

## **Annex 5 - Supply-side reforms in Europe: Can the Lisbon Strategy be repaired?**

## **1 Introduction**

The ambitious Lisbon objectives of turning the EU into “the most dynamic, knowledge based economy in the world by 2010” are becoming an embarrassing joke. There is little or no sign that Europe’s economic decline is stopping or turning around, particularly in the large countries of continental Europe. There is also substantial agreement on what should be done to improve the long run economic outlook, at least a general level. Yet, the economic reforms that are needed are not being implemented, or they are enacted too slowly. The Lisbon strategy is clearly failing.

What can be done to speed up the pace of reforms? What are the most urgent priorities? In particular, what role should the EU play to facilitate supply side reforms? In which areas of supply side policy, if any, is the need for European coordination more acute? How can the current institutional framework for coordination of supply side policies be improved? These are the issues addressed in this paper.

The current framework for coordinating supply side policies is the Open Method of Coordination (OMC), enshrined in the Lisbon Strategy. This approach is based on the idea that there is a need for national governments to go further in these supply-side areas as well. Yet, it does not propose to centralize national policies. Thus, the OMC can be seen as a flexible approach to coordination in areas where the case for centralization is weak but yet present. Yet, this pragmatic approach is not delivering many results, certainly not in the areas where the most difficult reforms are needed. Our main purpose is to evaluate whether the need for supply-side coordination is warranted and, where it is, to ask how the Lisbon Strategy can be reinforced. We reach three main conclusions.

First, centralization is certainly needed in the area of the Single Market. Here the main challenge is to remove remaining barriers to trade in services and to induce more effective cross-border competition in public utilities and financial markets. To achieve this goal, the soft approach of the Lisbon strategy should be abandoned, in favor of a stronger delegation of enforcement and regulatory powers to the European Commission (or possibly to European independent agencies).

Second, centralization cannot and should not be strengthened in the area of labor markets. Here reforms should be pursued by national governments, who are the only ones to have the political legitimacy to make decisions in this controversial area. Nevertheless, the OCM can be reinforced, essentially by adding national political pressure to the peer pressure already present in the Lisbon strategy. This can be achieved by sharpening the focus of the OCM around a few important benchmarks

and indicators of labor market performance, and then forcing national parliaments to debate the performance of their governments in light of these European comparisons.

Third, in the area of research and tertiary education, governments should be encouraged to pursue bold reforms through the creation of new universities and research centers. Gradual and piecemeal reforms are unlikely to work, both because of internal opposition from the establishment, and because success is more likely if scarce resources are concentrated in the few institutions that can attract a critical mass of researchers. Governments should learn a few lessons from their experience with labor market reforms. In this politically difficult area, successful reforms have been implemented through the creation of dual structures: the rights of the insiders have been preserved, while new and more flexible legislation changed the rules for new employees. The same dual approach should be pursued in the area of research and education. Rather than trying to radically change existing universities, member states should set up new research institutions under new rules and with additional resources. Here too, the initiative should mainly come from member states, not from the EU. But this novel approach should be encouraged at the European level, through some coordination and by providing matching grants for the countries that are willing to go along this path.

The outline of the paper is as follows. In the next section we present our guiding principles, inspired by the theory of fiscal federalism but applied to the key supply side challenges faced by the EU, all of which have now been clearly identified. Section 3 addresses the challenges that pertain to labor markets. Next, in section 4, we compare the performance of labor productivity in Europe vs the US since the mid 1990s. In light of this evaluation, section 5 and 6 contain the policy analysis concerning the single market and policies towards research and education. Section 7 then examines the Lisbon Strategy and outlines our main normative conclusions. The last section contains a brief summary and some concluding remarks.

The paper does not seek to identify all the reforms that Europe needs to cure its ills. Both the ills and the medicine are well-known, as are the reasons why some countries have failed to act. These aspects are cursorily recollected only to illustrate the paper's main aim, that of analyzing how the *process* of economic reform can be best served, and what role can Europe play in this regard.

## **2 Principles**

Contrary to some popular beliefs, coordination or centralization is not desirable *per se*. The case must be based on the idea that national policymakers acting in isolation have distorted incentives. But where does the distortion come from? To answer, we need to consider two cases: governments can be “benevolent” or “politically motivated”.

## 2.1 Benevolent governments

The traditional perspective views policymakers as “benevolent” and motivated only by the goal of maximizing national welfare. In this case, distorted national incentives arise from one of two problems: the presence of externalities (one country’s action affects others), or the existence of increasing returns to scale (some activities are more efficient when carried on a scale larger than the national domain).

Aggregate demand policies carry externalities which, if important enough, call for coordination, whenever possible. In the area of monetary policy, for instance, a country’s exchange rate depreciation is an appreciation from its partners’ viewpoint. This has long been seen as dangerous beggar-thy-neighbor moves that require a high degree of coordination, hence the Bretton Woods system, the EMS and eventually the monetary union.

Supply-side policies are different. Any policy that distorts trade is of paramount importance and generates externalities that lead to Pareto inefficient outcomes. This is the rationale for interfering with national sovereignty over trade policy, for imposing free trade inside the EU, and for delegating strong enforcement powers to the European Commission over the functioning of the Single Market.

Obviously, there are important exceptions to this general argument. The first one is that, if market failures pre-exist, one country’s supply-side policies may actually hurt its partners. For example, wage rigidities that stunt the market mechanism can result in higher unemployment. Yet, the first best principle suggests that the solution is not coordination but a reduction of the incriminated market failure where it exists.

The second exception concerns legislation and regulations, seen as policy interventions designed to deal with market failures. For example, anti-trust policies are needed because increasing returns to scale, where they exist, lead to excessive market concentration. In this second-best world, policy coordination is justified because most markets operate at the EU level. A well functioning Single Market indeed requires a high degree of harmonization of commercial laws, public procurement, anti-trust policies, etc..

But the strong argument in favor of centralization stops at trade policies (or more generally at policies that enforce the Single market). In the other areas of supply side policy, the case for coordination is much weaker. Once free trade is guaranteed, one country’s productivity gains benefit its trade partners through favorable terms of trade effects. It is sometimes feared that one country’s failure to carry on effective supply-side policies, while its partners do, could lead to a loss of market share and reduced demand, leading to a growth slowdown and unemployment. Similarly, if one

country's actions benefit others, uncoordinated supply-side policies might be optimal at the national level but under-developed at the collective level. Both observations correspond to the existence of externalities. But these are pecuniary externalities, that do not support the case for coordination or centralization other than through the enforcement of free trade.<sup>1</sup> Put differently, countries that pursue effective supply-side policies are rewarded by the market; those that don't suffer from their own behavior and indirectly benefit from others' efforts, and therefore cannot complain.

## **2.2 Politically motivated or constrained governments**

The abstraction of "benevolent" welfare maximizing national policymakers is not always appropriate. Often national policymakers face political constraints, and respond to electoral concerns or to the influence of organized groups who seek rents for themselves. In this case, national policymaking has distorted incentives even in the absence of externalities or economies of scale. The question then becomes whether centralization mitigates or enhances these political distortions.

The main reason why centralization may be counterproductive, if there are national political distortions, is obvious: centralization weakens the incentive to compete. Each government acting in isolation faces a cost in pursuing politically expedient but inefficient policies, and this cost is lower if everyone agrees to remain inefficient. A well known example is tax policy. When acting in isolation, national governments have an incentive to set low tax rates, so as to attract mobile tax bases from abroad. This so-called tax competition is inefficient if governments are welfare maximizing, because every country ends up with excessively low tax rates. But suppose instead that politically motivated governments have distorted incentives to over-spend and over-tax. Then tax competition could be welfare enhancing, because it offsets the political distortions.

Centralization may also reduce the cost of political lobbying by foreign organized interests. This can be counter-productive or welfare improving, depending on whether domestic and foreign lobbies have the same or opposite interests (see Bordinon et

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<sup>1</sup> The distinction between pecuniary and non-pecuniary externalities is established in Musgrave and Musgrave (1973). Bagwell and Staiger (2003) illustrate why pecuniary externalities lead to efficient outcomes under free trade.

alii (2003)). Under decentralized policymaking, national policy is distorted only (or mainly) by the influence of the domestic lobby. With centralization, policy is also influenced by the foreign lobby. If the foreign and domestic lobbies have the same interests, then they pull in the same direction, and the policy is doubly distorted. If instead the two lobbies have opposite interests, then they offset each other and the distortion is mitigated.

Examples of policies where foreign and domestic organized interests are aligned are consumer or environment protection – both foreign and domestic producers are likely to lobby for excessively low consumer or environment protection. When policy is decentralized, each government is influenced by the domestic lobby, but neglects the adverse effect of consumer or environment protection on the foreign lobby. Under policy coordination, instead, both governments cooperate and exchange favors. As a result, domestic policy is likely to be even more distorted towards low consumer or environment protection, because it also internalizes the interests of the foreign lobby.

Examples where foreign or domestic organized interests are opposite are policies that protect the market share of national incumbents, or production subsidies to national producers. These policies hurt foreign competitors, either because they create barriers to entry in the domestic market, or because they create a competitive advantage for domestic producers by reducing their cost. Here, centralization or coordination exposes the policymaking process also to the influence of the organized interests that are hurt by these protectionist policies, and this is likely to lead to better policies.

So far, we have discussed the effect on policymaking incentives of strong forms of coordination (such as delegation of power to a European policymaker, or coordination to a commonly agreed policy). But some policies, in particular in the labor market, are coordinated in a softer way, through the so called Open Coordination Method (OCM) – see the previous section. Here national policymakers basically exchange information and set performance standards for policy decisions that remain entirely national. This kind of soft policy coordination generally strengthens the incentives of policymaker to enact good policies, because it increases the transparency of public policy decisions, forces governments and statistical agencies to gather information about policy consequences, and facilitates international comparisons by voters. Note however that, precisely because it entails soft coordination methods, it also does not change the incentives of policymakers in important ways. We discuss more extensively these coordination methods below, in specific contexts.

### **2.3 Summary**

The upshot is that there is no general case for supply-side policy coordination. The presumption is that each country benefits from conducting effective supply-side policies without hurting its partners, possibly even bringing general benefits.

Competition via supply-side policies is a priori desirable, since countries can learn from each other's experiments and have stronger incentives to compete and enact efficiency enhancing policies. The main exception concerns policies that guarantee equal access to the Single market to all producers, such as policies that fight state aid or other competitive distortions. Here there is a clear benefit from centralization, which alone fully exploits the conflict of interest among organized interests located in different countries.

### **3 Labor markets**

#### **3.1 The challenge: raising the employment rate**

Average per capita income in the EU is about 30% lower than in the US. This gap is almost entirely due to Europeans working less than Americans; output-per-hour-worked is about the same in Europe and the US.

Why do Europeans work so much less than Americans? The main reason is that fewer of them are employed. Hours worked per employee have also recently declined in Europe relative to the US. But a shorter working day accounts for less than a third of the overall gap in hours worked between Americans and Europeans; the remaining two thirds are due to the extensive margin of fewer employed individuals. Moreover, the recent decline in working hours per employee is also explained by the increase in female labor force participation and the resulting extension in part-time work.<sup>2</sup> The main challenge faced by European policymakers is thus to increase employment. This is also confirmed by public opinion polls, that routinely show that this is a key concern of European citizens.

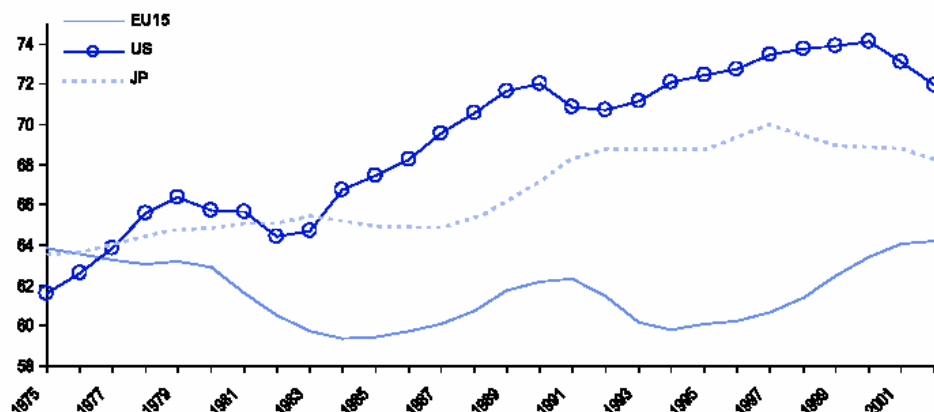
As shown in Figure 1 European employment has fluctuated between 60 and 64% of the working age population since the mid 1970s. In contrast, the US employment rate always remained well above 70% since the late 1980s. The failure to provide able workers with jobs is a massive and costly failure. Not only does it result in the waste of the most precious resource – people's talent, often enhanced by extensive education systems – but it also create social problems which affect the social cohesion and

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<sup>2</sup> See Boeri and Tabellini (2004).

generate fears of growth-enhancing reforms in a vicious circle that is Europe's landmark.

**Figure 1. Employment rates in the EU, US and Japan 1975-2002**  
(% of working population)



Source: European Commission (2003)

The Lisbon strategy aims to achieve an overall employment rate of 70% in Europe by the year 2010 (65% by the year 2005). As shown in Figure 1, European employment improved significantly in the second half of the 1990s. This progress is also evident in Table 1, which compares the EU and the US before and after the onset of the Lisbon Strategy. In Europe employment growth accelerated from -0.3% on average in the first half of the 1990s, to +1.4% on average after 1997. In the US, instead, it slowed down from 1.7% before 1997, to 1% from 1997 onwards – the comparison with the US is partly distorted by cyclical factors, however, since the US went through a deeper recession in 2001 compared to the EU.

