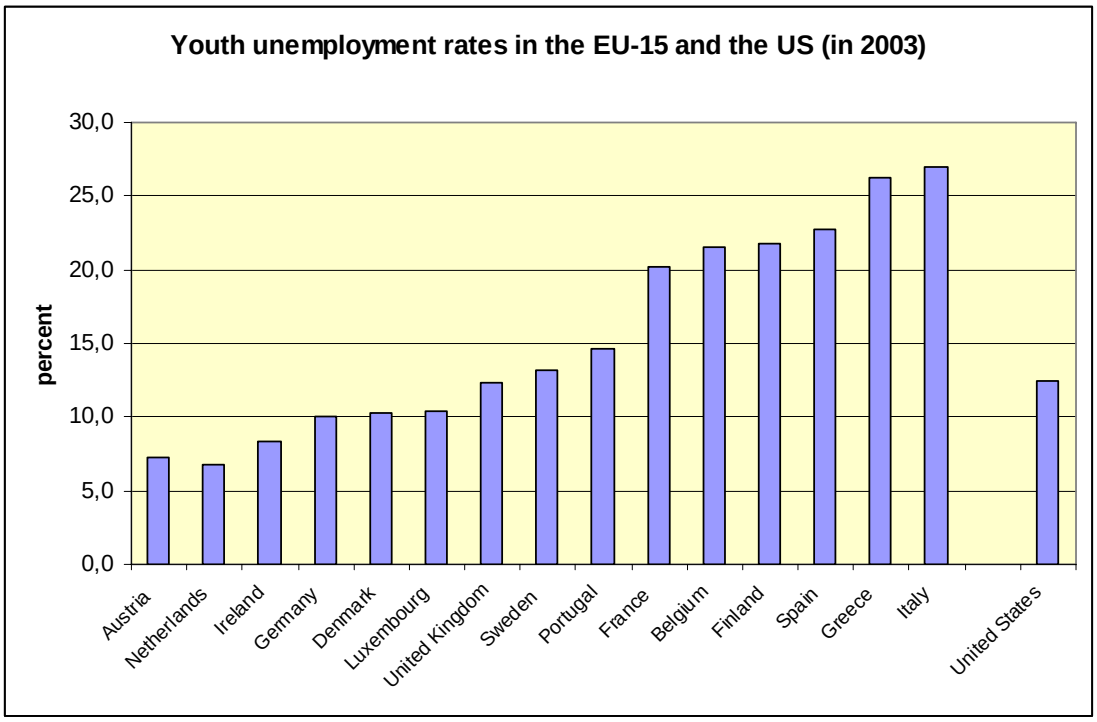
Figure 12. Effect of minimum wages when future productivity is uncertain



We show the youth unemployment rates in the EU and the US (2003) in Figure 13. There are two noteworthy observations to be made. First, there is a wide disparity within the European Union as far as youth unemployment is concerned. We will return to this feature when we discuss models of social security. Second, youth unemployment rates of a number of EU countries are very high, exceeding 20%. With the exception of Finland, these tend to be Southern European countries. As has been documented by Sapir (2005), these are the countries where the kind of employment protection schemes discussed earlier tend to be prevalent.

There can be no doubt that the high youth unemployment rates observed in a number of EU countries pose serious economic and social problems. *Economic* because a part of the future human capital of these nations is left untapped, reducing their long-term growth potential; *social* because the unemployed young lose their sense of purpose and self-esteem, creating a potential for social unrest and violence. It is clear, therefore that these countries will have to reform their social systems so as to strip them from their protectionist features against the young. Resistance to do so is strong, however, as the recent upheavals in France testify, when the government introduced timid reforms aimed at bringing a little more flexibility into labour contracts.

Figure 13. Youth unemployment rates



Note: Percentage of individuals aged 15-24 in the labour force who are unemployed (ILO definition).

Source: The Statistical Yearbook of the Economic Commission for Europe 2003.

There is also a widespread fear in these EU countries that reforming the social security system implies scaling it down in such a way that all forms of social protection will have to be abandoned. The choice is often presented as a choice between social protection and economic efficiency. Nothing could be further from the truth. There are ways to reform social security systems that maintain strong forms of protection while safeguarding efficiency and competitiveness. We will argue that it is not so much the size of social security systems that matters, but rather the way in which these are designed.

