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The Economic Future of Europe  
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### **ABSTRACT**

After three years of near stagnation, the mood in Europe is definitely gloomy. Many doubt that the European model has a future. In this paper, I argue that things are not so bad, and there is room for optimism. Over the last thirty years, productivity growth has been much higher in Europe than in the United States. Productivity levels are roughly similar in the European Union and in the United States today. The main difference is that Europe has used some of the increase in productivity to increase leisure rather than income, while the U.S. has done the opposite. Turning to the present, a deep and wide ranging reform process is taking place. This reform process is driven by reforms in financial and product markets. Reforms in those markets are in turn putting pressure for reform in the labor market. Reform in the labor market will eventually take place, but not overnight and not without political tensions. These tensions have dominated and will continue to dominate the news; but they are a symptom of change, not a reflection of immobility.

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After three years of near stagnation, the mood in Europe is definitely gloomy.

The two economics books on the bestseller's list in France in 2003 are called "La France qui Tombe" (the Fall of France) (Baverez [2003]), and "Le Desarrois Francais" (the French Disarray) (Duhamel [2003]). Both books offer a pessimistic vision of France and its economic future, a future in which, unless dramatic reforms are implemented, France will steadily lose ground against its competitors.

Governments are trying to put on a good face, but their boasts, such as the goal adopted at the EU Lisbon conference in March 2000 to make the European Union "the world's most dynamic and competitive economy within ten years" are seen as largely empty and pathetic.

The most articulate diagnoses argue that, like Stalinist growth in another time and place, the European model worked well for post-war Europe, but is no longer fit for the times.

For much of the post-war period, the argument goes, European growth was "catching-up growth," based primarily on imitation rather than innovation. For such growth, large firms, protected in both goods and financial markets, could do a good job. They could do much of the R&D in-house. They could develop long-term relations with suppliers of funds. They could offer long-term relations and job security to their workers. The rents generated in the goods markets could be shared between firms, workers, and the state, and to help finance the welfare state.

Now that European growth must increasingly be based on innovation, now that firms cannot be insulated from foreign competition, the European model has become dysfunctional. Relations between firms and suppliers of funds, between firms and their workers, must all be redefined. This requires nothing short of a complete transformation of economic and social relations.<sup>1</sup> So far, the argument concludes, Europe has not risen to the challenge. Instead, it seems increasingly petrified,

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1. Many of these themes are developed in a recent report to the European Commission, known as the "Sapir Report" [2004].

unable to engage in fundamental reforms. This is why the future is bleak.<sup>2</sup>

I have a more optimistic assessment. In this paper, I want to argue that:

- Things are not so bad. Over the last thirty years, productivity growth has been much higher in Europe than in the United States. Productivity levels are roughly similar today in the EU and in the U.S. The main difference is that Europe has used some of the increase in productivity to increase leisure rather than income, while the U.S. has done the opposite.
- A deep and wide-ranging reform process is taking place in Europe. This process is driven by reforms in financial and product markets. Reforms in those markets are in turn putting pressure for reform in the labor market. Reform in the labor market will eventually take place, but not overnight and not without political tensions. These tensions have dominated and will continue to dominate the news; but they are a symptom of change, not a reflection of immobility.

The paper is organized as follows: Section 1 looks at the facts, focusing on productivity, income, and employment. Section 2 focuses on financial and product market reforms. Section 3 discusses implications for labor market reforms. Section 4 concludes.

## 1 Some Facts

Two facts are often cited by Euro-pessimists: GDP per person in the European Union, measured at purchasing power parity (PPP) prices, stands at 70% of GDP per person in the United States. Not only that, but this ratio is the same as it was 30 years ago.<sup>3</sup>

These facts are correct. They suggest a Europe stuck at a substantially lower standard of living than the United States, and unable to catch up. This interpretation

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2. For example, a description of Germany along these lines is given by Siebert [2003].

3. As of the time of this writing, the actual exchange rate of 1.20 dollars to the Euro is close to the PPP exchange rate.

would be misleading however, and the reason why is shown in the numbers in Table 1. Table 1 gives GDP per capita, GDP per hour, and hours per capita for the EU-15 in general, and for France in particular, as ratios to the United States, for both 1970 and 2000. The reason for choosing France as an example of a European country, here and often below (showing the numbers for all 15 countries would lead to unwieldy tables) is twofold. The first is that it is a large European country, and one often perceived as a poster child for the European malaise.<sup>4</sup> The second reason is, quite simply, that I know France better than the other European countries...

**Table 1. PPP GDP per person, PPP GDP per hour, and Hours per person, 1970 and 2000: U.S., EU-15, and France. (U.S.=100)**

	GDP per person		GDP per hour		Hours per person	
	1970	2000	1970	2000	1970	2000
US	100	100	100	100	100	100
EU-15	69	70	65	91	101	77
France	73	71	73	105	99	67

Source: EU Ameco data base.

- The first two columns, which show the evolution of GDP per capita relative to the United States, confirm the two facts presented earlier: The gap between the EU-15 and the U.S. has remained roughly constant; the gap between France and the U.S. has even increased a little.

4. For the same reasons, Germany would also be a natural candidate. But the German reunification of the early 1990s leads to both German-specific issues, and to issues of measurement when looking at periods which include reunification.

- The next two columns show however that labor productivity, measured as GDP per hour worked, has increased much faster in Europe than in the United States. Relative EU productivity, which stood at 65% of the U.S. in 1970 now stands at roughly 90%. French labor productivity now exceeds U.S. labor productivity.
- The last two columns, which give hours worked per person (total hours worked divided by total population) give the key to the divergent evolutions shown in the earlier columns. As relative EU labor productivity increased, relative hours worked decreased in roughly the same proportion, leading to a roughly constant relative GDP per capita.

In other words, had relative hours worked remained the same, the EU would have today roughly the same income per capita as the U.S. The stability of the U.S–EU gap in relative income per capita comes from the decline in hours worked.

There is another way of stating the same underlying facts, looking at absolute rather than relative evolutions, which is quite striking. In the United States, over the period 1970 to 2000, GDP per hour increased by 38%. Hours per person also increased, by 26%, so GDP per person increased by 64%. In France, over the same period, GDP per hour increased by 83%. But hours per person decreased by 23%, so GDP per capita only increased by 60%. In that light, the performance of France (and of the European Union in general) does not look so bad: A much higher rate of growth of productivity than the U.S., and, as one might expect given that leisure is a normal good, the allocation of part of that increase to increased income, and part to increased leisure.

Is this too polemical a way of stating the facts? Is labor productivity correctly measured? Can the decrease in hours worked really be interpreted as an increase in leisure? What about the recent past, where the U.S. appears to have accelerated relative to Europe? These questions require a closer look at the facts.

## 1.1 Productivity

There are at least two obvious issues of interpretation with the productivity numbers presented above.

In many European countries, the unemployment rate is high, higher than in the United States, and high unemployment disproportionately affects low skill workers. In a number of European countries also, the ratio of the minimum wage to the average wage is higher than it is in the United States, leading again to the potential exclusion of low skill workers from employment.

By excluding more low productivity workers from employment, both factors tend to increase measured labor productivity. In comparing labor productivity across countries, we may want to control for this effect. One way to do so, if we want to compare the U.S. and France for example, is to assume that wages reflect productivities, to use the information from the U.S. wage distribution to fill the French wage distribution between the relative French minimum wage and the (lower) U.S. relative minimum wage, and then to compute the resulting productivity adjustment. Such a computation was made in a comparison of productivity in France, Germany, and the United States by McKinsey ([1997], updated [2002]); this computation gives a downward adjustment for French labor productivity of about 6%, so yielding roughly similar labor productivity in both countries.