**Table 1. Economic Performance: EU and US**

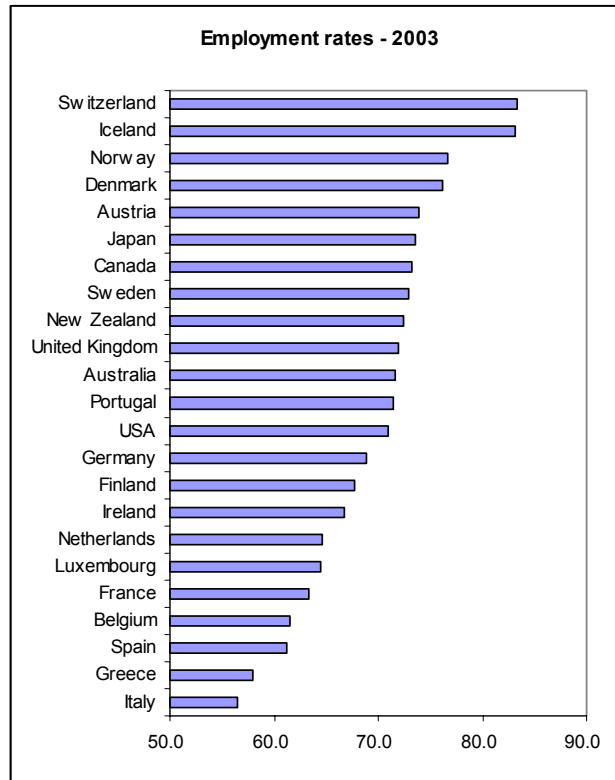
Annual average percentage changes	1991-1996		1997-2002	
	EU15	US	EU15	US
	GDP	1.5	3.2	2.4
Employment	-0.3	1.7	1.4	1.0
Hourly Productivity	2.2	1.4	1.5	2.2

Source: Kok Report of the Employment Taskforce, November 2003



Although progress is evident on this front, the challenge is far from being met. First, the overall employment rate remains low (64.3% in 2002). Second, employment is particularly low in a few countries (Italy, Greece, Spain, but also France and Germany) – see Figure 2. Third, the employment rate is exceptionally low for specific groups in the population (elderly, young, female). Finally, employment growth slowed down in 2002 and in 2003; as always, further progress becomes more and more difficult once the first most glaring distortions have been removed.

**Figure 2. Employment rates in 2003**



Source: *Economic Outlook* 74, December 2003, OECD

Looking at the data in some detail, we also see that Europe's poor performance in terms of employment is explained by two features that makes Europe (on average) stand apart from the US. First, relatively few new jobs are being created. Second, when they lose jobs, Europeans spend considerably more time finding new employment. This can be seen in Table 2 which shows, for example, that in Italy one unemployed worker out of two has not found a job after one year, that this is also the

case of half of German workers and a little bit less in France, while only 6% of those unemployed have been in this situation for more than one year in the US.

**Table 2. Proportion of long-term<sup>a</sup> unemployment- 2002 (%)**

France	Germany	Italy	Japan	Netherlands
42.5	51.5	60.8	25.5	32.7
Spain	Sweden	Switzerland	U.K.	United States
47.6	26.4	29.1	28.0	6.0

Note: (a) Share of people unemployed for one year or more.  
Source: Baldwin and Wyplosz (2003)

This conclusion is perfectly consistent with the 2003 report of the Economic Policy Committee, which follows up the Lisbon Strategy:

“Reforms need to promote active job searching and diminish obstacles to job creation, which arise among other reasons from the level, duration and/or eligibility criteria of benefits, overly restrictive employment protection legislation and inflexible wage bargaining systems that do not allow wages to evolve according to productivity and skills differentials. In addition, both the efficiency and coverage of active labor market measures needs to be improved and mobility encouraged.”

Economic Policy Committee (2003), p.9.

In what follows we summarize the main aspects of European’s labor market policies and institutions that are commonly deemed responsible for the disappointing performance. Although there is some disagreement about the relative importance of each of these factors, most experts would agree that this is where reforms are needed. We conclude with a discussion of the role of the European Union in the reform process.

### **3.2 Labor market negotiations**

Labor market negotiations, which determine wages and other aspects of working conditions, may take place at three different levels:

- at the plant level
- at the industry level

- at the national level with particular firms or industries possibly improving upon the national agreements.

When they negotiate at the plant level, workers and their unions are aware that high wage settlements could endanger their firm's competitiveness and result in job losses or even bankruptcy. This should have a moderating influence on claims. Similarly, national level bargaining clearly affects the whole economy's competitiveness, presumably leading unions to be careful about the employment implications of high wages and other. At the industry level, in contrast, unions feel responsible neither for the entire economy nor for particular firms. Indeed since all firms that compete nationally with each other for the same range of products jointly agree, trade unions hardly feel any restraint on their wage claims.

This reasoning has led Calmfors and Driffill (1988) to formulate the hump-shape hypothesis. This hypothesis posits that *ceteris paribus* real wages are higher where negotiations are at the industry level than when they are either fully uncoordinated or fully coordinated. The hypothesis, which has received empirical support,<sup>3</sup> implies that the employment rate is lower in countries where negotiations are conducted at the industry level. Figure 3 shows a related measure, which captures the degree to which labor market negotiations take into account the overall effects on the economy. The index can take a value that ranges from 1 (no coordination) to 3 (full coordination). The Calmfors and Driffill hypothesis means that worst level is 2. This is level close to which most European countries were in 1998, the latest available year. The figure also shows that, between 1960 and 1998, few European countries (Ireland, the UK, and somehow France and Italy) have moved away from the middle range, while several have moved in the wrong direction (Spain, Portugal, Sweden, etc.).

Negotiations at the industry level entail a second large distortion if labor productivity differs across regions in the same industry. This problem is obviously very relevant in countries like Italy and Germany after unification. Industry level negotiations tend to reflect the strong bargaining power of labor in the low unemployment regions

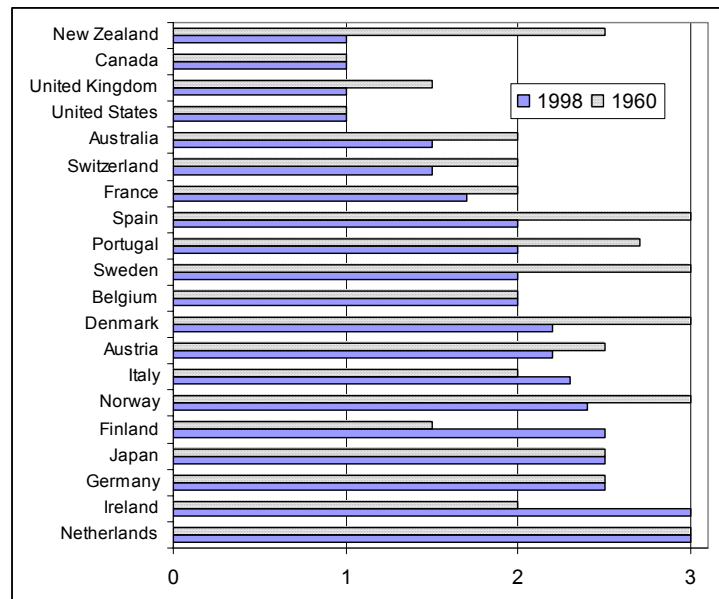
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<sup>3</sup> See Heylen (1993), Scarpetta (1996) and Elmeskov et al. (1998). The hump shape describes how real wages vary according to the degree of centralization, peaking in the intermediate range (with the opposite effect on employment).

(northern Italy and West Germany), causing persistently high unemployment in the low productivity regions. Here the obvious solution would be to move towards more decentralized firm level bargaining. But this is opposed by the unions who fear a loss of bargaining power, and sometimes also by the large firms who fear a surge of labor unrest and high negotiation costs.

The completion of the Single Market means that competition on the goods markets no longer takes place at the national level, an effect probably reinforced by the creation of the euro. An important aspect of this change is that national labor market negotiations now concern only a relatively small part of the firms' markets. Put differently, the indices shown in Figure 3 need to be very significantly reduced for the EU countries. Put differently, goods market integration in Europe considerably raises the competition that is transmitted from the goods market to the labor market. This could explain the apparent wage moderation observed over the recent years throughout Europe.

**Figure 3. Index of coordination of labor market negotiations (1960 and 1998)**



Source: Nickell (2003)

This is good news for Europe's employment, but it is bound to weaken trade union bargaining power. The question, therefore, is what will be the unions' next move. Clearly, heightened pan-European competition provides incentives for trade unions to

get organized at the European level. The recently increasing visibility of the European Trade Union Confederation (ETUC) indicates that they begin to respond to the incentives. It is fair, however, to assume that existing differences – institutional and ideological – among trade unions are too deep to expect a rapid evolution. What can be the governments' attitude?

One option is to aim at completely centralized bargaining, with topping up at the industry and/or national levels. This option is most unlikely, for the same reasons that we are unlikely to see any time soon a truly European union movement. In addition, it would most likely encourage national unions to focus on the topping-up at the industry level, the least desirable outcome as far as employment is concerned.

Another option would be a move to the other desirable end of the spectrum, fully decentralized negotiations at the firm or establishment level. This can be done country by country without any formal agreement. It fits well with the principles set out in Section 2.1 above. National labor market institutions are characterized by a high degree of heterogeneity, shaped by each country social history. In addition, failure to achieve the most desirable outcome does not adversely affect the countries. On the country, if a country fails to adopt efficient labor market institutions, it loses employment and competitiveness, the latter being an advantage for its partners. The implication is that the incentives faced by each country are well aligned with employment-friendly policies.

The least desirable outcome would be for each country to move to industry level negotiations. This would happen if trade unions organize themselves around industry lines, as in France and Germany, at the European level and closely coordinate their strategies. Even though national bargaining practices may be incompatible with this evolution (e.g. in the UK or Sweden), if trade unions were to recover power<sup>4</sup>, the result would be a shift towards pan-European industry level bargaining. One reason why this is undesirable is simply the Calmfors-Driffill effect, which is magnified now that competition has increased and so the economic price to pay for being uncompetitive. Indeed, it used to be a time when unions were counting of subsequent devaluations to re-establish any loss of competitiveness caused by employment-

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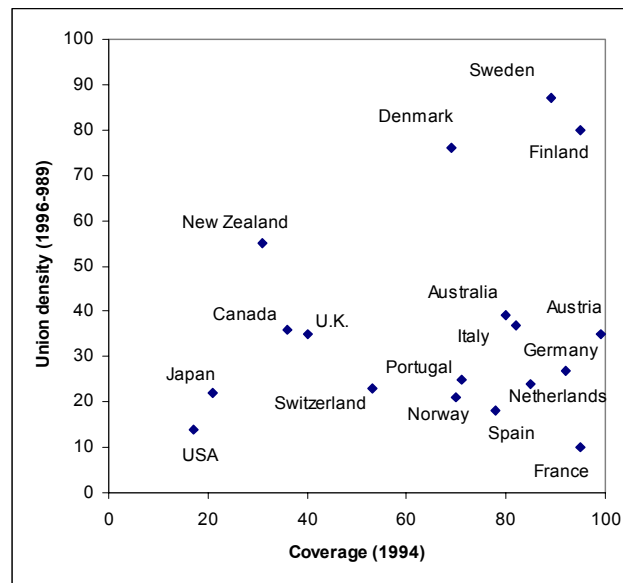
<sup>4</sup> It is interesting to note that, in the UK, trade unions had lost much public support at the time of the election of Mrs. Thatcher but have more than recovered by now, see Pencavel (2003).

unfriendly negotiation outcomes. In addition, and most crucially, if industry level negotiations were generalized, the incentives for trade unions to structure themselves at the pan-European industry level would become very strong. This would place the EU at the top of the hump.

### **3.3 Coverage of labor market agreements**

A related issue concerns the coverage of labor agreements, where large differences exist. The issue can be illustrated by looking at all the OECD countries in Figure 4. One special case is that of the USA where agreements typically apply only in the plants where they are signed (and unions do the negotiation only if the workers have previously voted to delegate this task). Another special case is France where branch agreements apply automatically to all firms belonging to that branch. In both cases, union density – the percentage of workers who are union members – is very low. The US case creates maximum competition, both among firms (which try hard to have their plants declared “non-union”) and among workers (who often vote against union representation to protect their own jobs). The French case gives much power to unions, it prevents any labor cost competition within branches (except by adopting labor saving production techniques, which is the case) and it discourages union membership (since all workers are automatically protected, whether they pay union fees or not), which limits democratic accountability. Another special case concerns Sweden and other Nordic countries, where union membership is very high so that *de facto* – and even *de jure* in Finland – labor agreements apply to nearly all workers. This creates an effect similar to centralization, giving labor market negotiators much power while making them accountable to the whole workforce. As far as employment is concerned, the most favorable cases are in the US and Nordic country corners and the worst cases are in the French corner, where most of the EU countries lie.

**Figure 4. Union density (%) and agreement coverage (%)**



Source: Nickell (2003)

The diversity of institutions, usually backed by laws or regulations, raises the question of harmonization. One view is that the intensification of goods market competition will trigger a “race to the bottom” or “social dumping”. This view calls for harmonization designed to protect workers’ rights. The opposite view is that the intensification of goods market competition promotes a competition among labor market institutions that will reveal those that promote employment. It further notes that any harmonization move is likely to strengthen the French corner where most EU countries lie. This view opposes harmonization. Not surprisingly, this second view is defended by the UK and the Nordic countries, the first by France.