7. Is Europe's social model doomed?

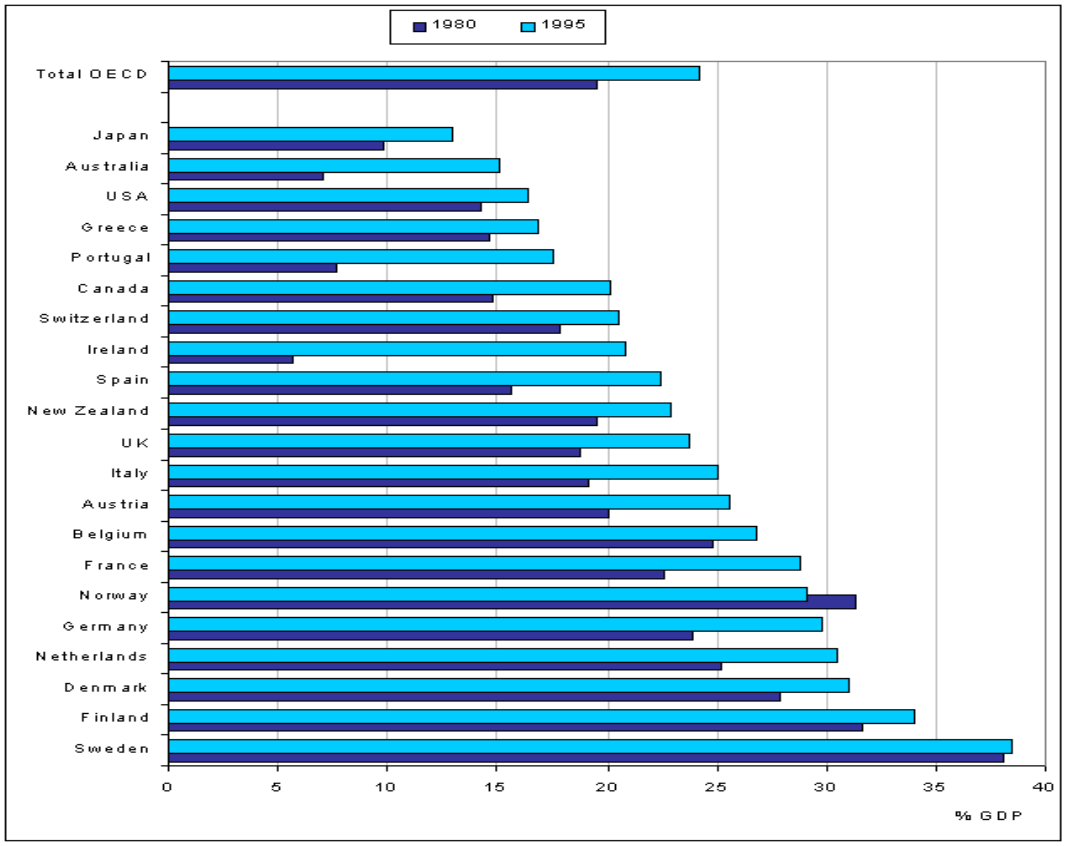
There is a widespread perception, especially in Southern EU-countries, that globalisation endangers Europe's social security system. This view is often formulated as follows. Social security is expensive as it raises the cost of labour. As a result, profit maximising firms tend to curtail their activities in countries with high labour costs and move to places where the cost of labour is low and where the social security system is less extensive. As rich countries open their

markets to imports from countries with lower labour standards and lower wages, employers and governments in rich countries are forced to adopt similar low standards in order to remain competitive. These phenomena create pressures on the countries with well-developed social security systems to scale back on them. A 'race to the bottom' is set in motion, whereby the competitive pressures arising from globalisation slowly erode social security. If not controlled, this dynamics may destroy one of the great social achievements of European countries – their capacity to guarantee a reasonable income to all citizens hit by unfavourable circumstances.