The second issue is that labor productivity reflects not only the state of technology, but also the capital-labor ratio chosen by firms. Increases in the cost of labor lead firms to decrease labor relative to capital, leading to an increase in labor productivity. To control for this, the obvious solution, at least conceptually, is to shift from comparisons of labor productivity to comparisons of total factor productivity. The capital-output ratio appears indeed to be typically higher in Europe than in the U.S. Based on OECD series for the business sector, the ratio is, for example, 30% higher in France than it is in the U.S. A back of the envelope computation suggests that, starting from roughly equal labor productivities (which is where we started after the correction above), the level of French TFP is roughly

10% lower than that of the U.S.<sup>5</sup>

In summary, the two adjustments lead to a more modest assessment of European productivity relative to U.S. productivity. But the EU in general, and France in particular, remain within close range of U.S. levels.

## 1.2 Hours Worked

Should we interpret the large decrease in hours worked per person in Europe as the result of preferences leading to the choice of leisure over income as productivity increased? Or should we interpret it instead as the result of increasing distortions, such as higher taxes on work, an increase in the minimum wage, generous or forced early retirement programs, and so on?<sup>6</sup>

Let's start with a closer look at the facts. Given that different margins (how many hours to work, whether to be employed or unemployed, whether to participate or not) imply different choices, it is useful to start by decomposing the change in hours worked as follows:

$$\begin{aligned}\Delta \ln(HN/P) &= \Delta \ln H + \Delta \ln(N/L) + \Delta \ln(L/P) \\ &= \Delta \ln H + \Delta \ln(1 - u) + \Delta \ln(L/P)\end{aligned}$$

The change in hours worked per person,  $HN/P$ , is equal to the change in hours worked per worker,  $H$ , plus the change in the ratio of employment,  $N$ , to the labor

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5. The computation is as follows. Start with the standard expression for the Solow residual:  $\Delta \ln A = \Delta \ln Y - \alpha \Delta \ln N - (1 - \alpha) \Delta \ln K$ , where  $\Delta$  here refers to the difference across the two countries, rather the change in time. Rewrite it as:  $\Delta \ln A = \alpha(\Delta \ln Y - \Delta \ln N) + (1 - \alpha)(\Delta \ln Y - \Delta \ln K)$ . If labor productivity is the same in both countries, and the share of capital  $1 - \alpha$  is equal to 0.33, then a 30% difference in the capital output ratio leads to a 10% difference in TFP levels.

6. Another way of asking the same basic question is the following: In trying to compare welfare rather than just income per capita, what shadow price should we use to weigh leisure? Should we use the wage, in which case the measure of welfare is roughly similar in Europe than in the U.S., or should we use a much lower shadow price, in which case Europe remains substantially behind.

force,  $L$  (equivalently, one minus the unemployment rate), plus the change in the ratio of the labor force  $L$  to population,  $P$  (equivalently the participation rate).

Applying this decomposition to the various European countries yields two main conclusions:

- Most of the decrease in hours worked per person has come, in an accounting sense, from the decrease in hours worked per worker, rather than from increases in unemployment or decreases in participation rates.

Applying for example this formula to France for the period 1970 to 2000 gives -23%, -7%, and 7% for the three terms on the right. Hours per worker decreased by 23%, from 1962 hours per year in 1970 to 1550 hours per year in 2000. The unemployment rate increased by 7 percentage points, from 2% in 1970 to 9% in 2000. And the participation rate increased by 7%, going from 0.42 in 1970 to 0.45 in 2000. In this decomposition, France appears representative of other European countries.

- Focusing on the decrease in hours worked per worker, most of the decrease has come from a decrease in hours worked per full time worker, rather than from an increase in the proportion of part time workers.<sup>7</sup> In France, for example, full time wage earners worked an average of 45.9 hours in 1970; they worked only 39.5 hours in 1999—a 15.0% decrease. Since 1999, the decrease has been more pronounced, due to the two “35-hour” laws passed in 1998 (mandating a reduction of the workweek to 35 hours by 2000 for firms with more than 20 employees) and in 2000 (mandating a similar reduction by 2002 for public sector employees, and for firms with less than 20 employees).<sup>8</sup> The latest available number puts the average workweek at

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7. The motivation for this further decomposition is that some of the increase in part-time employment may not have been voluntary. 20% of part time workers in Europe in 2000 said it was because they could not find full-time jobs. The corresponding number for the U.S. is 8%.

8. Whether the shift to 35 hours should be seen as voluntary is a matter of debate. The promise to pass such a law was probably the main factor behind the victory of the Socialist government in 1997. Whether or not voters actually understood the income/leisure trade-off is now hotly debated.

38.3 hours in 2001, a 18% decline since 1970.<sup>9</sup>

The facts therefore suggest that much of the decline in hours worked has come from a decline in hours worked per full time worker. It is reasonable to think that, over thirty years, one should interpret this choice as voluntary on the part of workers. But this does not yet settle the issue. This choice may be the result of the interaction of preferences and an the increase in productivity, or the result of increasing tax distortions faced by workers. And, indeed, the evidence suggests that marginal tax rates (constructed by adding marginal income and payroll tax rates, and consumption tax rates) have increased more in Europe than in the U.S. (10-15% for most EU countries, relative to about 8% for the U.S.)<sup>10</sup>

The answer as to how much of the decrease in hours can be attributed to preferences or changes in tax rates depends on what assumptions one is willing to make about preferences, and the implied strength of income and substitution effects. In a recent study, Prescott [2003], using a utility function logarithmic in consumption and leisure, has argued that all of the decrease in hours in Europe could be attributed to the increase in taxes. One can object however to his assumptions about utility, and the large implied elasticity of labor supply. More importantly, within Europe, the cross-country relation between the decrease in hours and the increase in tax rates is weak. A revealing example here is that of Ireland. Average hours worked per worker in Ireland have decreased from 2140 in 1970 to 1670 in 2000, a 25% decrease over the period, and hours worked by full time workers have decreased in line with the European average.<sup>11</sup> This decline can clearly not be blamed on a depressed labor market: Ireland has boomed during the period, has seen major immigration, an increase in participation rates, and unemployment is now very low. Nor can it be blamed on an increase in tax rates. The increase in the average tax rate has been small, about 3% compared to the 8% increase in the U.S. Turning

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9. Lest one conclude that France is an outlier, it is useful to note that the country with the lowest number of hours worked per year per worker is Germany, with 1450 hours compared to France's 1550.

10. For detailed evidence on marginal tax rates, and their recent evolution, see Joumard [2001].

11. This statement is based on the evolution of hours worked by full time workers in manufacturing, the only series available for the period at hand.

to more formal evidence, econometric estimates based on panel data evidence (see Nickell [2003] for a recent survey and discussion) typically find a significant, but more modest role for taxes in explaining the decline in hours per capita. They imply that the evolution of tax rates may explain about a third of the decrease in hours per capita in Europe over the period.

To summarize: Most of the decrease in hours per capita over the last 30 years in Europe reflects a decrease in hours worked per full-time worker, a choice which is likely to be made voluntarily by workers. The remaining issue is how much of this choice comes from preferences and increasing income, and how much from increasing tax distortions. I read the evidence as suggesting an effect of taxes, but with a large role left for preferences.<sup>12</sup>

### **1.3 Evolutions Since the Mid-1990s**

Looking at productivity growth since 1970, or at productivity levels today, may not tell the whole story. Indeed, part of the Euro-pessimism is based on evolutions since the mid 1990s, and the feeling that the U.S. is again gaining advantage on Europe.

The basic numbers are given in Table 2, based on the work of Van Ark et al [2002a]. The table gives TFP growth numbers for the U.S., the EU, and France, for the 1980s, for the 1990s, and for each half decade of the 1990s.