Partly, these views weigh differently economic efficiency, larger in the US corners, and trade union power, greatest in the French corner. What is interesting is that the Nordic countries manage to combine both economic efficiency and trade union power. This suggests that harmonization towards best practice, if possible, would be desirable. Harmonization towards controversial practices, the French corner, is not.

### 3.4 Unemployment insurance

Unemployment insurance is another highly controversial issue, which raises similar trade-offs between economic efficiency and perceived social protection. Protecting the unemployed is a natural element of solidarity. At the same time, the evidence is that ill-designed insurance systems are a major source of unemployment. The adverse effects of unemployment insurance come from the disincentives that unemployed workers face when looking for and accepting jobs that offer a combination of salaries and content which is not attractive in comparison with subsidized unemployment.

Three aspects are involved in these disincentives:

- The level of the benefits. The lower they are relative to the salary alternatives, the smaller is the disincentive;
- The duration- The longer the benefits are served, the less unemployed workers actively search for a new job;
- The rules that accompany the benefits. In some countries, the beneficiaries are not allowed to turn down job offers more than a number of times, in others no such condition is imposed.

An additional consideration is the fact that, in general, unemployment benefits are seen as an insurance system and are financed by taxes levied on wages. The more generous is the unemployment benefit system (high benefits, long duration, few conditions), the longer on average unemployed workers remain in this situation and the costlier is the system.

This distortion is aggravated if, as in Italy, Germany and other European countries, unemployment benefits are not fully taxed by the income tax or the social security contribution. In this case, the tax on labor income or the social security contribution creates a gap between the income if employed and if unemployed, inducing workers to demand higher wages when taxes on labor go up. This raises labor costs, reduces competitiveness and further hurts employment - Daveri and Tabellini (2000). The resulting “unemployment trap” is well documented.<sup>5</sup>

provides an illustration by comparing the “generosity” of unemployment benefits - the maximum amount of insurance that can be drawn upon becoming unemployed – and the proportion of people who have been unemployed for more than 12 months. It confirms that unemployment benefits reduce the intensity of job search by the

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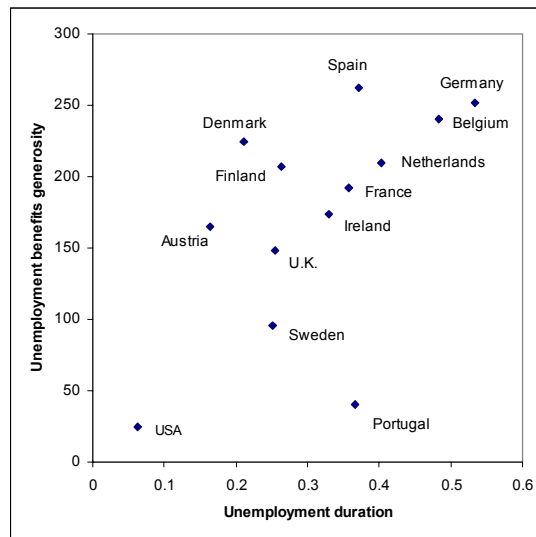
<sup>5</sup> See, for example, the numerous sources quoted in Nickell (2003) as well as Blanchard and Tirole (2003).



unemployed. In addition, countries' position regarding the strictness of eligibility conditions is broadly in line with the generosity indicator. Sweden, for example, has long combined relatively high unemployment benefits with strict conditions and limited duration; the system is intended to be generous, but not for long.

Should the national unemployment insurance systems be harmonized or centralized? As for other labor market institutions (negotiations, coverage), the diversity of existing arrangements reveal heterogeneous preferences about the trade-off between economic efficiency and social protection. Combined with limited externalities, the case of harmonization is very weak.

**Figure 5. Long term unemployment and unemployment benefits (2000)**



Source: Baldwin and Wyplosz (2003)

Notes: unemployment duration is the ratio of long-term unemployed (from Eurostat) to the unemployed (from OECD, *Economic Outlook 72*, Dec. 2002). Unemployment benefits generosity is the product of the replacement rate and the duration of benefits (from Blanchard and Wolfers, 2000).

On the other side, it has been suggested that the loss of national monetary policy in the euro area is likely to make unemployment more variable. With just one instrument, the ECB cannot attend to every country's conditions and its average concern is likely to leave out the extreme, booms and slowdowns. This is potentially an important externality, whose magnitude remains to be seen. As a possible solution, some have suggested a European unemployment scheme that will collect resources throughout the EU – or just the euro area – and serve limited unemployment benefits, to be topped up by the national insurance systems.<sup>6</sup> This could establish a measure of European solidarity and allow for indirect automatic counter-cyclical transfers from booming to depressed countries. But this idea is not convincing, for two reasons. First, it would create obvious moral hazard problems, weakening the incentives of national policymakers to reform their labor market institutions. Second, there are large differences in national unemployment rates within the EU. A European system of unemployment insurance would thus contain a large amount of redistribution among countries, and not just of risk sharing. This redistribution would be opposed by the net contributors and would create unnecessary controversies.

### **3.5 Employment protection legislation**

A naïve approach to unemployment is to ban it. In fact, many countries have legislation that restricts firing by firms. These restrictions include procedures that can be lengthy and cumbersome, such as advanced notice, mandatory severance pay, the possibility of appeal against unfair dismissal, regulations on fixed-term contracts, etc. The evidence is that these measures do reduce dismissals in bad years, by making them more expensive, but that they also reduce hiring in good years, because employers anticipate that it will be hard to fire workers at the next downswing. Overall, there is limited evidence that employment protection legislation reduces the variability but not the level of unemployment or employment.<sup>7</sup>

Even if the unemployment effects were small, high firing costs hurt productivity growth. The reason is that they raise the cost of labor reallocations, and thus make it

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<sup>6</sup> See, for example, Bean et al. (1998).

<sup>7</sup> Bertola et al. (1999) provide an excellent review. See also Nickell (2003) and Blanchard and Tirole (2003).

harder to benefit from labor savings technological advances. The disappointing performance of Europe in the sectors that use ICT, documented in section 4 below, could also be due to this feature of European labor markets.

### **3.6 Making reform happen: a role for the open method?**

The previous sections identify the desirable directions for labor market reforms in Europe. Should reforms be coordinated at the European level? More generally, what can the European level of government do to strengthen the resolve to reform? This is the question addressed in this subsection.

The reforms that are needed differ across countries, and entail no spillover effects across national borders – the only exception concerns provisions to increase labor mobility within Europe, such as the portability of some welfare state benefits. Hence, from the perspective of welfare maximizing governments, centralization is not needed. The real question is whether the EU can be exploited to overcome political resistance to labor market reforms, and how.

It is not surprising that reforms are opposed by large segments of the population. European labor market institutions and policies have evolved in the course of a long and controversial political process, where political and economic actors had to find a difficult compromise between the conflicting goals of economic efficiency and social protection or redistribution. In the end, each country must decide how much weight it wants to give to raising the employment rate and lowering the rate of unemployment – two largely different objectives – relatively to preserving the level of social protection and the role and influence of trade unions. This is a political judgment that each government has to make. Obviously, different countries have decided different combinations. This is a second reason for concluding that Europe can only play a very limited role in this reform process. Simply put, the European level of government would not have the political legitimacy to intervene in this area with binding decisions. If there is a scope for policy coordination, it must be a “soft” type of coordination, that strengthens the incentives for reform without dictating that they be undertaken. Having said this, the European Union can still play an important role in making reforms happen.

To start with, the European Union should make sure that firms and trade unions face an integrated and strongly competitive single market for their products. As argued by Blanchard and Giavazzi (2003), stronger product markets competition reduces the rents over which firms and workers bargain. Smaller rents, in turn, reduce the incentives to retain distorting labor market practices that increase the bargaining power of unions. Through this channel, European integration can be seen as an agent of change. Enlargement to Central and Eastern Europe increases the relevance of this mechanism, given the lower cost of labor in that region. This view receives some

backing from the argument that integration may lead to “social dumping”, a sign that competition is producing some of its expected effects.

Second, some degree of centralization in the reform process may provide a useful boost to reforms if European governments face different labor market political constraints. The needs for reform and trade union orientations differ from country to country. This means that the interests that stand against reforms are not well aligned in all European countries. The discussion in section 2 above suggests that in this case centralization might help to overcome resistance to reform. But how can some centralization be achieved, without excessive interference in the domestic political process?

The Lisbon strategy was designed precisely to achieve some degree of coordination, while at the same time leaving ultimate decisions and implementation in the hands of national governments and parliaments. Under the OCM, employment is identified as a common goal and achievements in each country are compared against successful benchmarks. Governments can use foreign experiments as examples of good policies and this reduces the danger of collusion among conservative forces. Moreover, the OCM is that countries can learn from each other. In this difficult area, reforms can only be gradual and piecemeal. By comparing what works and what doesn't, countries understand what are the priorities and how to design successful reform packages. Since the OCM does not involve any commitment to centralize or harmonize, it combines some of the positive aspects of coordinating reforms without raising concerns about excessive centralization.

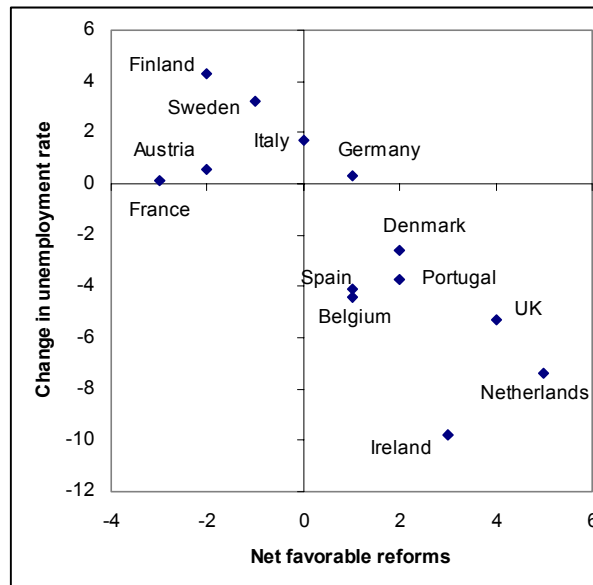
An objection often raised against the OCM is that it encourages hyperactivism: countries engage in counter-productive reforms or increase institutional complexity just to show that they are doing something. The criticism is valid and we return to it in Section 7 below, in our overall appraisal of the Lisbon strategy. To be effective, reform effort must be directed towards the appropriate goals. When this happens, reforms are indeed associated with labor market improvements. Figure 6 compares the change in unemployment to the intensity of labor reforms. Nickell (2003) looks at changes in nine areas known to affect unemployment;<sup>8</sup> for each country he lists

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<sup>8</sup> These areas are: unemployment benefit replacement ratio, unemployment benefit duration, unemployment benefit strictness, active labor market policies, union coverage, union density, bargaining coordination, employment protection, labor taxes.

whether any reform has taken place between the early 1980s and the late 1990s and whether the change is likely to be beneficial or not to the objective of reducing unemployment. The horizontal axis lists the difference between favorable and unfavorable shifts (e.g. France is listed as having undertaken five reforms, one of which is judged favorable, four unfavorable, hence a rating of -3). The vertical displays the change in the rate of unemployment, a decline being desirable of course. There is clear inverse relationship (the correlation coefficient is 0.81), which indicates that reforms work and that countries can learn from each other.

**Figure 6 . Unemployment and reforms: from the early 1980s to the late 1990s**



Source: Nickell (2003)

A final and important objection against the Lisbon strategy is that, being a “soft” coordination method, it impacts on government incentives only very marginally. This is certainly true. In section 7 we formulate a specific proposal for how to strengthen government incentives, through a closer involvement of national parliaments in the Lisbon process.

#### 4 Productivity

Besides raising employment, the other main challenge for Europe is to increase labor productivity. This means better exploitation of the new technological opportunities that already exist, but also increasing the pace of technological innovation.

#### 4.1 Comparing Europe vs the United States

As shown in Table 3, since the mid 1990s productivity growth accelerated in the US (from 1.1% on average before 1995, to 2.2% afterwards). In fact, Table 3 underestimates the underlying acceleration of US productivity growth in recent years, because of the US recession of 2001; and in 2003 US productivity accelerated further. This acceleration is entirely due the new information and communication technologies (ICT) – this is firmly established, for instance, by Oliner and Sichel (2000), Jorgenson (2003). These new technological opportunities are equally available in Europe. Hence, one should expect that European productivity accelerated too in this recent period. But this is not what happened. As shown in Table 3, European productivity growth declined in the second half of the 1990s, from 1.9% on average before 1995 to 1.4% on average since then.

In fact, as argued by Blanchard (2003), until the mid 1990s European productivity was catching up with the US. This was largely because of capital deepening (i.e., rapid growth in capital per worker), probably induced in turn by high labor costs and substitution of labor with capital. But this convergence stopped in the mid 1990s, precisely when the US was reaping the benefits of ICT. Europe has not been able to fully exploit the benefits of the new ICT for productive purposes, and is now lagging behind the US. Overcoming this deficiency is the second main challenge currently faced by European economies.

Recent research has identified some of the key European weaknesses. Table 3, taken from van Ark, Inklaar and Mc Guckin (2002), breaks down productivity growth between ICT producing sectors, ICT using sectors and the rest of the economy, in the EU and the US.