How serious is this race-to-the-bottom scenario? Let us first look at some facts. We show social spending in the OECD countries in 1980 and 1995 as a percentage of GDP in Figure 14. We observe that if anything social spending has increased in almost all OECD countries since 1980. In a second step we relate social spending to measures of competitiveness. The race to the bottom hypothesis suggests that countries that spend a lot on social security pay a price in terms of competitiveness that will ultimately force them to scale down their social security systems.

In order to test for this hypothesis we relate the OECD social spending data to two indices of competitiveness as constructed by the World Economic Forum and by the IMD Business School of Lausanne. These indices synthesise the different dimensions of the competitiveness of nations (cost and price competitiveness, capacity to innovate, quality of human capital, efficiency of government sector, and other indicators). In such a set-up, competitiveness should be understood as the capacity of economies to sustain the forces driving the open world economy (for more detail about how these indices are constructed, see De Grauwe & Polan, 2005).

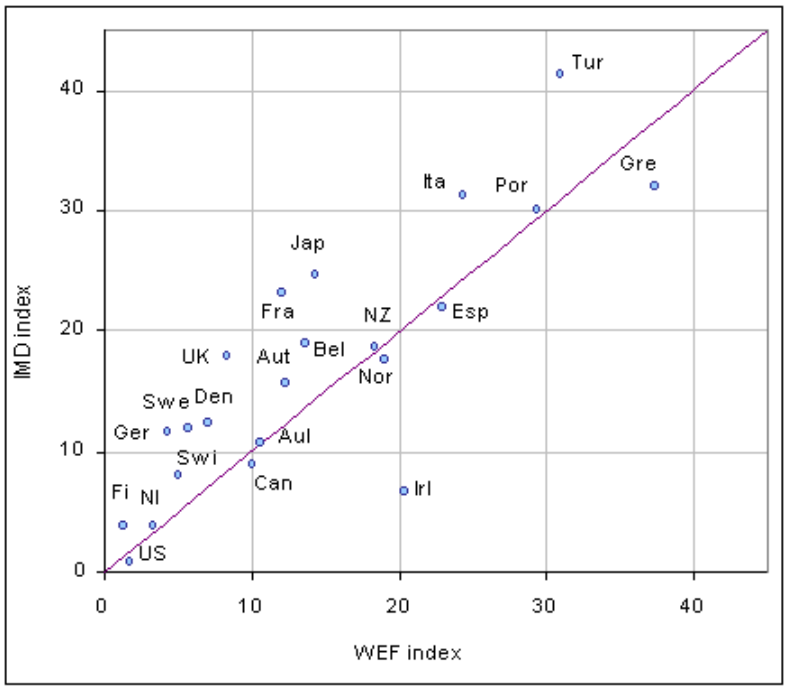
Figure 14. Social spending as a % of GDP in OECD countries



Source: De Grauwe & Polan (2005).

We show the two aforementioned indices and compare the rankings of the countries obtained with these two indices. This is done in Figure 15. We observe that, although the classification of countries in terms of their competitiveness is not the same, there is a reasonable degree of coherence between the two. The correlation coefficient between these two rankings is 0.8 (in 1999, 2000 and 2001).

Figure 15. Scatter diagram of alternative indices of competitiveness.



Source: De Grauwe & Polan (2005).

Next, we compare these competitiveness rankings with social spending by the OECD countries. Social spending includes spending on unemployment, disability, health care, pension, family services (including child benefits) and housing.

Scatter diagrams and regression lines in Figure 6 and Figure 7 show the relation between the competitiveness indices and social spending. The regression results themselves are shown in Tables 3 and 4.

The results suggest that there is a negative relation between the competitiveness ranking and social spending. This means that the countries that spend larger proportions of their GDP on social needs also score best on the competitiveness scale (they have a low number in the ranking).[7] Note that we relate the average competitiveness during 1998-2002 (IMD) or 1999-2001 (WEF) to the social spending in 1997 (this is the last available observation that is comparable across OECD countries). In doing so, we minimise the potential for a reverse