The table yields three main conclusions. In the 1980s, European TFP growth was higher than in the U.S. In the 1990s, it was roughly the same as in the US. And this was the result of a first half decade with Europe growing faster than the U.S., but a second half decade with the U.S. growing faster than Europe.

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12. There is plenty of anecdotal evidence that Europeans enjoy their leisure more than their U.S. counterparts. I have looked for more formal evidence from surveys on happiness and leisure across countries, but have not been able to find it.

**Table 2. Total factor productivity growth: U.S., EU, and France, 1980-2000. (Percent per year)**

	1980s	1990s	1990-1995	1995-2000
U.S.	0.91	1.06	0.74	1.39
EU-15	1.45	1.04	1.36	0.72
France	1.90	0.68	0.89	0.38

*Van Ark [2002a], Tables 19 and A7.*

Reaching conclusions about trend changes in TFP based on just five years of data is a dangerous exercise.<sup>13</sup> Cyclical factors and measurement issues may well dominate any trend change over a short period. But we also know that the first three years of this decade have looked very much like the second half of the previous decade, with very high TFP growth in the U.S. despite a recession, and continuing low TFP growth in Europe. For this reason, most observers now believe that we have indeed seen a change in relative trends, starting around 1995.

The nature and the origins of the change have been the subject of a large amount of recent work. Some have emphasized the role of information technologies (IT), both in the IT-producing and the IT-using sector. Some have emphasized differences between evolutions in manufacturing and services. For these reasons, Table 3 presents labor productivity growth rates for each half decade of the 1990s, for the U.S. and the EU (I leave France out, so as not to clutter the table), distinguishing between IT-producing, IT-using, and non-IT-using sectors and between manufacturing and services. The table is based on the work of Van Ark et al [2002b],

13. The standard deviation of annual productivity growth in the U.S. or Europe is roughly 1%. Assuming no correlation between the two growth rates, this implies that the difference between five-year average growth rates in Europe and in the U.S. has a standard deviation of  $(\sqrt{2/5}) = 0.63$ .

which pays careful attention to problems of comparability across countries, using in particular harmonized price deflators for IT (the construction of national price deflators for IT varies widely across countries, and makes direct comparisons of national figures unreliable).

**Table 3. Labor productivity growth, IT producing/IT using, Manufacturing/services: U.S. and EU, 1990s. (Percent per year)**

	Share	US		EU	
		1990-95	1995-2000	1990-95	1995-2000
Overall		1.1	2.5	1.9	1.4
IT producing					
Manufacturing	2.6	15.1	23.7	11.1	13.8
Services	4.7	3.1	1.8	4.4	6.5
IT using					
Manufacturing	4.3	-0.3	1.2	3.1	2.1
Services	26.0	1.9	5.4	1.1	1.4
Non IT using					
Manufacturing	9.3	3.0	1.4	3.8	1.5
Services	43.0	-0.4	0.4	0.6	0.2

“Share” in the first column is the share of the sector in US GDP, in percent. Source: Van Ark [2002b], Tables 5 and 6.

The table yields the following three main conclusions:

- Some have argued that the slowdown in productivity growth in Europe since 1995 reflects primarily a slowdown in productivity growth in manufacturing ([Daveri 2003]). The table shows that manufacturing productivity growth outside the IT producing sector has indeed declined (this decline is present in all EU countries, except for the Netherlands.) But it has declined to a rate which is still higher than that of the U.S. This appears more to be

evidence of the end of catch-up growth than of any emerging European inability to innovate in manufacturing.

- Some have argued that Europe has missed the IT revolution, in the sense that IT production, and its associated high productivity growth, has been more limited in Europe. The table cannot by itself answer the question, as what is needed in addition to the information in the table is the share of the IT producing sector in GDP in the U.S. and in European countries. This share has been indeed slightly smaller in the EU than in the US, 6.0% versus 7.3%. But this average hides differences across countries. A number of countries, in particular Ireland and Finland have shares which exceed 10%.
- Finally, some have argued that the main problem of Europe has been in the use rather than the production of IT. The evidence is somewhat mixed: One way to proceed is to look at the contribution of IT capital to growth in the IT-using sector. This exercise was carried out by Colechia and Schreyer [2002] for example, using a growth accounting framework. Their conclusion is that investment in IT was substantially higher in the U.S. than in Europe in the second part of the 1990s, and so led to more labor productivity growth in the IT-using sector in the U.S. than in Europe. However, such a conclusion is only correct if the assumptions underlying growth accounting are correct, if, in particular, the investment in IT in the U.S. had an expected rate of return equal to the user cost of that capital. Many observers doubt that this was the case, and the evidence on IT investment since 2000 suggests that there was indeed substantial overinvestment in IT in the second half of the 1990s.

Another way to proceed is to look directly at changes in labor productivity growth, without trying to separate between the contribution of capital accumulation and the contribution of TFP growth. This is what is done in Table 3. The numbers suggest that there was indeed a large difference in labor productivity growth in the IT-using service sector, 5.4% in the U.S.

versus 1.4% for the EU. This difference is important because the sector accounts for a substantial proportion of GDP, 26% in the U.S., 21% in the EU.

Can one trace this difference to specific sectors, so as to get a sense of what the U.S. did right, or Europe did wrong? A more detailed exploration by Van Ark et al concludes that the difference is nearly fully attributable to three sectors: retail trade, wholesale trade, and securities. Productivity growth in this third sector seems largely attributable to the increase in internet-based and other transactions associated with the bubble economy of the late 1990s. This leads to a focus on retail and wholesale trade as two of the main factors behind the difference between the U.S. and the EU in the late 1990s, a conclusion shared by a number of other studies (McKinsey [2001] for the U.S., McKinsey [2002] for a comparison of France, Germany, and the U.S.)

What should one conclude for the broad examination of the facts? Contrary to widespread perceptions, Europe has done very well over the last 30 years. Indeed, some European countries, such as France, have a level of productivity roughly equal to that of the United States. The income level has not caught up with that of the United States, but only because of a different choice between income and leisure. In the recent past, the U.S. has clearly done better than Europe. Clearly, Europe is somewhat behind in IT production. It also has invested less in IT capital, but it is not clear that this was wrong. Some sectors, trade in particular, have done very well in the United States; such an increase in productivity growth has not been visible in Europe; what this means for the future is hard to tell without a closer look at the trade sector. I shall return to it in the next section.

## **2 Reforms In the Financial and Product Markets**

The last fifteen years have seen dramatic changes in goods and financial markets in Europe. Most of these changes can be traced to a reform process in which

“Bruxelles” (this is the way Europeans refer to the European Commission, located in Bruxelles) has played a central role, forcing (or allowing?) national governments to implement reforms they would probably not have implemented on their own.

## **2.1 The Role of Bruxelles**

A central document here is the “White Paper” written in 1985 by the European Commission, under the presidency of Jacques Delors. At the time, it was felt that the European Union needed a new and more ambitious goal, and, in that report, the Commission laid a plan for achieving a fully integrated European internal market by 1992.<sup>14</sup>

The report offered a timetable to achieve the elimination of physical barriers, of fiscal barriers, and of technical barriers—the different standards for individual products in place in different countries. Realizing that harmonization of rules and regulation might be difficult to achieve or even lead to deadlock, the report argued for using, whenever possible, the more wide-ranging principle of “mutual recognition”: “If a product is lawfully manufactured and marketed in one member state, there is no reason why it should not be sold freely throughout the community”. It also emphasized the role of competition policy in achieving and maintaining competition in the internal market.