**Table 3. Sectoral decomposition of productivity growth**

	Productivity growth				GDP shares	
	1990-95		1995-2000		2000	
	EU	US	EU	US	EU	US
Total						
Economy	1.9	1.1	1.4	2.5	100	100
ICT						
Producing	6.7	8.1	8.7	10.1	5.9	7.3
ICT						
Using*	1.7	1.5	1.6	4.7	27.0	30.6
Non-ICT						
	1.6	0.2	0.7	0.5	67.1	62.1

Source: van Ark, Inklaar and Mc Guckin (2002). EU is defined as Austria, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Spain, and Sweden. No adjustment for hours worked.\* Excluding ICT Producing

The main difference between Europe and the US is that the productivity growth in the ICT using sectors accelerated sharply in the second half of the 1990s in the US (from 1.5% to 4.7%) but not in Europe (from 1.7% to 1.6%). ICT using sectors are mainly services, such as wholesale and retail trade, and financial services. A second, smaller, difference is that ICT producing sectors (where productivity growth is faster) are bigger in the US than in Europe, and are more productive in the US.

This interpretation of the difference between Europe and the US is confirmed by recent research by Jorgenson (2003) and Daveri (2003), which shed further light on why ITC using sectors in Europe performed worse than in the US. Table 4 decomposes aggregate productivity growth in the US and the main European countries in its determinants: improvements in labor quality, accumulation of physical and ICT capital (capital deepening), and a residual component (total factor productivity, TFP) in ICT producing sectors and in the rest of the economy. The data are those of Jorgenson (2003). ICT capital deepening refers to accumulation of ICT capital in all sectors, and likewise for Non-ICT capital deepening. TFP of ICT producers refers to TFP in the ICT producing sectors, and likewise for TFP of Non-ICT producers.<sup>9</sup>

**Table 4. Sources of labor productivity growth**

	1989-95		1995-2000	
	EU	US	EU	US
Hourly labor productivity	2.30	1.34	1.44	2.11
Labor quality	0.45	0.36	0.34	0.21
Non-ICT capital deepening	1.34	0.32	0.48	0.39
ICT capital deepening	0.23	0.43	0.43	0.87
TFP of ICT producers	0.26	0.25	0.56	0.44
TFP of Non-ICT producers	0.01	-0.02	-0.37	0.20

<sup>9</sup> The sector definition is different from that of van Ark, Inklaar and Mc Guckin (2002), and here (but not in Table 2) an adjustment is made for variation in labor hours.

Source: Jorgenson (2003). EU is defined as the simple average of France, Germany, Italy, and the UK

Table 4 makes clear that the deterioration of European productivity growth in the second half of the 1990s relative to the US is explained by three facts. First, Europe has reduced its accumulation of Non-ICT capital (row 3). In itself this is not a bad thing: it is the other side of the coin of the improvements in European labor markets described above. In previous years, capital accumulation entailed a large component of substitution of labor for capital; as labor costs recede, we should expect capital deepening to slow down. Second, Europe still lags behind the US in its accumulation of ICT capital. ICT capital deepening has doubled in the second half of the 1990s, both in Europe and the US, but the US still invests twice as much as the large EU countries in ICT capital. This is likely to be part of the reason why productivity in ICT-using sectors has not improved in Europe as much as in the US. Third, TFP in the Non-ICT producing sectors has declined in Europe, while it has improved in the US. This says that Non-ICT producing sectors have become more efficient in the US, but not in Europe.

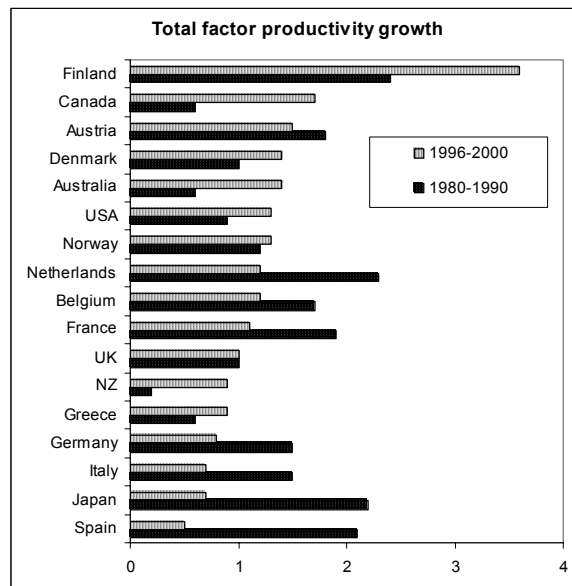
Summing up, these data identify two problems. First, Europe lags behind the US in terms of both ICT production and ICT use. Fewer workers are employed in ICT production in Europe than in the US; this matters because these are the sectors that grow more rapidly (productivity in ICT producing manufacturing grew on average almost 24% each year between 1995 and 2000 in the US). Overall spending in ICT is also lower in the EU than in the US. These differences between the US and the EU have not increased significantly over time, they already existed in the mid 1990s. But the EU was certainly not able to catch up, and if anything the distance between the US and the EU in ICT production and employment has increased.

Second, even though ICT spending in Europe has accelerated since the mid 1990s, Europe has not been able to benefit from this investment: labor productivity in ICT using sectors stagnated despite the additional ICT spending (Table 3), and this is confirmed by the decline in TFP outside of ICT production (Table 4).

So far we have looked at the situation in the whole of Europe, but the continent is far from homogeneous. As Figure 7 shows (countries are ranked according to their performance over 1996-2000), productivity is currently growing faster in the Northern European countries than in the Southern countries, often even faster than in the US, in many cases a reversal from the 1980s. The mediocre performance of the UK is also noticeable.



**Figure 7. Average annual growth in total factor productivity**



Source: Nicoletti and Scarpetta (2003)

#### **4.1 What to do?**

The policy implications of this analysis are more complex than in the case of employment policies as they involve several largely unrelated aspects: distortions in the labor market, distortions in product and financial markets, and the acquisition and production of knowledge. As a result, the productivity challenge can only be met through a combination of reforms and supply side policies.

##### *Labor market*

Starting with the labor market, it is important to recognize that new productive technologies have an important labor savings component. To enhance overall productivity, labor must move within the firm, across firms and across sectors. The rigid European labor markets – in particular firing protection – hamper the reallocation of labor needed to take advantage of new technologies. Removing these rigidities is thus an important priority.

##### *Product and financial markets*

Product market regulations also play an important role. Implicit non tariff barriers in services, energy markets and utilities, but also state aid, remain widespread; they act as a tariff that protect firms from competition. This in turn affects the incentives of firms to innovate or to adapt new technologies. Product market regulations also affect corporate governance and the possibility of survival of inefficient firms. Firms that

benefit from explicit or implicit protection are less likely to disappear or be bought than unprotected firms. The same is true for financial market regulations, in particular takeover rules. Although the link between competition and innovation is theoretically ambiguous, empirical evidence by Nicoletti and Scarpetta (2003) suggests that OECD countries with more competitive and de-regulated product markets have faster productivity growth. A second important priority for Europe is thus to strengthen product and financial market competition. Of course, this can only be done on a European scale.

### *Knowledge*

That the acquisition and creation of knowledge is a source of comparative advantage is amply demonstrated by a large range of studies on economic growth.<sup>10</sup> Policies towards research and education impact on the size of rapidly growing innovative sectors, in ICT and in many other areas where R&D plays a strategic competitive role. The finding that productive sectors at the forefront of technological innovation are smaller in Europe than in the US is an important symptom that Europe is lagging behind in terms of research capabilities. To remedy this deficiency, Europe should devote additional resources to research and should improve the organization and quality of its basic research institutions. This is the third priority to be addressed to revamp productivity growth in the medium run.

Labor market reform has already been discussed in section 3 above. The next two sections discuss policies towards the single market and towards research, respectively. In both sections, our main focus will be on the role of the European level of government, through coordination or outright centralization, or through other means.

## **5 The Single Market**

### **5.1 The single market and productivity growth**

The first and most straightforward argument in favor of a single European market for goods and services is the usual one, of static gains from trade: each country specializes in production according to its comparative advantage, and all consumers benefit from cheaper goods and services. But the single market also brings about

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<sup>10</sup> See, e.g., Aghion and Howitt (1998), Grossman and Helpman (1991), Barro and Sala-i-Martin (2004).

dynamic gains from trade. These induce a more rapid pace of innovation used in production, and hence faster productivity growth. The channels through which this happens are subtle and worth discussing in some detail.

The body of knowledge usable in production keeps growing over time. Most of this knowledge can be used anywhere, irrespective of where it was first discovered. The discovery of a new business practice, or a new organizational form, or a new productive technology, is often random and unpredictable. But once it has taken place, nothing prevents all producers of similar goods and services from adopting it and benefiting from the innovation. This process of continuous productive innovation and adoption of new technologies is what sustains economic growth over time.<sup>11</sup>

When thinking about the growth effects of the single market, the key word is “adoption of new technologies”. Suppose that the pace of innovation potentially usable in production is exogenously given – this assumption will be relaxed in the next section. Then the rate of economic growth only depends on how fast new technologies are adopted and disseminate throughout the economy as they become available. An integrated European market for goods and services increases the rate of adoption and dissemination of new productive technologies, and in this way it brings about faster economic growth in Europe. This happens through two channels: international trade and stronger competition.

International trade expands the assortment of intermediate inputs available for production, which in turn raises total factor productivity. Through this channel, innovations introduced in one country raise productivity in its trading partners as well. Moreover, international trade expands the scope of the so called “knowledge spillovers”. Trading partners can learn from each other, simply because trade exposes domestic firms to a variety of business practices and organizations. Under autarchy, learning-by-doing in France is limited by the cumulative experience of the French industry. Trade enables French producers to benefit from the experience accumulated

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<sup>11</sup> Several recent contributions analyze economic growth from this perspective. See for instance Aghion and Howitt (1998), Helpman (2004), Parente and Prescott (2000).

by other countries as well.<sup>12</sup> Box 5.1 summarizes some empirical evidence more extensively discussed in Helpman (2004).

### **Box 5.1. Trade and growth**

History is full of examples of trade volumes having a large beneficial effect on economic growth. In the late medieval period, the Italian city states of Genoa and Venice prospered thanks to their active trade. According to economic historians, in the mid 1700s Europe was not much more advanced than China; but Europe was able to benefit much more from the industrial revolution, also thanks to its greater ability to exploit trade opportunities, in particular trade with the New World (Pommeranz 2000). Japan in the second half of the 1800s also started to grow after it had opened up to the rest of the world (Lockwood 1954). Several papers, such as Edwards (1992), Ben David (2000) and Alesina, Spolaore and Wacziarg (2003) look at the cross-country correlation between trade volumes and growth in the post-war period, and find a positive correlation, which however peters out as countries become larger.

The recent literature has also studied the effect of trade policy (as opposed to trade volumes) on economic growth. Sachs and Werner (1995) in particular construct a widely used indicator of trade liberalizations, that combines several indicators of being open and exposed to free markets. This indicator of openness is positively correlated with economic growth in the period 1970-89 in a large sample of countries. The effect is very large and robust: trade liberalization increases average growth by as much as 2%.

Besides opening up opportunities for inter-European trade, the single market also extends the scope of competition beyond national borders. This in turn forces incumbent firms to speed up the adoption of innovations to avoid succumbing to their competitors. Adoption of productive innovations often entails an intertemporal tradeoff, just like an investment in R&D. In the short run, it is costly (the corporation

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<sup>12</sup> The analysis of how international trade impacts on growth through the dissemination of productive innovations is mainly due to the work of Grossman and Helpman (1995) – see also Helpman (2004), chp. 5.

has to overcome internal oppositions of stakeholders, or acquaint employees with the new technology or with new work practices). In the long run, it increases efficiency and reduces costs. The threat of competition from foreign producers can force incumbent firms to change sooner rather than later, as the option of postponing adjustment becomes too risky. Moreover, a single European markets speeds up the dissemination of innovation through the entry and exit of firms. Inefficient firms who are unable to survive the foreign competition have to close down, freeing up resources for new and more productive initiatives.<sup>13</sup>

A well functioning and integrated financial market is crucial in this respect. Financial development determines the extent of competition in the rest of the economy. Limited financial resources act as a barrier to entry of new firms; thus imperfect financial markets end up protecting inefficient incumbent firms in all sectors of the economy. Rajan and Zingales (2003) discuss several examples. They point out that the deregulation of US banking in the 1970s and 1980s led to a significant increase in the degree of financial development and, as a result, in the rate of creation of new enterprises, in the US states that deregulated – cf. Box 5.2. Similarly, there is direct evidence that differences in financial development among Italian regions affect competition at the local level: the profit margin of small-medium size Italian firms is much higher in less financially developed regions (Guiso, Sapienza and Zingales 2002).

**Box 5.2. Financial de-regulation in the US**

Between 1971 and 1991, many US states removed regulations that prevented out-of-state banks from opening up branches in their state, or that prevented in-state banks from expanding their branches. This deregulation significantly improved bank performance: loan losses fell, operating costs were reduced, and banks became more competitive. What is perhaps more interesting is that average income growth in the state also increased significantly. In the states that de-regulated, growth accelerated by 0.5-1%, in those that did not, it declined by about 0.6%. - see Rajan and Zingales (2003)

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<sup>13</sup> The idea that competition is beneficial to growth because it forces incumbent firms to adopt more efficient productive technologies has been particularly stressed by Parente and Prescott (2001).

Barriers to trade in goods and services within Europe have now been almost completely removed. In this sense, the single market has been a reality for several years. Nevertheless, some distortions remain in specific sectors. Moreover, the single market requires constant monitoring and enforcement, to make sure that new barriers or new distortions are not introduced. Each area poses specific problems, and we will not attempt to provide a detailed analysis. Instead, we briefly discuss three policy areas, state aid, regulation of public utilities, and financial markets. In each case, we try to identify the main policy challenges and ask what should be the role of the EU.