[7] Note that the US is the most notorious exception to this rule; it is ranked first (according to IMD) and second (according to WEF) in terms of competitiveness during 1997-2001 and spends relatively little on social security, i.e. only 17%, compared to about 30% in most Northern European countries. Figures 16 and 17 illustrate this. Nevertheless, the experience of the US has very much influenced the perception of the critics, who now claim that the US experience of high competitiveness and low social spending is foreshadowing of what globalisation will do in Europe.

causality. Reverse causality would occur if the countries with a high competitiveness rank created more domestic value added (their domestic product would be higher) and that, in turn, allowed them to spend more on social needs. By regressing competitiveness on past values of social spending we eliminate reverse causality as a possible explanation of the negative relations between social spending and competitiveness rankings.[8]

Figure 16. Social spending and IMD competitiveness index

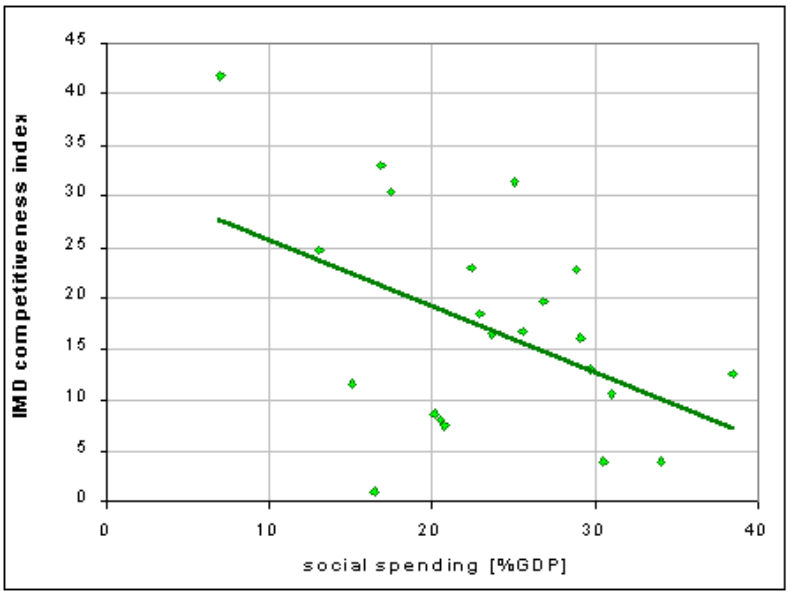
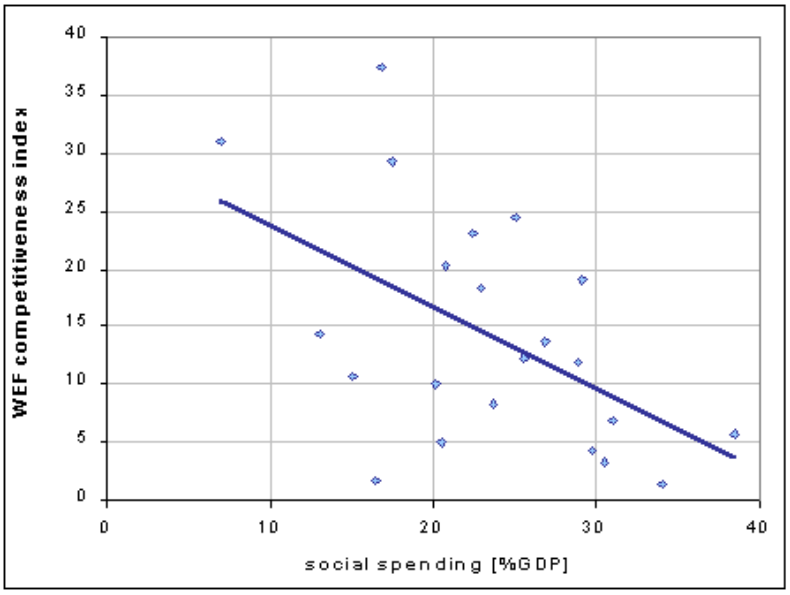


Figure 17. Social spending and WEF competitiveness index



Source: De Grauwe & Polan (2005).

[8] In De Grauwe & Polan (2005) the reverse causality is tested further by the introduction of instrumental variable methods.