At the end of 1992, most of the agenda set out in 1985 was indeed achieved, and, in a highly symbolic step, border controls for goods were eliminated (Financial market integration took longer, but has accelerated with the adoption of the Euro in 1999. The current plan is to have a fully integrated financial market by 2005). The process of reform continued however, through the implementation of competition policy. Today, competition policy and fights between the current Commissioner, Mario Monti, and national governments, often make the news.

European competition policy comes into play only when trade between member

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14. Surely by EU standards, but indeed by any standard, this is a remarkably clear document (Commission of the European Communities [1985]).

states is affected. In practice, given the integration of markets, this still leaves a very broad scope for Bruxelles to intervene. European competition policy covers four areas, in which the Commission either can act alone, or shares its powers with national own competition authorities and law courts: <sup>15</sup>

- The elimination of anti-competition agreements or abuse of dominant position. It can prohibit an agreement, and even impose fines, up to 10% of the world turnover of the relevant parties. Examples of recent interventions range from a ruling against British Airways in its relations with travel agents, to a ruling against the use by the Belgian Architect Association of a minimum fee scale.
- The liberalization of monopolistic sectors. The Commission can initiate the opening up of markets. It is a 1996 Commission directive which led for example to the opening up of the market for mobile telecommunication services to competition. It also checks that member states, when granting exclusive rights, comply with the European Union competition rules. In 1997 for example, the Commission ruled that the Spanish state had given an unfair advantage to the state company in the mobile phone market, forcing the company to pay back the state for the amount of the implicit subsidy the state had given the company.
- The control of mergers between firms (for firms with a turnover in excess of 250 million euros). Such mergers require prior notification to the Commission, and the Commission has exclusive power to approve or prohibit a given merger. In November 2003 for example, the Commission rejected a merger which would have led the French firm Lagardère to dominate the book distribution network in France; the terms of the merger had to be modified so as to maintain competition in book distribution and thus satisfy the Commission.
- The monitoring of state aid. This is another area where the Commission

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15. For further description, see European Commission [2000]. For a description of reforms over time, see the annual reports from the European Commission (for example European Commission [2002].)

has exclusive power, and an area where it often clashes with governments. In 2003 for example, the Commission rejected a plan by the French government to rescue the French firm Alstom, provoking widespread criticism of Bruxelles in France. Not until the plan was modified was it approved by Bruxelles. Some politically hot sectors, such as agriculture, or coal, or fisheries, are excluded. But, in general, the rules governing restructuring or rescue plans are tough: They can only take the form of short-term loans, at the normal commercial rate, and can only be granted once.

These are considerable powers, and the Commission has not hesitated to use them.<sup>16</sup> This raises two intriguing questions. The first is why this part of the Commission has been so willing to reform and deregulate, when other parts of the Commission showed much less commitment to markets.<sup>17</sup> The second is why governments have been willing to leave such power in the hands of the Commission. One hypothesis is that this happened partly by accident, that Bruxelles was able to use its mandate as defined in the Treaty in a way that national governments had not anticipated. But this hypothesis is belied by the fact that governments have, at various times, increased the powers of the Commission in matters of competition policy. For example, rules on state aid to airline companies were tightened in 1994, general rules on rescue plans were tightened in 1999. This suggests an alternative hypothesis, that governments have willingly delegated those powers to Bruxelles, in order to achieve reforms, while being able to shift the blame to Bruxelles. This point is important. As I shall argue later, product and market deregulation put strong pressures on labor market institutions, raising the risk of reversal. The fact that Bruxelles, rather than national governments, is leading the process decreases this risk.

Does this mean that all the reforms of product and financial markets have come from Bruxelles? Obviously not, and an important exception is privatization. But,

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16. The Commission publishes an annual “state aid scoreboard”, in order to report progress, show problems, and put pressure on national governments.

17. This is one of the issues taken up in the parallel article by Alesina and Perotti [2004] in this issue of the Journal.

there, progress has often been slower, more subject to political ebbs and flows, and therefore more country specific. The example of France is again revealing here. Under a socialist government, and bucking a general world trend, France was the last rich country to nationalize a number of banks and firms in the early 1980s. The trend then changed in the late 1980s, with a first wave of privatization under a Gaullist government in 1986-1988, and then more steady privatization since 1993, under governments both of the right and of the left. Despite this new commitment, the share of nationalized firms in the business sector remains higher in France than in other European countries.

## **2.2 Measuring the Changes in Regulation**

How far has deregulation (or, more accurately, better regulation) progressed in Europe? Are there important differences across sectors, across countries? To answer these questions requires constructing quantitative measures and indexes, and until recently, such indexes were missing. Two OECD projects have now partially filled the gap. The first and more ambitious one is aimed at giving a precise characterization of regulation circa 1998; it is based on the answers from national governments to a questionnaire assessing the status of 1300 regulatory provisions. (The data set and the construction of the indexes are described in Nicoletti et al [1999].) The second one is more limited in scope but has both a time series and a cross country dimension; it gives the evolution of regulation in seven sectors from 1975 to 1998 (The data set is described in Nicoletti and Scarpetta [2003].) Based on this second data set, Table 4 gives a sense of the evolutions over time, for the U.S. and three European countries, of two synthetic indexes, the first called “barriers to entrepreneurship” (BE), the second “public ownership” (PO). Each index ranges from 0 (no barriers or no public ownership) to 6.

**Table 4. Indexes of regulation: U.S, France, Germany, the Netherlands. 1975-1998.**

	BE			PO		
	1975	1990	1998	1975	1990	1998
U.S.	5.5	2.4	1.5	1.7	1.5	1.5
France	6.0	5.1	3.3	6.0	5.8	4.9
Germany	5.3	4.3	1.9	4.6	3.9	3.0
Netherlands	4.4	5.2	2.3	5.6	5.6	4.0

Table 4 yields three conclusions. First, that regulation has steadily decreased in Europe over time, especially in the 1990s, confirming the informal evidence presented earlier. Second, that Europe is still more regulated than the U.S. Third, (this is less obvious from the table which gives numbers only for France and Germany, but is clear when looking at the whole set of countries) that there is substantial heterogeneity across countries. Regulation is still high in the Netherlands, public ownership still high in France, for example.

### 2.3 Assessing Structural Changes

So far, the argument has focused on changes in regulation, not on the economic outcomes themselves. There is plenty of evidence, however, that these changes in regulation have transformed goods and financial markets.

Consider first a few macro measures. Prices of specific products or classes of products have shown steady price convergence across countries throughout the 1990s (European Commission [2002, Annex 1].) . With the introduction of the Euro, exchange rate risk has disappeared, and interest rates on bonds, risk adjusted, have fully converged. The structure of financial relations has also changed, becoming more arms' length. For example, the proportion of bank loans in firms' financial liabilities (based on a sample of large firms) has come down from 74% in 1990 to 32% in 2002 in Germany, and from 75% to 53% in Italy (Danthine et al [2000]).

The best way, however, to get a sense of the changes that have taken place is to look at the evolution of specific sectors. Here, we can rely on a number of studies, in particular two studies conducted by the McKinsey Global Institute (MGI), in 1997 and 2002. In each of these two studies, MGI assessed the levels of productivity in specific sectors in the U.S., France, and Germany, and looked for the factors behind the level and the evolution of productivity in each country. I shall take three sectors as examples.