## **5.2 State aid and industrial policy**

Production subsidies to selected sectors or firms are a key tool of industrial policy, with which governments can steer resources towards economic activities that are deemed beneficial from an economic or political point of view. But precisely because they influence the market allocation, selective production subsidies are also a tool of trade policy. As such, they can be abused to distort trade and protect domestic producers against foreign competition, to the detriment of all. What should be the role of the EU in controlling this policy tool? What criteria and guidelines should be employed by the EU policymaker? Are current arrangements satisfactory? These are the questions addressed in this subsection.

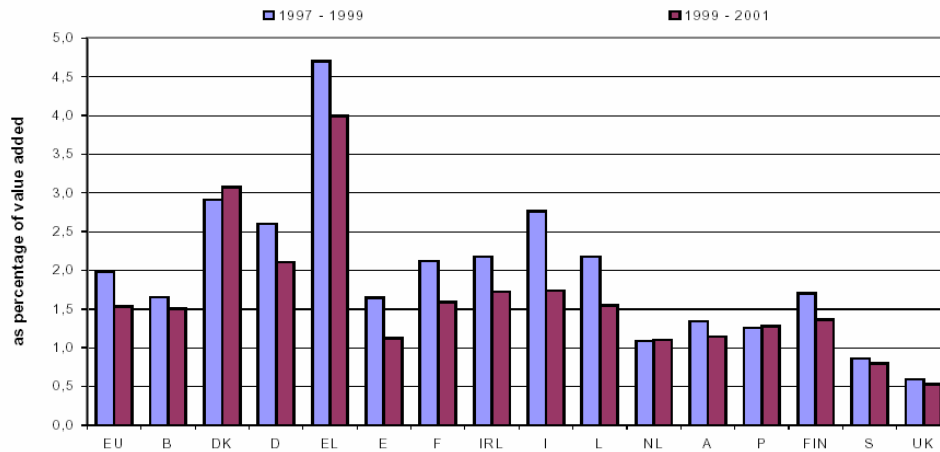
### **5.2.1 Current provisions on State aid**

Article 87(1) of the Treaty provides that State aid is, in principle, incompatible with the common market. Under Article 88, the Commission is given the task to control State aid and each member state has to notify the Commission in advance of any plan to grant new aid. These rules apply to measures that satisfy the following criteria: there is an implicit or explicit transfer of State resources that provides an economic advantage to the recipient; aid is selectively given to a few producers, sectors or regions, and has a potential effect on competition and trade between member states. The Treaty does not ban all kind of State aid, of course, but allows a number of “exemptions”, and gives the Commission the power to decide whether the exemption applies. Examples of these exemptions are: aid given to specific regions in need of assistance, aid to small and medium-sized enterprises, aid for research and development, aid to specific sectors such as agriculture and fisheries, and several other cases. Each exemption is regulated by specific rules and guidelines –see the *Vademecum on Community Rules on State Aid*, the European Commission, 1/9/2003.

State aid as defined by the Commission is a relatively small and declining portion of EU GDP (about 1% in 2001, over half of which goes to agriculture, fisheries and

transport). In manufacturing, however, state aid is more important, particularly in a few countries – see Figure 8.

**Figure 8. State Aid to the manufacturing sector, 1997-2001**



Source: European Commission, State Aid Scoreboard, spring 2003

In practice, the Commission very seldom blocks State aid. Over the period 2000-2002, only 7% of the cases resulted in a negative Commission decision for the EU as a whole –cf. European Commission, State Aid Scoreboard, spring 2003. All other cases of State aid were approved. Similar or even lower rejection rates apply in earlier time periods. Even when a negative decision was made, State aid could have been granted nevertheless in some cases. Although the Commission in principle can require that State aid be repaid back by the recipients, in practice recovery is very difficult, because enforcement is made by the members states themselves and sometimes bankruptcy proceedings obstruct the recovery.

The fact that the Commission attempts to block so few cases of State aid can be interpreted in two ways. A benign interpretation is that the Commission is credible, and the threat of a veto is sufficient to discourage member states from putting forward proposals that are likely to be turned down. The fact that State aid has come down over time lends some support to this interpretation, since the Commission has probably become tougher in recent years. But it could also be that the Commission lacks enforcement power, and if it tried to be stricter it would be over-ruled by the Council. This second, less favorable interpretation, is particularly plausible in the politically more difficult cases of restructuring of firms in difficulty.

## 5.2.2 Do we need a European industrial policy?

Are these arrangements satisfactory? Should the EU be more or less intrusive in the control of State aid granted by member states? And are the criteria that guide EU policy decisions appropriate? In particular, do we need a more proactive European industrial policy? To try and answer these questions, we should distinguish between two general motivations for the provision of a selective production subsidy to specific sectors of firms: redistribution vs. correcting a market failure.

Consider redistribution first: suppose that the government subsidy aims to redistribute in favor of the owners of factors of production employed in that sector or firm (whether capital or labor). This in turn can happen for a variety of reasons. In particular, the government might be politically captured by organized interests, in which case the subsidy is likely to be inefficient even from the point of view of national welfare. Alternatively, the government might be benevolent and welfare maximizing and its policy attempts to change the terms of trade vis a vis foreign competitors - this presupposes that the sector is not competitive (i.e., producers are not price takers), or that the policy affects the international market price (even if all producers are atomistic).<sup>14</sup>

In this case, there is a clear argument in favor of centralizing policy decisions at the EU level. Redistribution is a zero sum game, and the gains to one member state are the losses of another. Hence, production subsidies motivated by redistributive goals are clearly counterproductive for the EU as a whole. A European policymaker would internalize both gains and losses, and would not engage in this kind of redistribution. National policymakers instead are likely to have distorted incentives, since they only care about national welfare. Note that the argument in favor of centralization applies even if both national and European policymakers are captured by political lobbies. The reason is that, as argued in section 2, political lobbying is less disruptive at the European level when the interests of producers in different countries are opposite (since they tend to offset each other). Thus, if the main effect and true motivation of the government subsidy is to redistribute, then there is no doubt that we want a strong EU policymaker in charge. Judged from this perspective, the procedure for controlling

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<sup>14</sup> See Brander and Spencer (1985)



State aid envisaged by the Treaty is appropriate. If anything, the powers of the Commission ought to be reinforced and the exemptions reduced.

Next, consider the case of market failures. Specifically, suppose that the production subsidy aims to address a positive economic or social externality. Advocates of an active industrial policy often argue that specific productive activities induce positive local externalities, for instance because of technological spillovers to downstream or upstream producers in the same geographical area.<sup>15</sup> Such activities should be subsidized, the argument goes, because the free market does not internalize these positive external effects. Alternatively, even if there is no economic externality, the firm that is being subsidized might perform a socially valuable public service, or have an obligation to do so (as in the case of postal services or transportation).

In this case, the question of whether or not to centralize policy decisions is more controversial. Here too, production subsidies might distort the allocation of resources within the EU and might entail costs for competitors located in other member states. Moreover, a national policymaker would only consider local externalities that benefit his country, neglecting the question of whether similar positive externalities might be stronger in other member states. Each government has an incentive to defend his “national champions”, forgetting that perhaps the “champions” could be even stronger and generate stronger positive externalities in other member states. These are the arguments in favor of centralization. The opposite argument, in favor of national control, rests on the comparative disadvantage for the European policymaker in assessing the benefits of externalities accruing to each member state. This disadvantage is most evident in the case of the provision of essential public services, such as the provision of mail or other facilities to a secluded location, while it seems negligible for externalities that are purely economic (for instance, assessing the knowledge spillovers induced by a large firm operating in a high-tech sector).

Judged from this perspective, current arrangements might appear less satisfactory. The EU level of government has essentially veto powers, but does not attempt to formulate or implement a European industrial policy. Industrial policy is left in the hands of national governments, and the Commission reserves the right to block State aid that is deemed to distort competition. The rules for State aid provide clear and

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<sup>15</sup> See Krugman (1991), or Baldwin et al. (2003).

explicit exceptions for public services of general interest that are subject to specific obligations in each member state, such as postal services or public health systems. Policymaking in these areas is essentially decentralized to the level of member states, and this seems appropriate. But no European policymaker has the responsibility of identifying European priorities, assessing economic externalities with a European perspective, and taking initiatives. As a result, it is sometimes alleged that important externalities remain unexploited and neglected. The development of transportation infrastructure provides a case in point. Transportation systems have largely developed on a national basis, with little concern for creating major transportation routes across member states. The recent efforts at coordinating public investments in transportation networks in Europe seek to remedy this problem.

Nevertheless, we should be wary of drawing the conclusion that we need a more proactive European industrial policy supported by public funds. It is not at all clear that externalities and market failures, rather than redistribution, are the main motives for disbursing public funds to support ongoing economic activities. And even if that was the case, identifying sectors and firms that induce valuable externalities in the rest of the economy is not an easy task. The empirical evidence supports this skepticism. It is sometimes said that the US productivity booms and technological improvements have been facilitated by federal spending in transportation or defense (for instance, railway construction in the 19th century, military support for chemical research during World War II, or more recently for the development of the ARPANET, the predecessor of the Internet). But, as argued by Ferguson (2004), in the US most technological breakthroughs had their genesis in the private sector, and led to aggregate productivity improvements as firms sought to exploit new opportunities for cost reduction or for selling new products at a profit. Even for investments in railroads, government funding played a small role (less than 10% of nominal investment after the Civil War – Ferguson 2004, Fishlow 2000). And careful empirical studies on the effects of US federal spending on infrastructure generally conclude that their growth effects are nil – see for instance CBO (1998).

### **5.3 Regulation of public utilities**

State aid is not the only distortion hampering the single market. National regulation is also a major obstacle, because it stifles competition, it raises barriers to entry of new firms and it constrains the choices of producers. Several empirical studies have documented that deregulation promotes faster productivity growth, cost reduction and investment. Winston (1998) summarizes the US evidence. Between the 1970s and 1980s, the US deregulated a number of industries, such as airlines, financial services, natural gas, trucking, railroads. In each industry deregulation was followed by a significant acceleration of productivity and reductions in operating costs ranging from 25% to 75%. Alesina et al. (2002) study the effects of deregulation in seven industries (electricity, gas supply, road freight, airlines, railroads, postal services and

telecommunications) in a sample of OECD countries. They find that the removal of regulatory entry barriers is associated with large increases in investment in each of these industries. Nicoletti and Scarpetta (2003) focus on aggregate data of OECD countries, and show that countries with more competitive and de-regulated product markets have faster productivity growth.

These negative effects of regulatory entry barriers have not escaped the attention of European policymakers. In the public utilities, where some regulation is unavoidable because of the natural monopolies aspects or other social concerns, much effort has been devoted recently to try and create a “level playing field” throughout Europe. Energy markets in particular are characterized by a natural monopoly in network infrastructures, and upstream and downstream markets that can be made competitive. European directives in these areas have established general principles to prevent discriminatory access to the network. Member states were then left free to implement specific regulatory and proprietary solutions of their own choice (see for example Polo and Scarpa 2003).

But despite the good intentions, European energy markets remain dominated by a few incumbent firms, each operating in its own national market, and in some cases owned by the state. Table 5, taken from Polo and Scarpa (2003), shows the market share of the largest three firms in generation and retail of electricity (where natural monopoly is not a problem). In many countries, the largest three producers cover well over 80% of the market share. Similar figures apply to the gas market (Polo and Scarpa 2003). So far, the “level playing field approach” did not create a well functioning and integrated European energy market.

**Table 5. Share of largest 3 producers in the electricity market**

Country	C3 generation	C3 retail	Country	C3 Generation	C3 retail
Austria	68	42	Ireland	97(1)	97(1)
Belgium	97(2)	100(1)	Italy	79(2)	93(1)
Denmark	75(2)	32	Netherl.	64	80
Finland	54	Na	Portugal	85	90(1)
France	98	96	Spain	79	94
Germany	63	62(2)	Sweden	77	52
Greece	100(1)	100(1)	UK	44	37

C3 refers to the market share of largest 3 producers (in brackets the number of producers if less than 3).

Source: Polo and Scarpa (2003), European Commission (2002)

There are several reasons for the lack of success. European liberalization is still relatively recent (the first directives were drafted in the mid 1990s and left long time horizons for national implementation). The initial situation was not favorable, as members states had a single monopolistic producer, often publicly owned. But also, the regulatory and proprietary solutions adopted in some member states are imperfect and the transition to a liberalized market is too slow (particularly with regard to the opening of the demand side). A more aggressive approach is needed to create competition inside each national market and across borders. An obvious solution would be to reduce concentration through forced divestitures and through faster complete opening of demand. But this is politically very difficult, also because in some countries it would entail privatizations.