Table 3. IMD regression results (average of 1998-2002) on social spending

Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	24.912	7.6617	3.2514	0.0042
Social spending	**-0.3725**	0.3057	-1.2186	**0.2379**
R-squared	0.0725	Mean dependent variation		15.895

Table 4. WEF regression results (average of 1999-2001) on social spending

Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	27.980	7.4879	3.7367	0.0014
Social spending	**-0.6025**	0.2987	-2.0167	**0.0581**
R-squared	0.1763	Mean dependent variation		13.396

The previous results suggest that there is no contradiction between spending a lot on social security and maintaining high levels of competitiveness. Scandinavian countries stand out in both superior levels of competitiveness and high social spending testifying to the view that there does not have to be a contradiction between the high levels of social security and competitiveness.

Why is it that some countries have been very successful in maintaining strong social security systems while remaining highly competitive, while other countries have failed to combine social protection and competitiveness? The answer has to do with the way social security systems are designed.

8. Different ways to design social security systems

André Sapir (2005) has introduced a typology of social security systems that is very useful in evaluating their design and their capacity to combine social protection and efficiency. We will use here the distinction Sapir makes between Scandinavian systems and Mediterranean systems (he distinguishes other types that are less pertinent for our discussion here).

The Scandinavian system of social security is characterised by four features. First, it is a system that guarantees a high level of compensation for unemployment; second it combines liberal unemployment compensation with active labour market policies aimed at pulling the unemployed out of unemployment quickly, including stiff sanctions for those unwilling to work; third, it is embedded in a flexible employment legislation, allowing firms to hire and fire workers relatively easily; fourth, incentives are given to workers and firms to keep older workers on the job. The first three features ensure that in a world of rapid turnover of jobs, firms can easily dispose of redundant workers, while these workers find it relatively easy to move to another job. During the unemployment spells they obtain generous compensation (that they lose if they show no willingness to work).

The Mediterranean systems have very different features. First, the level of unemployment compensation is generally poor; second there is an almost complete absence of active labour market policies aiming at integrating the unemployed in the job market; third, as mentioned earlier, job protection schemes are very stiff, making it very difficult for firms to fire redundant workers with the effect that they are very reluctant to hire, especially when faced with high minimum wages; fourth, governments in these countries give strong financial incentives for the

older workers to exit the labour markets. The combination of these features leads to a situation in which large parts of the active population obtain some form of welfare payment (unemployment or pension) without any mechanism urging them to get out of inactivity. As a result, large amounts of human resources are wasted and social unrest is created. Ultimately this undermines the capacity of a nation to compete in world market places.

In these 'Mediterranean' countries there is indeed a contradiction between social security (i.e. the particular way it is designed in these countries) and competitiveness. These countries will have to reform their social security systems to survive as competitive nations.

The previous analysis makes clear that the choice EU-countries face is not between social security and competitiveness. This choice is often caricatured as forcing European countries to move towards a US-style minimal social security in order to safeguard competitiveness. Different choices can be made. It is possible to keep strong social security systems in the EU and to maintain competitiveness if they are designed along the lines of the 'Scandinavian model'. EU countries that fail to do so, however, may indeed be forced by default to reduce the overall level of their social security systems.

9. Competition in social systems

The European Union is in a unique position in that it has kept social security systems national. This creates the possibility of competition between these social systems.[9]

The social security systems in Europe were developed in an environment in which domestic markets were significantly more protected than today. This was also an environment in which the forces of "creative destruction" analysed by Schumpeter were not as intense as they are today. As a result, many social systems were focused on defending existing jobs as long as possible. They could do so as the competitive forces from the outside world were limited.

Globalisation had the effect of accelerating the process of creative destruction. Many social systems were caught off guard, especially those primarily geared towards protecting existing jobs. The Scandinavian countries that had developed the most extensive social systems were the first to be hit by these developments. Overhauls of the system occurred in countries like Sweden and Denmark during the 1990s. The focus changed. Instead of attempting to protect existing jobs, the focus switched to promoting employment in general. Trade unions in these countries stopped their futile protectionist attempts vis-à-vis existing jobs and accepted the dynamics inherent in creative destruction. This implied an acceptance that job turnover in dynamic market systems is inherently high and should not be resisted. At the same time the focus switched to policies aiming at assisting workers to find new jobs. This fundamental change in outlook helped to develop social security systems that do not stand in the way of developing highly competitive economies.