- Road freight was traditionally a highly protected and regulated sector in Europe. The internal market, the elimination of restrictions on foreign carriers, and other reforms have led to a nearly deregulated market. The OECD indexes suggest that the levels of regulation in France and Germany are similar today to those in the U.S. (Boylaud [2000].) The MGI study suggests that labor productivity, which stood in France and Germany at roughly 60% of the U.S. level in 1992, increased to about 85% in 2000. It documents how changes in regulation have allowed for larger truck sizes and higher load rates, leading to higher productivity in both European countries.<sup>18</sup>
- Uniformization of standards and ownership changes have also transformed the automotive market, especially in France. The MGI study concludes that, in the 1990s, France made up much of its productivity gap relative to the U.S., with productivity growing at 7.8% in France from 1992 to 2000, compared to 2.2% in the U.S. and Germany. It finds that, in turn, this high productivity growth can be explained by partial privatization of Renault and the associated change in governance, and by the lifting of quotas of Japanese imports to France—a lifting which led first to financial losses and a crisis at Renault, and then to a successful reorganization.
- In the light of the results of the previous section that much of the difference in productivity growth between the U.S. and Europe can be traced to the trade sector, retail trade is particularly interesting (another reason is

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18. MGI attributes half of the remaining gap to structural factors (geography, which allows for longer hauls and faster speeds in the US), and half to more recent and more limited use of IT in Europe.

that it accounts for a large share of total employment, 8.7% in the U.S., 6.8% in France.) Partly because regulation largely takes the form of zoning restrictions and these regulations fall outside the Bruxelles mandate, some countries remain relatively highly regulated. In France, for example, two laws, the “Loi Royer” and the “Loi Raffarin” (named after its sponsor, then the minister of commerce, now the current prime minister) give local incumbents a large say in whether to allow for the opening of new large stores, with predictable results.

This would seem to give us a potential key for why productivity levels and recent productivity growth might be lower in France than in the U.S. But the evidence turns out to be more complex:

The 2002 MGI study finds that labor productivity (measured as gross margins per hour worked) in 2000 was actually higher by about 7% in the retail food sector in France than in the US.<sup>19</sup> Once an adjustment is made for the truncation effects of the higher minimum wage in France, and for opening hours, productivity appears roughly similar in the two countries. The conclusion reached by MGI is that regulation in France, which mostly takes the form of restrictions on new entry of medium sized firms, has led to a hollowing of the size distribution of retailers, with less medium sized retailers, and both more small size and more large size retailers (hypermarkets). French small size retailers are less efficient than their U.S. counterparts, but French large size retailers turn out to be more efficient. Turning to productivity growth over the 1990s, the MGI study does not find obvious explanations for the apparently better performance of the US. The degree of use of IT does not appear radically different; in 1999, spending on IT was equal to 8% of gross margins in the US, versus 6.3% in France and 6.0% in Germany.

This leads one groping for an explanation of the apparently different evo-

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19. The 1997 study also constructs measures of TFP. Arguing that large differences in land prices make construction of comparable capital stocks unreliable, it uses square footage as a proxy measure for capital. Results are quite similar to those for labor productivity.

lutions of productivity in retail trade in the U.S. and Europe in the 1990s. A tentative explanation is based on the findings of Foster et al [2002], who find that, in the U.S., most of the productivity growth in retail trade in the 1990s can be attributed to composition effects, i.e. the replacement of less productive by more productive establishments. A similar study does not exist for France, but the evidence is that regulation has indeed sharply limited the amount of new permits, especially since the tightening of zoning restrictions in 1996. Thus, regulation may be limiting productivity growth by restricting turnover of firms.<sup>20</sup> (An argument against this hypothesis is that it does not obviously extend to other European countries. In particular, productivity growth appears to have been low in retail trade in the UK in the 1990s (Basu et al [2003]), a country with low regulation of the retail trade sector.<sup>21</sup>)

The MGI studies cover a number of other sectors, from fixed and mobile telecommunications to electricity generation and distribution, to retail banking. In most of these sectors, deregulation (or appropriate regulation, as in the case of telecommunications) appears to have had important effects on the behavior of firms, the degree of competition, and the level of productivity. This however brings a puzzle: Why hasn't this transformation, so apparent on the ground, led to higher productivity growth in the 1990s? Measurement issues, in particular for price deflators, the representativeness of the sectors chosen by MGI, may all play a role. I want to end this section however with another, tentative, hypothesis. Throughout the 1990s, faced with high unemployment and low employment growth, many governments endorsed the idea of "job rich growth". The idea, a direct descendant of the lump-of-labor fallacy, was based on the idea that output growth was given, and so low productivity growth would allow for more employment growth.<sup>22</sup> More

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20. Bertrand and Kramarz [2002] look at the related question of whether these restrictions have hindered employment growth, and conclude that they have.

21. Comparisons are plagued by problems of definition and measurement. For example, the estimates of productivity growth in retail from Basu et al are substantially lower than those from Van Ark, presented in the previous section.

22. A "success story" here is Spain, where, despite moderate output growth, dismal productivity

generally, firms were under considerable pressure to maintain employment. Given low demand growth, this reduced the incentives of firms to implement innovations which might lead to layoffs or plant closings. Thus, a tentative hypothesis is that many innovations were not implemented, leading to lower productivity growth.<sup>23</sup> A weakness of the hypothesis is that the channels through which government pressure was applied on firms are not easy to identify.<sup>24</sup> But, if the hypothesis is partly correct, it is good news for the future, as it suggests that, if output growth increases, so will implementation, and in turn productivity growth.

### 3 Implications for Labor Markets.

Jacques Delors wanted the “Single Market” report to include a “social chapter,” a set of rules for the labor market. He did not succeed. And to a large extent, reforms in the product and financial markets have shaped labor market changes and labor market reforms since then. This is the focus of this section, looking both at past evolutions, and what may lay down the road.

#### 3.1 Deregulation in Goods and Financial Markets, Wages, and Unemployment

Higher goods market competition increases average real wages, and is likely to decrease unemployment. Let me briefly go through the argument, following Blanchard and Giavazzi [2003], as it lays the ground for the discussion which follows.<sup>25</sup>

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growth has allowed for a substantial reduction of unemployment.

23. Informal evidence from interviews of firms’ managers suggest that they believe that, absent political and social constraints, they could and would reduce employment further than they have so far.

24. One may think of testing this hypothesis by looking across sectors and countries. One should find that, *ceteris paribus*, sectors that had higher demand for exogenous reasons also have had higher productivity growth. I have not explored this.

25. Blanchard and Giavazzi study the effect of different dimensions of product market deregulation in a model with monopolistic competition in the goods market, and different forms of collective bargaining in the labor market. An extension to include capital accumulation is given

Consider first the case where the wage is allocative, i.e. the case where firms take the wage as given in setting prices. Then, an increase in competition will lead firms to choose a lower markup, leading to a decrease in prices given wages. Put another way, higher competition will lead to a higher real wage at any given level of employment. Given any positively sloping labor supply or “wage curve”, this will lead, in turn, to an increase in the real wage and an increase in employment.

Consider instead the case where the wage is distributive, a case known as “efficient bargaining” in the labor literature. In this case, firms choose prices not based on the wage but on the reservation wage of workers. The wage itself is then chosen so as to divide the total rents, according to the relative bargaining power of the firm and its workers.<sup>26</sup>

Think now of an increase in competition, which eliminates monopoly power, and thus eliminates all monopoly rents (the argument holds for a partial reduction of monopoly power, but is easier to state this way). There are then two effects at work: As workers, workers lose. But, as consumers, they gain, and they gain more, so they end up better off. More explicitly:

- Consider a given firm. The increase in competition leads to lower prices, eliminating monopoly rents. As part of these rents were accruing to the workers, this effect makes the workers in this firm worse off.
- To the extent, however, that the increase in competition affects all firms in the economy, this means that all prices are now lower, and the rents which were previously going to firms and workers now go to consumers (in the form of lower prices). Thus, as consumers, workers gain. And because they

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by Spector [2004]. An interesting alternative treatment, which assumes Cournot competition in the goods market, and firm-level collective bargaining in a search labor market is developed by Ebell and Haefke [2003].