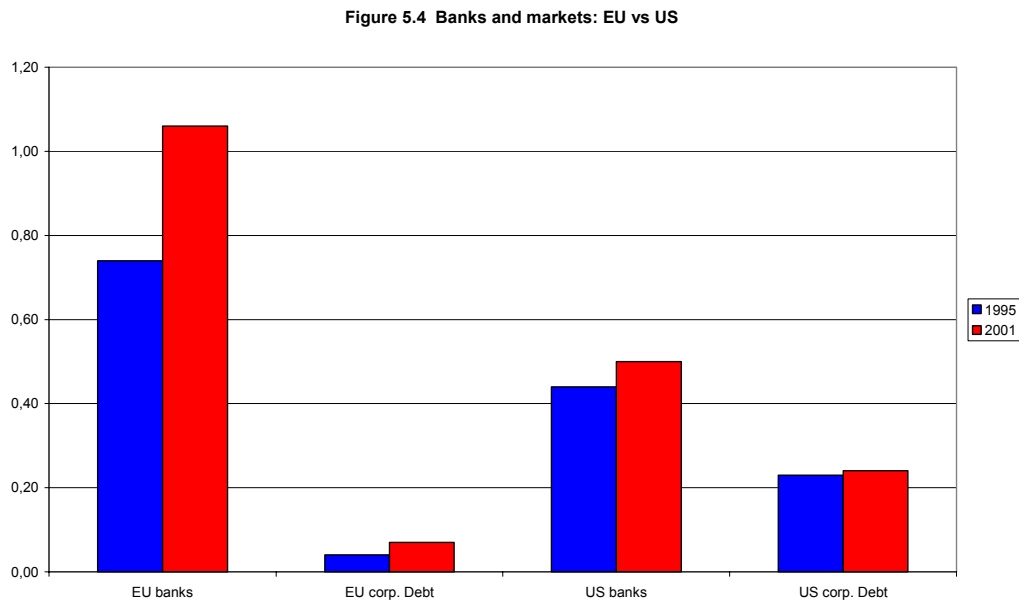
Should the EU attempt to play a stronger role in this process of liberalization, or should the more aggressive measures be left to the discretion of members states? The arguments in favor of decentralization are similar to those already discussed with reference to labor markets: the benefits of a more competitive national market largely accrue to the consumers of each member state, and the direct spillover effect across countries are small as long as there is indeed a "level playing field". But here, there is a counterargument: decentralization weakens the incentive to liberalize. If I am the only one to reduce concentration through forced divestiture and more open demand, there is a chance that foreign monopolistic producers (perhaps publicly owned) would enter my market; this threat discourages me from unilateral liberalization. Resistance to complete liberalization and forced divestitures or privatizations is thus lower if a centralized approach is pursued. This is an important difference with labor markets, where decentralization increases the incentives to deregulate because if I am the only one to do so I gain a competitive advantage.

## **5.4 Financial markets and corporate governance**

### **5.4.1 Banks vs markets**

Despite the changes over the last two decades, the financing of European firms remains dominated by banks, as opposed to "arm's length" investors (creditors or shareholders). This is an important difference with the US, where the market for corporate debt has traditionally played a bigger role (see Figure 9), and where stock market capitalization (the value of the stock market over GDP) is much higher than in Europe (about 1.5 in the US vs. 1.0 in continental Europe in 2000).

## Figure 9. Banks and markets: EU vs. US



Banks: claims of deposit money banks on the private sector as a ratio of GDP

Corp. debt: domestic corporate bank outstanding as a ratio of GDP

Source: Rajan and Zingales 2003

The predominance of banks in Europe is important, because banking remains much segmented. While wholesale banking and investment banking are fully integrated throughout Europe, retail banking is largely a national activity. Even within the Euro area, 89% of loans were made to domestic customers, and 84% of deposits accrued to domestic residents in 2002 (Cabral et alii 2002). This segmentation will probably not be overcome in the medium-short run, since it is due to a variety of deep-seated reasons and not just to remaining differences in national regulations: the local nature of retail banking, differences in taxation, high set up costs in entering in a new market – see the discussion in Dermine (2002, Cabral et alii 2002, Angeloni et alii 2003).

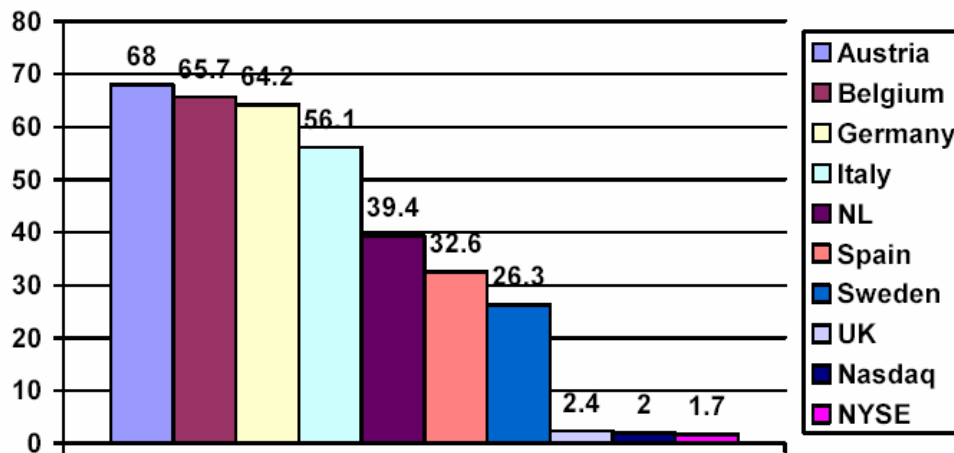
This is why “arm’s length” financing by anonymous markets can more easily exploit the full benefits of European integration and the economies of scale associated with the birth of the Euro, since unlike banking it is not based on personal contacts and long term relationships. As argued by Rajan and Zingales (2003), the benefits of “arm’s length” financial markets relative to banking are also enhanced by the current phase of technological development. In periods of rapid change and revolutionary

innovations, banks' information becomes obsolete more quickly. Banks are less likely to risk their money to finance new products or new entrepreneurs, and tend to discriminate against outsiders in favor of mature incumbents. This bias towards stability is not always undesirable, but may delay the exploitation of new opportunities in times of exceptional innovation and structural change.

#### 5.4.2 Corporate control

The segmentation of European financial markets is worsened by a second feature, common to all countries in continental Europe: the dominance of strong controlling shareholders who typically only own a fraction of the firm. The separation of ownership and control is achieved through a variety of devices that vary across European member states, such as shares with special voting rights, Chinese boxes or other arrangements of share pyramids. As shown by Figure 10, instead, the Anglo-Saxon model is one of diffuse ownership, with control and ownership being jointly traded in the equity market.

**Figure 10. Percentage of listed companies under majority control**



Source: Barca and Becht (2001)

A priori, both systems of corporate governance have pros and cons. The European model overcomes the free rider problem of diffuse ownership: the controlling shareholder has a strong incentive to monitor the management and to impose his long

run vision on the firm's strategic decisions. As a result, the agency problem between management and shareholders is more effectively resolved. On the other hand, the European model gives rise to a serious conflict of interest between minority and controlling shareholders, with minority shareholders being under-represented. In the Anglo-Saxon model, minority shareholders are less exposed to the risk of expropriation, both because their interests are better protected by legislation and because there is no dominant shareholder who can abuse of his control to divert corporate funds. Thus, the two systems of corporate governance correspond to a choice of two different points in the tradeoff between agency and representation (Becht et alii (2003)).

Which point is preferable depends on the external environment and on the nature of the corporation. The European model of corporate finance matches well with the dominance of banks in providing external finance to firms – the personal relationships between bankers and corporate owners guarantee a stable environment and a steady flow of credit. Conversely, the Anglo-Saxon model of diffused ownership is well suited to an environment of well functioning financial markets, where effective regulations guarantee transparency and adequate information, and where risks can easily be diversified away by holding a portfolio of claims on a variety of corporations.

Above, we argued that the current phase of technological innovation and the integration of European financial markets thanks to the Euro increase the advantage of “arm's length” investors relative to banks. These same forces also put into question the desirability of the European model of corporate governance. At a time of revolutionary innovation and rapid change, the role of markets in diversifying risk, identifying corporate winners and losers and financing innovation gains relevance. It also becomes much more important to have a well functioning market for the transfer of control, not just of ownership. European block shareholders, protected by Chinese boxes, special shares and cozy relationships with banks, cannot be easily challenged by new prospective owners, particularly if they come from a different member state. This lack of contestability reduces the pressure to efficiently manage European corporations and to adopt new business practices when new opportunities arise. The problem is particularly evident where the controlling shareholder is a non-profit organization or an entity in the public sector, as in the banking sectors of some European member states.

#### 5.4.3 Policy challenges

What can be done to facilitate the integration of European financial markets and the evolution of their systems of corporate governance towards arm's length investing, diffused ownership and greater contestability? As argued by Rajan and Zingales (2003), the first major challenge is to improve the legal, supervisory and regulatory

infrastructures inside each member state. Financial markets thrive when the rights of “arm’s length” investors are effectively protected, information is properly disclosed, and fraud and abuse are extremely rare. Much remains to be done to achieve these goals, particularly in Southern European countries –see box 5.3. Compared to the US and Anglo-Saxon countries, continental Europe, but mainly Southern Europe, lags behind in several dimensions. Regulation does not adequately protect the rights of minority shareholders. Law enforcement to protect creditors’ rights is often inefficient. In several countries, widespread tax evasion, corruption and lax accounting standards undermine the quality of information that is disclosed.

These challenges are up to the member states, and there is little that the EU can do to help. In countries that fail to develop adequate institutions, borrowers will not have access to the European financial market, so the penalty for failure is largely confined within national borders. This implies that decentralization does not reduce the incentives to reform. Moreover, the specific reforms that need to be enacted vary across countries, since each member state has its own peculiarities and its own system of corporate governance– another argument in favor of decentralization.

Centralized European intervention should mainly aim to establish a level playing field and increase contestability of corporations across national borders. Here are some examples of where the EU could play a role: in establishing common and demanding principles for disclosure (to avoid a harmful race to the bottom and to achieve some simplifications); in establishing some common ground rules for takeovers, mainly to insure that the ultimate decisions of whether or not to transfer control rests with shareholders and not managers; in improving the ability of shareholders to vote, particularly across borders; in discouraging excessively complex pyramids of control. This seems the approach currently taken by the Commission and the European Court of Justice. But these European initiatives should pay due respect to the heterogeneity of the systems of corporate governance within Europe. Given the complexity of these issues and the difficulty of identifying a clearly superior model, the danger of excessive centralization and harmonization cannot be dismissed too easily.

**Box 5.3. Institutions and financial markets (from Rajan and Zingales (2003))**



Shareholders' rights is an index from 1 to 5 of the rights minority shareholders have against incumbents. Similarly creditor' rights is an index from 1 to 5 of the rights creditors have in bankruptcy. Both are from La Porta et al. (1998). Days to collect a check is the number of days it takes to collect the money on a bounced check. Source: Djankov et al. (2002). Judicial efficiency is an assessment, produced by country risk rating agency Business International Corp, of the "efficiency and integrity of the legal environment as it affects business, particularly foreign firms". The scale is from 0 to 10 and the source is La Porta et al. (1998). Rule of law is the "assessment of the law and order tradition in the country produced by the country risk rating agency International Country Risk (ICR). Scale from zero to 10, with lower scores for less tradition for law and order, source: La Porta et al. (1998). Corruption is an index of the pervasiveness of corruption (higher number means less corruption), source: La Porta et al. (1998). Tax compliance is the "assessment of the level of tax compliance. Scale from 0 to 6 where higher scores indicate higher compliance. Data is for 1995. The source is the Global Competitiveness Report 1996 as reported in La Porta et al. 1999. The value of control is the premium paid to acquire a controlling block lock as a percentage of the value of equity. The block premia is computed taking the difference between the price per share paid for the control block and the exchange price two days after the announcement of the control transaction, dividing it by the exchange price two days after the announcement and multiplying the ratio by the proportion of cash flow rights represented in the controlling block. Source: Dyck and Zingales (2003). The average number of employees is the ratio between the total number of workers and the total number of firms in 1992-92. Source Kumar et al. (2000).

COUNTRY	Shareholders' rights	Creditors' rights	Days to collect a check	Efficiency of judicial system	Rule of law	Corruption	Tax compliance	Accounting standards	Value of control	Average number of employees
AUSTRIA	2	3	434	9.50	10.00	8.57	3.60	54	0.38	62.8
BELGIUM	0	2	120	9.50	10.00	8.82	2.27	61	na	12.5
DENMARK	2	3	83	10.00	10.00	10.00	3.70	62	0.08	11.5
FINLAND	3	1	240	10.00	10.00	10.00	3.53	77	0.02	5.7
FRANCE	2	0	181	8.00	8.98	9.05	3.86	69	0.02	7.1
GERMANY	1	3	154	9.00	9.23	8.93	3.41	62	0.10	10.3
GREECE	2	1	315	7.00	6.18	7.27	2.36	55	na	na
IRELAND	4	1	130	8.75	7.80	8.52	3.55	na	na	na
ITALY	1	2	645	6.75	8.33	6.13	1.77	62	0.37	4.4
LUXEMBOURG	na	na	210	na	na	na	na	na	na	na
NETHERLANDS	2	2	39	10.00	10.00	10.00	3.40	64	0.02	11.9
PORTUGAL	3	1	420	5.50	8.68	7.38	2.18	36	0.20	6.0
SPAIN	2	2	147	6.25	7.80	7.38	1.91	64	0.04	4.0
SWEDEN	3	2	190	10.00	10.00	10.00	3.39	83	0.07	10.4
UK	5	4	101	10.00	8.57	9.10	4.67	78	0.01	9.6
Euro area average	2.00	1.64	252.92	8.20	8.82	8.37	2.89	60.40	0.14	13.9
EU average	2.29	1.93	227.27	8.59	8.97	8.65	2.94	63.62	0.12	12.0
Southern Europe	2.00	1.50	381.75	6.38	7.75	7.04	2.06	54.25	0.20	4.8
Northern Europe	2.40	2.10	171.09	9.48	9.46	9.30	3.54	67.78	0.09	15.8
US	5	1	54	10.00	10.00	8.63	4.47	71	0.01	na

## 6 Research and Human Capital

### 6.1 The Challenges

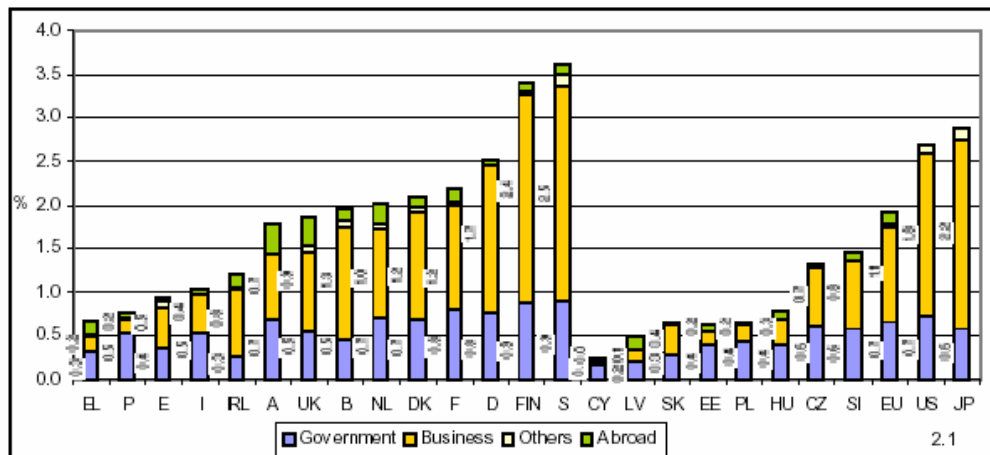
The Lisbon European Council was not shy, in March 2000, when it set the goal that the Union should become "the most competitive and dynamic knowledge-based economy in the world" by the year 2010. One of the central elements of the Lisbon strategy was the creation of a European Research Area (ERA).