These new social security systems are the outcome of a new global environment. They are likely to spread in Europe. As all EU countries face the same pressure from globalisation they are likely to take over the features of the more successful social systems. The fact that social systems have remained national facilitates this slow discovery of the fittest one. In this sense the EU is well equipped to face the challenge of globalisation.

The US has so far avoided having to make drastic changes to its social security system mainly because it has opted for a minimal system that leaves millions of US citizens unprotected. This is likely to be unsustainable in the long run. In particular, the absence of a comprehensive social security system exposes unskilled US workers to the pressure and pain of globalisation more so

[9] See Sinn (2003) on systems competition.

than in the EU. As a result, protectionist forces may gather more strength in the US than in the EU, undermining the long run competitiveness of the US economy.

The pressure to enlarge social protection will become increasingly felt, forcing the US to move towards a European style of social security. In this area Europe has a certain advantage over the US. The forces of globalisation have forced EU countries to innovate in the area of social security. Some of them have been quite successful in creating new social institutions that combine the desire of people for social protection and the maintenance of a high level of competitiveness.

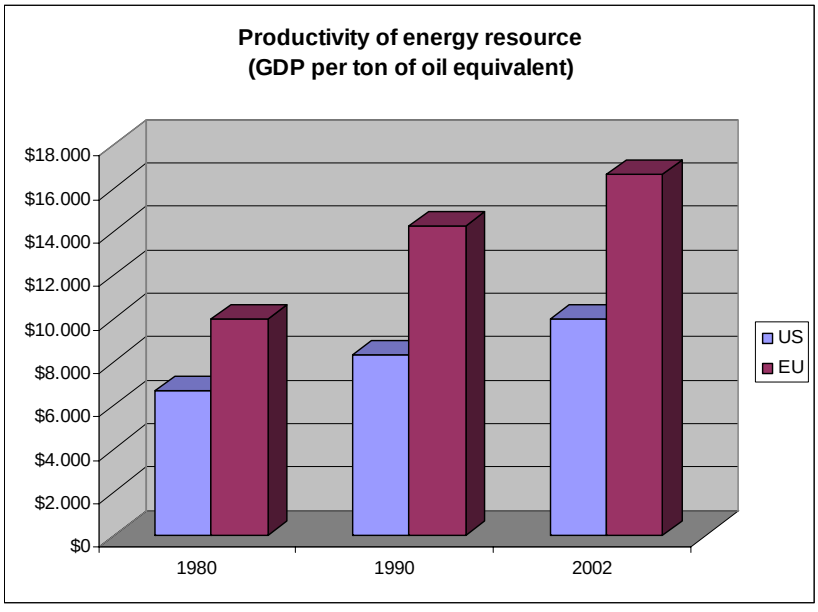
10. More on rigidities and structural reforms

There is an area in which Europe suffers less from structural rigidities. This is the area of energy use. While labour productivity in the EU remains below the level obtained in the US, the reverse is true with the productivity of the use of energy, in particular of oil. We show the evidence in Figure 18. We observe that in 2002 the EU produced almost twice as much GDP per tonne of oil equivalent. Thus, the EU was almost twice more productive in the use of scarce energy than the US. The difference in productivity of energy use between the EU and the US is significantly larger than the difference in labour productivity.

The reasons for this remarkable structural difference are well-known. They have much to do with the differences in pricing of energy in the US and in the EU. The latter have followed a road of relatively heavy taxation of the use of energy in different activities (mainly transportation). As a result, much stronger price signals have been given to European energy users leading them to economize on the use of energy and to develop new technologies aiming at reducing its use. The US has followed a different approach. As a result, the pricing signals given to US consumers to economize on energy are weaker.

It follows that the EU economy is structurally better prepared than the US to the new era of very expensive energy. The US will need structural reforms to face the new challenges of expensive energy.

Figure 18. Energy resource productivity



Source: International Energy Agency.