26. The question of how much of the rents workers appropriate is an old question in labor economics. A study of the relation between wage differentials and the indexes of regulation described earlier, across European countries and sectors by Nicoletti and Jean [2002] finds a significant effect on wages in manufacturing, a less significant effect outside of manufacturing. The authors hypothesize that some of the rents are taken in forms other than wages, such as lower effort and productivity or restrictions on employment.

now get all the rents, whereas before, as workers, they were only getting a fraction of them, their real wage is higher, and they are better off.

These conclusions raise an obvious issue: If product market deregulation, and by implication, higher competition, increases real wages and decreases unemployment, why do workers so often oppose it? The argument above actually gives us a key:

If the degree of monopoly power is the same to start with, and is uniformly reduced, then all workers are indeed better off. But, even in this case, the cost to the worker (the lost portion of rents) is a direct effect, while the benefit (the decrease in prices) is a general equilibrium effect, which may be much less salient.<sup>27</sup>

The degree of monopoly power however is not the same across sectors, nor is deregulation uniform across the board. In this case, it is still true that the average real wage increases, but some workers lose, while others gain. And, as in the case of trade liberalization, those who lose know they are losing, while gains are more diffuse. The implication is straightforward. As rents are reduced in some firms, and not in others, workers in those firms will lose. Thus, even if the average worker is better off, product market deregulation is likely to generate strikes and social tensions. This is where the fact that much of product market deregulation is driven by Bruxelles is of high relevance. Strikes may lead to disruptions, but are unlikely to stop the reform process. However, for sectors where deregulation is not driven by Bruxelles, the outcome is more in doubt. The main example here is the slow progress of reform in the public sector.<sup>28</sup>

We have so far focused on product market deregulation. The effects of financial market deregulation are slightly different. One can think of financial market deregulation as increasing the elasticity of capital to the rate of return—be it to a firm, to a sector, or to a country. Deregulation may then require a decrease in the real wage.

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27. This argument is close to that developed in Gersbach [2003].

28. An insightful analysis of the problems of reform of the French public sector is given in a study by the Institut Montaigne [2003].

Think for example of privatization. It is reasonable to think of capital in state-owned firms as being inelastic: Even if the firm is making losses, the state may often continue to invest. If the firm is privatized, capital will now require the market rate of return, and this in turn may require a decrease in the real wage. The same may hold for a country as a whole. Limits on international capital mobility may allow labor to extract a higher real wage, and thus a lower return to capital, without suffering capital flight. Higher financial integration will then require a decrease in the real wage. If unions do not realize the change in the environment, and do not change their behavior, then the effect may be lower capital accumulation, and lower employment for some period of time.

How much of the evolution of wages and unemployment over the recent past can be explained by deregulation in goods and labor markets is one of my current topics of research (see for example Blanchard and Philippon [2003]). The tentative answer is that deregulation may well account for some of the earlier rise, and the more recent and more limited fall in unemployment in Europe. The focus of this section is however more on the implications for the labor market in general, and the behavior of unions and the reform of labor institutions in particular. I now turn to those issues.

### **3.2 Weaker and Smarter Unions**

Deregulation implies smaller rents. Smaller rents imply smaller benefits for workers from joining a union. This in turn suggests a decrease in membership, a decrease in the power of unions. These implications are indeed consistent with the facts. Union membership has generally declined in Europe, going for example in France from 22% in 1980 to 10% in 1998, and from 36% in 1990 to 26% in 1998 in Germany (Boeri et al [2001]). This decline in membership is only partly due to the decline in rents; other factors, such as the decline in manufacturing, the increase in part time work, have all played a role. But econometric evidence suggests that they explain only part of the decline: A decline in rents is a plausible candidate for the residual.

Interestingly, there has been no decline in membership in Scandinavian countries. Union membership has increased from 78% in 1980 and to 88% in 1998 in Sweden, from 69% to 79% in Denmark, two countries where unions have traditionally been less confrontational than in the rest of Europe. This leads to the next point.

To caricature slightly, the rhetoric of European unions traditionally comes in one of two forms: Some unions speak of the need for a “partnership between labor and capital.” While fighting for labor, they nevertheless insist on the need to maintain an adequate rate of return for capital, lest capital move away and employment suffer.<sup>29</sup> Some unions instead have a view much closer to the old “class struggle” view of relations between capital and labor. They speak as if the fight over the distribution of income between wages and profits were a fight for rents, with few implications for employment.

In a world of high rents and low capital mobility, the second view had some justification. But the decline of rents and the increase in the elasticity of the demand for labor make it a dangerous strategy today. In Blanchard and Philippon [2003], we argue that, while it took some time, many unions have indeed shifted their rhetoric and their attitudes—although at different speeds across countries. This is for example the case for unions in the UK, or for example for the CFDT, one of the two main unions in France.<sup>30</sup> Others however, such as the CGT, the other main French union, have not changed their rhetoric very much. One interpretation is that those unions have decided to focus on the public sector, where rent extraction remains easier than in the private sector. (The membership of the CGT is now primarily in the public sector). But it is reasonable to conclude that, in general, unions have become both weaker and smarter.

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29. Perhaps the best-known early statement along these lines is by Helmut Schmidt, then the Social Democratic Chancellor of Germany, in 1976: “The profits of enterprises today are the investments of tomorrow, and the investments of tomorrow are the jobs of the day after”.

30. An ironic and revealing anecdote: In November 2003, Denis MacShane, Britain’s minister for Europe and a former senior trade union official, admonished German unions for their opposition to Chancellor Gerard Schröder’s reform program, “Agenda 2010”, telling them that there were “out of touch with modernity” (Financial Times, November 19, 2003).

### 3.3 Reforms of Labor Market Institutions

What have been, and are likely to be, the effects of product and financial market deregulation on labor market institutions, from unemployment insurance, to the minimum wage, to employment protection? This is a hard question, and more theoretical and empirical research needs to be done. But the following approach seems useful. There are two broad approaches to thinking about the shape of labor market institutions:

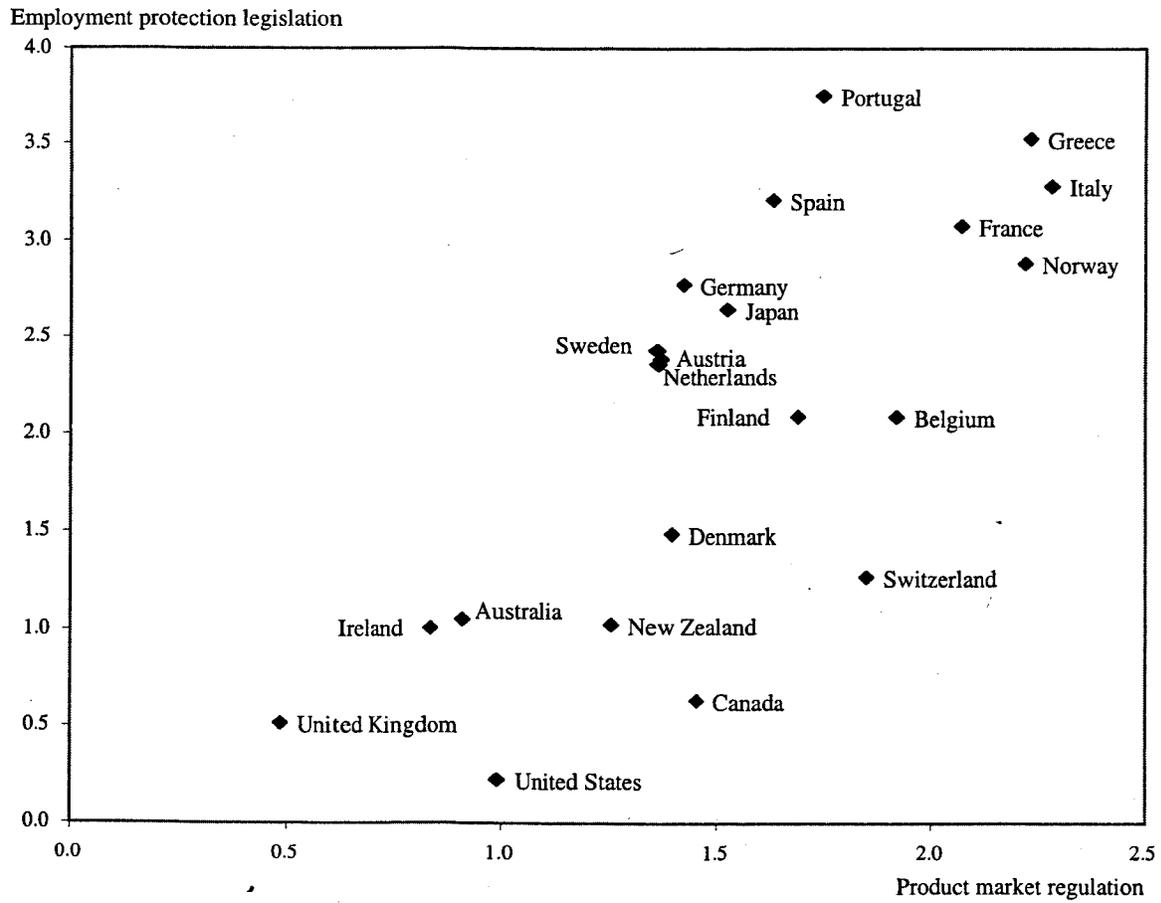
- The first is that these institutions are yet another way to affect the distribution of rents between firms and workers (or between different groups of workers, or between workers and non workers).<sup>31</sup> In this context, Figure 1, reproduced from Figure 14 in Nicoletti et al [2000], is particularly interesting. It plots the degree of employment protection, as constructed by the OECD, versus an index of product market regulation, also constructed by the OECD based on the large regulatory data set described in the previous section, across most OECD countries in the late 1990s. It shows the strong positive correlation between product market regulation and employment protection.
- The second is that these institutions are put in place to solve a number of market imperfections, for example the failure of markets to provide adequate unemployment insurance.

The first approach, on its own, is too cynical. The second, on its own again, is too naive, and both sets of factors surely play a role. This gives us a way of thinking about the effects of goods and financial markets deregulation.

Think first in terms of rent distribution. To the extent that rents are now smaller, labor market institutions, thought of as distorting instruments to extract rents, are now less attractive (this argument parallels the argument for why union membership is likely to decrease). A particularly egregious example of rent extraction

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31. See Saint-Paul [2000] for a development of this approach. See also Bertola and Boeri [2003], who analyze the effects of product market deregulation in such a context.



**Figure 4**  
**Product market regulation and employment protection legislation (from Nicoletti et al, 1999)**

in this context is the unemployment insurance system in place in France for people involved in theater, movies, and the performing arts (in French, “*intermittents du spectacle*”). Until this year, this unusually generous unemployment insurance guaranteed up to 12 months of unemployment for anyone who had worked the equivalent of 3 months in the previous year. Not surprisingly, this system ran a large deficit. This could be seen as reflecting the often stated commitment of the French government to help and subsidize culture, except for the fact that the cost is actually paid by firms, through the financing of the deficit of this fund by the general insurance fund, itself financed by payroll taxes. Perhaps because of numerous abuses of the system, probably also because of the decrease in rents, in 2003, firms proposed a reform of the system aimed not at eliminating it, but at mildly tightening it (through an increase in the number of months needed to qualify, from 3 to 4 months, and a shorter base period over which to compute the number of hours worked, 11 months rather than 12 months as before). The result was a long strike in early summer 2003, leading to the cancellation of most festivals in France. The reform has passed nevertheless, but the episode is a good example of both the pressure on some institutions, and of likely tensions in the process of reform.

Think next in terms of social insurance. If one thinks of the system as involving a trade-off between social insurance and economic efficiency, the questions are whether European countries are on the efficient frontier, and whether deregulation is putting pressure to get closer to that frontier and reduce efficiency losses.

A tentative answer is that many countries were indeed far from the frontier, and that they are slowly moving closer to it, providing roughly the same level of social insurance at a smaller efficiency cost (i.e. converging to a more efficient European model, rather than to the U.S. model). How much of the movement is due to an increase in efficiency costs coming from higher competition in goods or financial markets, and how much is due to other factors (such as learning from other countries’ experiments, something which appears important in the case of unemployment insurance, and in the case of negative income taxes) is difficult to assess.

Let me consider different institutions in turn.

- Since the mid 1980s, the most obvious flaws of the unemployment insurance system have been corrected. In particular, the highest replacement rates, which often made employment unattractive for low wage workers, have been reduced (see for example Blanchard and Wolfers [2000]). In the more recent past, unemployment insurance systems have increasingly moved towards more active reemployment policies, in which unemployment benefits are sometimes more generous than before, but are terminated if the unemployed refuse “reasonable job offers”. This, for example, is what underlied the Hartz commission proposals in Germany, now incorporated in the “Agenda 2010” introduced by Chancellor Schröder in 2003. Defining “reasonable job offers,” and providing unemployment agencies with the incentives to implement such policies has proven difficult, but change is visible. There is also some evidence of convergence across countries. Italy, which had a very low level of state-provided insurance, has increased the level over time.
- Changes in employment protection have been more limited, and more ambiguous in their effects.<sup>32</sup> Reforms have often taken the form of one or two steps forward, and one step back.

An interesting statistic can be constructed here based on the information provided by the Fondazione Rodolfo deBenedetti, which monitors labor market reforms in a number of European countries (FRDB [2003]).<sup>33</sup> After giving a short description of each reform, it categorizes them as minor or major, increasing or decreasing employment flexibility. While the categorization is often a bit arbitrary, the evidence, such as it is, is interesting: Since 1993, Germany shows seven minor reforms increasing flexibility, five minor reforms decreasing it, one major reform increasing flexibility, and

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32. For an interesting theoretical analysis of the effects of trade liberalization on the political economy of employment protection, see Bruegemann [2003].

33. Another useful source of information is the web site of EIRO, the European foundation for the improvement of living and working conditions.

one major reform decreasing it. For the group of covered countries as a whole, the number of reforms increasing flexibility barely exceeds the number of reforms decreasing flexibility. Here, again, there is some evidence of convergence across countries. Italy, which had one of the highest levels of employment protection to start, shows the highest number of flexibility-increasing reforms (The general strike triggered, in 2002, by the attempt by the Berlusconi government to introduce minor modifications to “Article 18”, the article regulating layoffs in Italy, and the subsequent failure of that attempt, shows however that reform at this margin is not easy.)

These numbers however hide an important evolution, in which governments have introduced reforms at the margin, extending the conditions under which firms can offer temporary contracts to workers. The reason for doing so was clear, the desire to increase the flexibility of firms, while keeping the existing level of protection for workers already protected. But this has led to an increasingly dual labor market structure, with two categories of workers, those covered by traditional employment protection, and those employed under temporary contracts. The effects may well be perverse, increasing the bargaining power of the protected workers. They may also make across-the-board reform more, rather than less, difficult in the future.<sup>34</sup>

- Finally, many countries have moved away from a focus on the minimum wage to a focus on a negative income tax as the best instrument to achieve higher income for low skill workers. The French “prime a l’emploi”, the Dutch “labour tax credit”, the Belgian “work tax credit”, all recently introduced, resemble in many ways the earned income tax credit in the U.S.