The emphasis on a knowledge-based economy reflects the "new economy" fashion in vogue at the time of the Lisbon summit, but it also acknowledges the importance of

technological gain as the main source of growth. By and large, the strategy emphasizes the desirability to boost investment in human capital and in R&D. This emphasis also stems from the awareness that Europe is falling behind the US in terms of its ability to shift the technological frontier, and that the economic price of this gap is becoming increasingly high.

The gap between the US and Europe has at least two dimensions. First, Europe on average devotes fewer resources to R&D investment and to tertiary education. As shown in Figures 11 and 12, the US spends about one third more than Europe in R&D, and more than twice for university education. In both cases, the deficiency concerns private spending: government spending is about the same in Europe and the US (this also applies to university education, not shown in the figures). But there is also large variation within Europe, with the countries in Northern Europe faring much better on both indicators.

**Figure 11. Gross domestic expenditure in R&D (% of GDP), by source of funds**

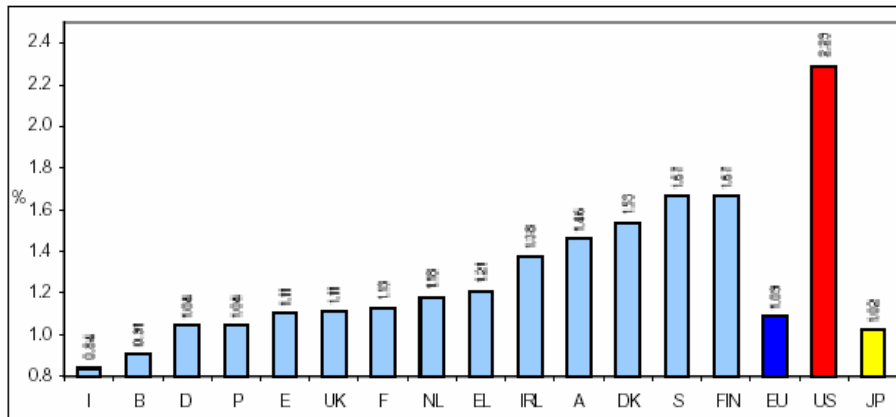


Source: DG Research

Data: OECD, Eurostat. Years: B, DK, EL, F, IRL, I, NL, P, S, UK: 1999; D: 2001; others: 2000

Source: Commission (2003)

**Figure 12. Tertiary education expenditure (% of GDP)**



Source: *Key Figures 2002*, DG Research

Data: OECD. Year: 1998

Note: EU average does not include L. Total expenditure include public and private expenditure

Source: Commission (2003)

Second, according to a variety of indicators, basic and applied scientific research appears much less successful and productive in Europe compared to the US. This is true of research with immediate or prospective economic value, as measured by the number of patents, but also of base research as measured by publication records, scientific impact, and the like – see for example the data and references in Aghion and Cohen (2003).

The second gap partly reflects the first one: Europe is less productive scientifically also because it spends less. But lack of financial resources is not the whole story, as suggested by the fact that government spending is not very different between the US and Europe. The organization of research inside European universities and research labs is also responsible for the European failures. Although the specific details differ between European countries, the heart of the problem is the same through Europe: lack of competition. The budget of European research institutions relies mainly on government grants and subsidies at the national level. These financial resources are given on the basis of need and equality, with little regard for scientific merit. Hence, resources are often wasted or misallocated. Lack of appropriate institutional incentives trickles down to the level of the individual researcher, who also lacks adequate career or pecuniary incentives. The best and more mobile researchers leave to the US, and those who stay often lack motivation and are underpaid. In many European countries the problems are then aggravated by conservative bureaucracies

inside ministries and government agencies and by inadequate corporate governance rules for the universities.

The cost of these common European failures largely falls on the individual Member States who are responsible for them, and who are less competitive and less productive as a result. There are nevertheless some important externalities. The knowledge frontier has no national borders, and everyone benefits from scientific progress. Moreover, mobility and communication within the research community implies that a more productive scientific environment in the universities or firms of a specific region is likely to benefit its neighbors. Finally, even abstracting from these externalities, the political distortions that are responsible for the national policy failures may be less prominent at the European than at the national level. For all these reasons, the EU has a role to play. In the next subsection we briefly review the European approach so far and then we evaluate it.

## **6.2 The European Research Area**

### **6.2.1 The current policies**

So far, the EU action has concentrated on three main fronts. First, steps have been taken to reduce the compartmentalization of public research and university systems throughout Europe. This means agreeing to common educational standards, increasing the mobility of students and researchers, coordinating the implementation of national research policies, and moving towards a European patent system.

Second, a small fraction of the EU budget is spent in direct support for research.<sup>16</sup> Two criteria guide the allocation of these scarce resources. First, the EU supports European research networks and collaboration among national research institutions. Second, the EU has privileged a top-down approach, identifying specific research priorities and then evaluating research proposals in light of the chosen priorities; for instance, in the social sciences, the current thematic priority concerns “Citizens and governance in a knowledge based society”, whatever that means.

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<sup>16</sup> The 6th « Framework program » was launched in 2003. Its budget is 17.5 bn Euros over five years, or about 4% of the EU budget.

Third, the open coordination method has been actively pursued in this area. As explained for instance in Commission (2003), this method is designed to help Member States to progressively develop their own policies towards the common goal of improving European research capabilities. In practice, this approach to policy coordination entails the following steps. (i) The Union sets some common guidelines and a timetable for achieving specific goals (such as increasing R&D spending for the EU as a whole from the current 1.9% of GDP to 3% by 2010, of which 2/3 to be funded by the private sector). (ii) The Union establishes quantitative indicators and benchmarks, to compare best practice and performance of individual Member States. (iii) Member States translates the European guidelines into national policies. (iv) The Union periodically monitors and evaluates the policies and the performance of Member States against the chosen indicators.

### 6.2.2 A new strategy is needed

Of these three European initiatives, the first one is clearly the most important and promising. Creating common standards is essential to have an integrated European system of advanced education and mobility of students and researchers within Europe. Mobility is not only a good in itself, but fosters competition among the EU research institutions. This in turn can be a stimulus for improvements of national policies and organizational structures.

The second stepping stone of the European Research Area, namely direct support to research according to the 6<sup>th</sup> framework program and the like, is badly flawed. There are two problems. First, the EU pursues a top-down approach: research priorities are defined ex-ante, and only research projects that are relevant to meet these priorities are funded. As others have pointed out (e.g., Alesina and Perotti (2004)), this approach is based on the faulty premise that bureaucrats know better than scientists what are the most promising research areas. But the results of new research are hard to predict, and the best judges of new research efforts are peer researchers.

As recently advocated by Sapir et alii (2003), the current system of European research grants should be replaced by a more open ended and bottom-up system, like the American NSF, where peer scientists establish the criteria for fund allocation. Ideally, such a new funding system would be run as an independent agency, rather than by a political body like the Commission, with the participation of highly respected and independent scientists. It goes without saying that scientific excellence and scientific merit should be the only criterion guiding the allocation of funds, without any regard for distributional or geographic implications. Redistribution in favor of the disadvantaged regions should occur through other means, without corrupting the criteria for funding scientific research.

The second problem with the current system of European research grants is that it is designed to encourage collaboration among European research institutions. But what European research needs is more competition, not more collusion. Collaboration is not an end in itself; sometimes it is helpful, sometimes it is a mere waste of time. Again, the best judges of whether or not collaboration can be fruitful are the scientists themselves, not the bureaucracies. In general, collaboration of researchers separated by geographic barriers is unlikely to be very helpful. What Europe needs is to build more “centers of excellence”, namely more instances of a critical mass of outstanding researchers in the same location. To achieve this goal, European funding should be concentrated in the few institutions that are more likely to be successful. “Networks” of centers of excellence will not have high payoffs, except to please bureaucracies. Competition among these centers of excellence for European funds is bound to be much more important.

Finally, we turn to the third stepping stone of the European Research Area, namely the open coordination method. Once more, we are skeptical. Although not harmful, this method is not designed to provide strong incentives to reform. Its main purpose is to enable countries to learn from each other through experimentation, and to keep up the pressure for gradual and piecemeal reform. But experimentation and gradualism is not what Europe needs. We know very well what works and what doesn’t, and how to organize successful research oriented university systems: we just need to look at the other side of the Atlantic. The American university systems, its structure of corporate governance, its career profiles, its funding arrangements, are a benchmark that could be successfully implemented in other industrial countries. We also know the objection: the American system is too different from the European model, it will never be accepted. This is true, and it is precisely our point. Gradual and piecemeal reform will never take us where we need to go.

To achieve something in the not too distant future, a radical change of perspective is needed. Europe must acknowledge that its public university system is by and large malfunctioning and cannot be reformed from within. The failures of European universities and research institutions are too daunting, particularly in the large countries of continental Europe, to imagine that they can be quickly overcome by gradual reform from within each national system. Europe needs more competition within the research community; it also needs to concentrate resources in a few very productive institutions. But both goals would be strongly opposed by vocal groups of students and researchers, and undermined by the hidden opposition of national bureaucracies. These oppositions will not be overcome.

Europe will succeed in improving the quality of its research only if it sidesteps the hurdle of national universities. Concretely, this means to create new research institutions outside of the national university systems. These institutions could mainly focus on research and advanced training, leaving undergraduate teaching to national

university systems. New institutions will not be bogged down by implicit contracts with unproductive and older researchers. They could acquire additional resources with more flexibility and without giving the impression that they are subtracted from the existing beneficiaries. And they could acquire new and more efficient organizational forms, imitating their US counterparts, without forcing change into the whole national university system. A recent initiative by the Italian government provides an example of how this might be done - see Box 6.1.

### **Box 6.1. The Italian Institute of Technology**

In the Fall of 2003, the Italian government created a new research institution, the IIT. Completely outside of the Italian University system, the IIT will be located in Genoa. Initially it will only focus on a few research areas in the natural sciences, but gradually the research areas could be broadened. The IIT will be a research institution, and its teaching and training activities will be confined to the post-university level. Its statute and organizational structure are still being formulated, but the idea is that the IIT will seek to attract the best researchers from all over the world. Thus, its contractual arrangements with prospective researchers will be unconstrained by Italian university regulations and will seek to match those of top US research institutions. Financing is provided by the Italian government, with a budget of about 1 bn euros spread over a period of 10 years. But active fund raising from the private sector through donations or joint ventures is planned.

Setting up new research institutions outside of the national university systems can and should be done unilaterally by Member States, as the Italian example illustrates. The incentives operate in the right direction as it is every country's best interest to host leading universities and research centers. In fact, financing the creation of new research institutions out of the common European budget would be a nightmare: just imagine the fights over where the new institutions would be located.

The main risk is that every country attempts to have, say, the top biochemistry department in the world. On the other side, it is entirely reasonable that two of the top five biochemistry departments in the world be located in Europe. This can be achieved through competition, but much costly fixed investment stands to be lost until the winners emerge. A much cheaper way is to coordinate at the EU level. This would allow the positive externalities and synergies within Europe to be more fully exploited. Moreover, in frontier research and education the size of the research community matters: the competition for resources must take place at the European

level since the national dimension is too small even for the larger European countries.<sup>17</sup> Finally, the example of a successful initiative in one country should induce others to follow suit.

While the OMC can be used to allow countries to learn from each other, some degree of centralization is required to exploit externalities and the benefit of cross border competition. Not all universities need to be at the frontier of innovation, so national governments will retain control of and responsibility for much of higher education. But leading universities and research centers might require a special treatment.

A simple solution is for the EU to use its research budget, possibly raised to more than its current one tenth of CAP's budget and 0.04% of EU GDP, to provide incentives to national governments to start new universities and research institutions outside of their national university systems. The procedure would be to collect bids and provide a limited number of large matching grants to those countries that offer the best chances of success, keeping an eye on avoiding the duplication of efforts. The allocation of funds would not be politicized, being delegated instead to an independent international jury of researchers.

## **7 The Lisbon Strategy**

The Lisbon Strategy recognizes that Europe is falling behind the US in many supply-side aspects and is achieving well below its potential. The common diagnosis is that structural rigidities hinder Europe's dynamism and that education and R&D need to be improved. Three pillars – economic, social and the environment – are identified.