11. Conclusion

Pessimism has been rampant in many EU countries over the last decade. This pessimism has been fed by lagging productivity growth in the EU since the late 1990s and a perception that the US has a superior economic model. This perception has led to the view that the only way to restore higher levels of productivity growth is by introducing deep structural reforms in the EU, making goods and labour markets more flexible.

Although Europe suffers from structural problems, the single-minded focus on these problems is excessive. It has led to a perception that these problems are intractable and that Europe lacks the capacity to solve them in time. This negative perception in turn creates a sense of pessimism that feeds back on consumption, investment and economic growth. This also explains the recent productivity slowdown.

Thus a significant part of the productivity slowdown in the EU is cyclical and is bound to turn around. At some point it will become clear that the prevailing sense of pessimism is disconnected from the underlying strengths of the EU economies. These strengths manifest themselves in levels of competitiveness that easily match the US level.

A corollary to this pessimistic view about Europe is that its social security systems are dinosaurs unable to survive the pressures of globalisation. This will force EU countries to drastically scale down the level of social protection offered to their citizens. We have argued that this view is wrong. The choice is not between a high level of social protection and competitiveness. There are quite a lot of Northern EU countries that have developed highly competitive economies while preserving strong social security systems. Conversely, other EU countries, mainly Southern, have been less successful in combining competitiveness and social security. The key to the success of some and the failure of others is the design of social security systems. These can be designed in such a way that they are no obstacles to successful and dynamic economies.

An important advantage of the EU is that it has left its social security systems national, allowing competition to discover those systems that work and those that do not. This allows the EU countries to innovate in social institutions and to create those that are best fit to survive the pressures of globalisation. EU countries are particularly well placed, and probably better so than the US, in this process of discovery of social systems that allow the combination of efficiency and fairness.

Finally, the EU countries' policies of high taxation of energy have left the EU less structurally exposed than the US to the major price increases of energy. In contrast the US faces a greater challenge than the EU in adjusting its economy to the new era of expensive energy.

References

Alesina, A., E. Glaeser and B. Sacerdote (2005), *Work and Leisure in the U.S. and Europe: Why so Different?*, NBER Working Paper, No. 11278, National Bureau of Economic Research, Cambridge, MA.

Blanchard, O. (2004), "The Economic Future of Europe", *Journal of Economic Perspectives*, Vol. 18, No. 4, Fall, pp. 3-26.

Conway, P., V. Janod and G. Nicoletti (2005), *Product Market Regulation in OECD Countries: 1998-2003*, OECD Working Paper, No. 419, Paris.

De Grauwe, P. and M. Polan (2005), "Globalization and Social Spending", *Pacific Economic Review*, Vol. 10 (1), February, pp. 105-123.

European Commission (2005), *The EU Economy: Annual Review*, Brussels.

Frey, B. and A. Stutzer (2002), *Happiness and Economics: How the Economy and Institutions Affect Human Well-Being*, Princeton, NJ: Princeton University Press.

Gordon, R. (2003), "Exploding Productivity Growth: Context, Causes and Implications", *Brookings Papers on Economic Activity*, Vol. 34, No. 2, pp. 207-298, Brookings Institute, Washington, D.C.

Gordon, R. and I. Dew-Becker (2007), "Unresolved Issues in the Rise of American Inequality", paper presented at AEA Meeting, January.

Griffith, R. R. Harrison and H. Simpson (2006), "The link between product market reform, innovation and macroeconomic performance", *European Economy*, Economic Papers, No. 243, European Commission.

Havik, K. and K. McMorrow (2006), "Global Trade Integration and Outsourcing: How Well is the EU Coping with the New Challenges?", *European Economy*, Economic Papers, No. 259, European Commission.

Jäntti, M., B. Bratsberg, K. Røed, O. Raaum, R. Naylor, E. Österbacka, A. Björklund and T. Eriksson (2006), *American Exceptionalism in a New Light: A Comparison of Intergenerational Earnings Mobility in the Nordic Countries, the United Kingdom and the United States*, Discussion Paper, No. 1938, Institute for the Study of Labor (IZA), Bonn.

Krugman, P. (1993), *The Age of Diminished Expectations*: *U.S. Economic Policy in the 1990s*, Cambridge, MA: MIT Press.