Can European countries maintain the same level of social protection, but do it in a way which allows them to return to low unemployment? Again, this is a question which vastly exceeds the bounds of this article. But the evidence from a number

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34. See for example the conclusions of the symposium in the *Economic Journal*, June 2002. See also Saint Paul [1993] for a theoretical analysis of the political economy of two-tier systems.

of countries that have returned to low unemployment, from the Netherlands to Sweden, suggest that the answer is positive.

#### **4 Some Conclusions**

In this paper, I have argued that Europe has done better than is often perceived; that there has been and continues to be a steady process of reform in the product and financial markets, that this process is likely to continue; that it has and will continue to lead to reforms in the labor market, although not without tensions along the way.

Is the outlook really so rosy? There are always reasons to worry. I shall mention three, realizing that each one would deserve a much longer treatment. The first is the current business cycle slump affecting Europe. As optimistic as I am about the medium term, I see good reasons to worry about the short term, and about how and when the European economy returns to the medium run path. The second is the state of the public sector. As I have argued, pressure for reform is much weaker there, and the public sector remains inefficient. The third is the state of the higher education system. The quality of higher education is mediocre in many European countries. Even if it is difficult to pinpoint the effect on growth, it is clearly likely to be a handicap for Europe in the future.

## References

- Alesina, Alberto, and Roberto Perotti, *The European Union: A politically incorrect view*, mimeo Harvard University, January 2004.
- Basu, Susanto, John Fernald, Nicholas Oulton, and Sylaja Srinivasan. *The case of missing productivity growth; or, does information technology explain why productivity accelerated in the US but not in the UK?*, NBER Working Paper, 10010, October 2003.
- Baverez, Nicolas. *La France qui tombe; Un constat clinique du déclin Français*, Perrin, Paris, 2003.
- Bertola, Giuseppe and Tito Boeri, *Product market integration, institutions, and the labour markets*, mimeo, Bocconi University, September 2003.
- Bertrand, Marianne and Francis Kramarz, *Does entry regulation hinder job creation? Evidence from the French retail industry*, Quarterly Journal of Economics, 117-4: 1369–1413, November 2002.
- Blanchard, Olivier and Francesco Giavazzi, *Macroeconomic effects of regulation and deregulation in goods and labor markets*, Quarterly Journal of Economics, 118(3): 879–909, August 2003.
- Blanchard, Olivier and Thomas Philippon, *The decline of rents, and the rise and fall of European unemployment*, mimeo MIT, September 2003.
- Blanchard, Olivier and Justin Wolfers, *Shocks and institutions and the rise of European unemployment. The aggregate evidence*, Economic Journal, 110-1: 1–33, March 2000.
- Boeri, Tito, Agar Brugiavini and Lars Calmfors, *The role of unions in the twenty-first century*, Oxford University Press, Oxford, 2001.
- Boylaud, Olivier, *Regulatory reform in road freight and retail distribution*, OECD Working Paper 28, Economics Department, OECD, August 2000.

Brügemann, Björn, *Trade integration and the political support for labor market rigidity*, mimeo MIT, December 2003.

Colecchia, A., and Paul Schreyer, *ICT investment and economic growth in the 1990s: Is the U.S. a unique case? A comparative study of nine OECD countries*, Review of Economic Dynamics, 5-2: 408-442, 2002.

Commission of the European Communities, *Completing the internal market*, Technical report, European Union, Bruxelles, 1985.

Danthine, Jean Pierre, Francesco Giavazzi, and E.L. von Thadden, *European financial markets after EMU. A first assessment*, NBER Working Paper 8044, December 2000.

De la Dehesa, G., *Quo vadis Europe? The persistent economic underperformance of the European Union relative to the United States*, mimeo, Madrid, 2004.

Duhamel, Alain, *Le désarroi Français*, Plon, Paris, 2003.

Ebell, Monique and Christian Haefke, *Product market deregulation and labor market outcomes*, mimeo, Pompeu Fabra, October 2003.

European Commission, *Competition policy in Europe and the citizen*, Technical report, European Union, Bruxelles, 2000.

European Commission, *Economic reform: Report on the functioning of community product and capital markets*, Technical report, European Union, Bruxelles, December 2002.

Fondazione Rodolfo deBenedetti, *Social reforms database*, [www.frdb.org](http://www.frdb.org), 2003.

Foster, Lucia, John Haltiwanger, and C.J. Krizan, *The link between aggregate and micro productivity growth: Evidence from retail trade*, NBER Working Paper, 9120, August 2002.

Gersbach, Hans, *Structural reforms and the macroeconomy: The role of general equilibrium effects*, Invited Lecture, IEA meetings, Lisbon, September 2003.

Gordon, Robert, *Two centuries of economic growth; Europe chasing the American frontier*, mimeo, Northwestern University, October 2002.

Institut Montaigne, *Comment reformer?*, Paris, September 2003.

Joumard, Isabelle, *Tax systems in European Union countries*, OECD Economics Department Working Paper 301, June 2001.

McKinsey Global Institute, *France and Germany*, 1997.

McKinsey Global Institute, *U.S. productivity growth, 1995-2000*, Washington, October 2001.

McKinsey Global Institute, *Reaching high productivity growth in France and Germany*, October 2002.

Nickell, Stephen, *Employment and taxes*, paper prepared for the CESifo conference on "Tax Policy and Employment", July 2003.

Nicoletti, Giuseppe, Andrea Bassanini, Ekkehard Ernst, Sebastien Jean, Paulo Santiago, and Paul Swaim, *Product and labour markets interactions in OECD countries*, Economics Department Working Paper 312, OECD, December 2001.

Nicoletti, Giuseppe, and Sebastien Jean, *Product market regulation and wage premia in Europe and North America; An empirical investigation*, OECD Economics Department WP 318, 2002.

Nicoletti, Giuseppe, and Stefano Scarpetta, *Regulation, productivity, and growth*, Economic Policy, 36-1: 9-72, April 2003.

Nicoletti, Giuseppe, Stefano Scarpetta, and Olivier Boylaud, *Summary indicators of product market regulation with an extension to employment protection legislation*, Economics Department Working Paper 226, OECD, April 2000.

Prescott, Edward, *Why do Americans work so much more than Europeans?*, Federal Reserve Bank of Minneapolis Research Department Staff Report 321, November 2003.

Saint-Paul, Gilles, *On the political economy of labor market flexibility*, NBER Macroeconomics Annual, 8: 151–196, 1993.

Saint-Paul, Gilles, *The political economy of labor market reforms*, Oxford University Press, Oxford, UK, 2000.

Sapir et al, *An agenda for a growing Europe: The Sapir Report*, forthcoming, Oxford University Press, 2004.

Siebert, Horst, *Why Germany has such a weak growth performance*, Kiel Working Paper, Kiel Institute for Economics, 2003.

Spector, David, *Competition and the capital-labor conflict*, European Economic Review, 48-1: 25-38, February 2004.

Turner, Adair, *What's wrong with Europe's economy?*, Lecture at the London School of Economics, February 2003.

Van Ark, Bart, Johanna Melka, Nanno Mulder, Marcel Timmer and Gerard Ypma, *ICT investment and growth accounts for the European Union, 1980-2000*, Report to the European Commission, September 2002(a).

Van Ark, Bart, Robert Inklaar, and Robert McGuckin, *Productivity, ICT investment and service industries: Europe and the United States*, Groningen Growth and Development Centre, Research Memorandum GD-60, December 2002(b)

Williamson, Hugh, *German trade unions "out of touch with modernity"*, Financial Times, November 19, 2003.