Layard, R. (2005), *Happiness: Lessons from a New Science*, Penguin Press, New York.

Nicoletti, G. and S. Scarpetta (2005), *Product Market Reforms and Employment in OECD Countries*, OECD Economics Department Working Papers, No. 472, Paris.

OECD (2007), "Going for Growth", *Economic Policy Reforms*, Paris.

Prescott, E. (2003), *Why Do Americans Work So Much More Than Europeans?*, Federal Reserve Bank of Minneapolis Research Department Staff Report No. 321, November.

Piketty, T. and E. Saez (2006), "The Evolution of Top Incomes: A Historical and International Perspective", *American Economic Review*, Vol. 96, No. 2, May.

Sapir, A., P. Aghion, G. Bertola, M. Hellwig, J. Pisani-Ferry, D. Rosati, J. Viñals and H. Wallace (2004), *An Agenda for a Growing Europe, The Sapir Report*, Oxford: Oxford University Press.

Sapir, A. (2005), "Globalisation and the Reform of European Social Models", Background document for the presentation at ECOFIN Informal Meeting in Manchester, 9 September.

Sinn, H.-W. (2003), *The New System's Competition*, Oxford: Oxford University Press.

Thurow, L. (1993), *Head to Head: The Coming Economic Battle Among Japan, Europe and America*, New York, NY: Warner Books.

van Ark, B., M. O'Mahony and G. Ypma (2007), *The EU KLEMS Productivity Report, An Overview of Results from the EU KLEMS Growth and Productivity Accounts for the European Union, EU Member States and Major Other Countries in the World*, March.

World Bank, *World Development Report*, various issues, Washington, D.C.

Appendix

The PMR indicators

Scope of public enterprises: this indicator measures the pervasiveness of state ownership across business sectors as the proportion of sectors in which the state has an equity stake in at least one firm.

Size of public enterprise: reflects the overall size of state-owned enterprises relative to the size of the economy.

Direct control over business enterprises: measures the existence of government special voting rights in privately-owned firms, constraints on the sale of state-owned equity stakes, and the extent to which legislative bodies control the strategic choices of public enterprises.

Price controls: reflects the extent of price controls in specific sectors.

Use of command and control regulation: indicates the extent to which government uses coercive (as opposed to incentive-based) regulation in general and in specific service sectors.

Licenses and permits systems: reflects the use of 'one-stop shops' and 'silence is consent' rules for getting information on and issuing licenses and permits.

Communication and simplification of rules and procedures: reflects aspects of government's communication strategy and efforts to reduce and simplify the administrative burden of interacting with government.

Administrative burdens for corporations: measures the administrative burdens on the creation of corporations.

Administrative burdens for sole proprietors: measures the administrative burdens on the creation of sole proprietor firms.

Sector-specific administrative burdens: reflects administrative burdens in the road transport and retail distribution sectors.

Legal barriers: measures the scope of explicit legal limitations on the number of competitors allowed in a wide range of business sectors.

Antitrust exemptions: measures the scope of exemptions to competition law for public enterprises.

Ownership barriers: reflects legal restrictions on foreign acquisition of equity in public and private firms and in the telecommunications and airlines sectors.

Tariffs: reflects the (simple) average of most-favoured-nation tariffs.

Discriminatory procedures: reflects the extent of discrimination against foreign firms at the procedural level.

Regulatory barriers: reflects other barriers to international trade (*e.g.* international harmonisation, mutual recognition agreements).

Source: Conway, P., Janod, V., Nicoletti, G., (2005)

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Changing Landscape of Security & Liberty (CHALLENGE)
European Capital Markets Institute (ECMI)
European Climate Platform (ECP)
European Credit Research Institute (ECRI)
European Network of Agricultural & Rural Policy Research Institutes (ENARPRI)
European Network for Better Regulation (ENBR)
European Network of Economic Policy Research Institutes (ENEPRI)
European Policy Institutes Network (EPIN)
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CENTRE FOR EUROPEAN POLICY STUDIES

Place du Congrès 1 • B-1000 Brussels
Tel: 32(0)2.229.39.11 • Fax: 32(0)2.219.41.51