The strategy itself is based on the Open Method of Coordination (OCM).<sup>18</sup> This soft form of coordination eschews the kind of binding commitments that have so far characterized common actions - this is presumably why it is called "open". Rather, the strategy intends to adopt the benchmarking approach, fashionable in the industrial

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<sup>17</sup> CERN is a good example of a domain where no single European country could have hoped to match the collective achievements in nuclear physics.

<sup>18</sup> For a discussion of the open method of coordination, see Hodson and Maher (2001) and Morelli et al. (2002).



world, and to apply peer pressure through a mutual analysis of each country's position vis a vis 102 chosen benchmarks that cover six areas: general economic background, employment, innovation and research, economic reform, social cohesion and the environment.<sup>19</sup> For each benchmark the strategy sets a Europe-wide target to be reached by 2010.

Each year, the Spring European Council is mainly dedicated to the examination of a report from the Commission that presents individual country performances on the benchmarks.<sup>20</sup> This discussion is preceded by work conducted by the Economic Policy Committee. The Commission's report includes a table that evaluates each country's performance, summarized in the 2003 report as the number of times a country appears in the top and bottom three on a rating of the benchmarks, see Appendix A.<sup>21</sup> The Commission's comments, which closely follow the benchmarking procedure, do not refrain from identifying stars (typically the Nordic countries) and laggards (the larger and the Southern countries). The European Council invariably issues a communiqué congratulating itself for the progress accomplished but acknowledging that more efforts are needed to meet the Lisbon objectives.<sup>22</sup> Table 6 shows a less rosy independent appraisal.

The review procedure also focuses on the remaining barriers to competition. Instead of letting the European Commission alone face recalcitrant states, and occasionally take them to the European Court for breach of law, the strategy moves these conflicts to the inter-governmental level. The hope is that collective peer pressure may be more subtle and politically more difficult to resist than formal demands from "Brussels".

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<sup>19</sup> It brings together the Cardiff, Luxembourg and Cologne processes that focus, respectively, on structural reforms, the labor markets and the social dialogue.

<sup>20</sup> The latest report is European Commission (2003).

<sup>21</sup> The "hall of fame and shame" is not presented in the Commission's 2004 report.

<sup>22</sup> The Brussels March 2004 communiqué states: "The Union set itself ambitious goals in March 2000. Four years later, the picture is a mixed one. Considerable progress has been made and the European Council reaffirms that the process and goals remain valid. However, the pace of reform needs to be significantly stepped up if the 2010 targets are to be achieved. The European Council is committed to demonstrating the political will to make this happen."

## 7.1 Economic principles and the political economy of reform

The OMC offers a number of advantages over other coordination strategies. First, it is better adapted to policies where the case for centralization is weak. Indeed, with the exception of the environment, most policies under the strategy display limited externalities and strong heterogeneities regarding initial conditions and institutions. Moreover, the areas covered by the Lisbon strategy, and in particular labor markets, are politically very sensitive and touch powerful political interests. The European level of government would lack the political legitimacy to impose its own decisions on member states. This is why the strategy is less than coordination.

Second, it is hoped that the OMC will strengthen the political resolve of national governments to reform. Economic reforms are inherently difficult and conflictual because they usually aim at removing existing rents<sup>23</sup> and often result in income redistribution.<sup>24</sup> Existing arrangements reflect a political equilibrium with economically inefficient features. Reforms aim at raising efficiency and, to that effect, they usually have to disturb existing equilibria. This is why governments are often reluctant to open up a process that can be politically costly. The hope is that peer pressure in the Council of Ministers can strengthen political incentives to reform.

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<sup>23</sup> Rents are defined as income in excess to social returns. This includes obvious cases such as subsidies to, or protection from competition of inefficient firms. It may also include welfare programs that provide transfers to individuals in excess of the social costs that they are meant to compensate for.

<sup>24</sup> Drazen (2000), Persson and Tabellini (2000), Saint-Paul (2000).

**Table 6. The Lisbon Scorecard for 2004**

Policy domain	Average performance	Heroes	Villains
Information society	B-	Denmark, Estonia, Sweden	Greece, Luxembourg
Research and development	C	Finland, Slovenia, Sweden	Greece, Italy, Portugal
Telecoms and utilities	C+	Netherlands, Sweden, UK	Greece, Italy
Transport	C+	European Parliament	Belgium, France, European Parliament
Financial and other services	C+	European Parliament, UK	Italy, Poland
Business start-up and environment	C	Ireland, Slovenia	Bulgaria, Romania
Regulatory burden	C	Denmark, Finland	Italy, France
State aid and competition policy	C+	Greece, Luxembourg, Netherlands	France, Germany, Portugal
Bringing people into the workforce	C-	Cyprus, Czech Republic, Netherlands, Sweden	Belgium, Italy, Poland
Upgrading skills	C	Czech republic, Finland, Slovakia, Slovenia, Sweden	Greece, Portugal
Modernizing social protection	B-	Austria, France, Sweden	Belgium, Ireland, UK
Climate change	C-	France, Sweden	Austria, Ireland
Natural environment	C+	Austria, Belgium, European Commission	Ireland, Spain

Source: Murray (2004)

A third view, defended by Dermot and Maher (2001), is that the OMC is a first step towards future transfers of sovereignty. In this view, once the member countries have developed a common understanding and agreed on common approaches, they will find it easy, if not natural, to go the next step. It is far too early to judge whether this evolution will materialize, but it is important to ask whether the strategy itself fits the general principles regarding supply-side coordination.

## **7.2 Can the Lisbon Strategy be repaired?**

### **7.2.1 Why is the strategy failing?**

Nearly halfway since the strategy was adopted in 2000, the general assessment is that Europe will not be “the most dynamic, knowledge based economy in the world by 2010”.<sup>25</sup> It is very tempting to see the whole exercise merely as grand, ritual declarations with little practical impact. True, the strategy’s objective is overly ambitious and many of its aspects were doomed from the start, but others may be useful. Why is the strategy failing?

One reason is that the objective was never taken seriously, neither by the authors of the declaration themselves, nor by public opinions. This anticipated failure has much to recommend. The Commission is invited to scold governments, with no effect since the domains concerned by the strategy are not shared competencies. Economists, national and European technocrats, members of the EU Parliament and other observers can vent frustration at politicians in a well-rehearsed fashion. It also provides the governments to ritually rededicate themselves to spirit-lifting intentions during their Spring meetings, a more pleasant exercise than hard bargaining on burning decisions. In the larger countries at least, those most in need of peer pressure, the public does not take notice.

Another reason for failure is that quantified objectives are bound to be unmet, especially as they fail to take into account the different starting positions and the varied abilities to meet them.<sup>26</sup> Quantified objectives bear a painful resemblance with the Soviet plans: they impart a deceptive sense of precision, they are set as ambitious

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<sup>25</sup> See e.g. Alesina and Perotti (2004) and Murray (2004).

<sup>26</sup> For discussion of this aspect, see Alesina and Perotti (2004).

objectives so they are expected to go unmet and, when this happens, it is unclear whether the government did not try hard enough or whether the objectives were unrealistic. More importantly, the Lisbon objectives concern outcomes, not policy measures. We may know what is to be done to raise the employment rate, but not how to achieve a particular target. Ex post, it is difficult to determine whether a failure to achieve the target is due to insufficient efforts or to disappointing effects.

Yet another reason for the strategy's failure is that the 102 benchmarks are a hodgepodge of characteristics, some important others less so. Knowing full well that not everything can be done, governments may freely pick some benchmarks – preferably the mundane ones – and drop others – the critical ones. This creates perverse incentives. Governments want to show that they have done something, and yet nothing of substance is affected. It seems a joke, but it is not. According to a recent study – Boeri (2003) – over the last 18 years there has been on average 1.6 reform per year *and* country. However, most of the reforms have been marginal, and their direction is mixed. Not infrequently, a reform corrects the mistakes or undoes the effect of a reform enacted just a few years before. This hyperactivism in reforms is not just useless: it can also be counter-productive because it increases the institutional complexity of European labor markets. Boeri (2003) counts that in Italy alone there are now over 40 possible types of employment contracts!

Clearly, the Lisbon strategy itself needs to be reformed, and some steps have been taken, but they do not go to the heart of the failure. A distinction must be drawn between two broad policy areas. One area is the single market in goods and services. As argued at length in the previous sections, here the main challenge is to complete the integration of the single market in services, public utilities, energy. This means dismantling barriers that achieve market segmentation along national borders, opening up markets for services to foreign providers, facilitating cross border mergers, shutting down state aid and regulations that prevent foreign entry, in some cases forcing divestitures and privatizations. Here the open coordination method will not do, as peer pressure will turn into peer protection. To make progress, this policy area must be simply taken out of the hands of national governments by increasing the prerogatives and the enforcement powers of the European Commission or of other European policymakers.

The second policy area concerns labor markets. As discussed above, here the challenge is not to achieve market integration, but rather to remove specific distortions from each national labor market. The EU can only have a limited role, both because there are no or few externalities, and because policy decisions entail delicate tradeoffs between efficiency and redistribution that can only be made through the national political process. Here, the OMC can be useful, but it should be simplified and refocused. The emphasis should move away from peer pressure, in the direction of increased accountability to national parliaments and national citizens.

## 7.2.2 Strengthen the EU institutions in charge of single market

The OCM relies on the intergovernmental approach. The Commission briefs the Council meetings, but has no concrete decision making powers. This “soft” approach makes sense in areas such as labor markets, that are politically charged and where technical criteria alone cannot inspire policy decisions. But the intergovernmental approach is much less appropriate in most areas related to the single market, such as state aid, public utilities regulation, and regulation of services. Here the main opposition to reform comes from national lobbies of state monopolies, of public employees, or of protected private firms. Peer pressure alone in the Council of Ministers will not overcome this opposition, and the intergovernmental method is bound to fail.

A better approach to complete reforms in the single market is to strengthen the prerogatives of a European policymaker. A single European policymaker is less likely to be captured by national lobbies, because it will face countervailing pressures from a variety of producers.<sup>27</sup> Moreover, its mission can be easily defined according to technical or efficiency criteria, so that one of his main goals is to strengthen and enforce the integration of segmented national markets.

The European Commission is of course the prime example of how this can be achieved. In most areas relating to the single market, the Commission already has the required technical expertise and is already playing an essential role. But this role can be strengthened and its mandate can be expanded. For instance, if it was felt that Europe lacks an industrial policy, it would be much better to give the Commission some new positive powers in that direction, rather than to relax the current negative powers of the Commission over state aids.

The Commission is not the only supranational institution that could be given the role of enforcing or regulating specific aspects of the single market. In the case of financial markets, expanding the role of the ECB at the expenses of national bank supervisors could be a step in the right direction. In the case of research policy, we already pointed to the desirability of creating a new European Research Agency in charge of

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<sup>27</sup> For example, the Commission has been attacked by the German government over its imposition of a fine on Volkswagen, only to be supported by other car manufacturers and their governments.

awarding grants directly to European researchers or to national university institutions. In other areas, new regulatory agencies could be created and given specific tasks currently retained by the European Commission.

What is important at this stage is not so much who is the European policymaker in charge. The really crucial issue is that the tasks of enforcing and regulating the various facets of the single market be taken away from national governments, and put in the hands of a single European policymaker with a strong mandate of eliminating all remaining barriers to a truly integrated market.

### 7.2.3 Labor market reform: realistic ambitions and political accountability on observable actions

In the case of labor market reform, however, a single European policymaker will not do. The specific and politically charged distortions that hinder the functioning of labor markets inside each nation must be removed or, at least, alleviated, and that challenge can only be met a national policymaker. Here, the OMC can fill a potentially interesting niche between shared competencies and national sovereignty, in areas where reforms are opposed by powerful interest groups. But in order to give the method a chance of working, the objectives for labor market reform must be few and realistic.

Multiplying the objectives and their associated benchmarks dilutes the whole undertaking. More ominously, it betrays the government's ability and/or willingness to identify clear priorities, heralding the ultimate failure. The first change to the strategy should therefore consist in agreeing on a limited number of essential objectives. The quantified targets must be replaced, in each case, by a clear and precise statement of what policy actions must be undertaken country by country.

While a small number of carefully chosen benchmarks for labor market reform can help concentrate policymakers' minds, we need to acknowledge that peer pressure does not work on matters of national sovereignty. Declarations inside the European Council carry little weight at home and no head of state or government will publicly – and even privately – lambaste his/her colleagues for failing to deliver on promises that do not affect him/her directly.

Political leaders only care about their citizens' opinions, and this is right for political accountability in democracies. This is why peer pressure must be replaced by domestic public opinion pressure. A simple way of proceeding in this direction is to require that the Commission's report on the labor market benchmarks be discussed by each national Parliament. The normal interplay of majorities and oppositions will undoubtedly reveal the policy failures. This will inform public opinions and reveal where special interests stand in the way of desirable reforms.

## 8 Conclusions

Europe's overall economic performance has been depressing for more than a decade. Yet, not all countries are equally affected and some countries are actually among the world's best economic performers. The problem is concentrated in a few countries, in fact the larger ones, which seem unable to extricate themselves from a decade of poor growth and high unemployment and are struggling to remain on the technology frontier.

The reasons for this depressing situation are well known, as are the solutions. The problem lies squarely with the supply side, which suffers from a number of inefficiencies in the labor markets, segmented financial markets, lack of competition in energy and public utilities, heavy tax burdens and disappointing performance in research and development. In each instance, deep reforms are needed but they are politically unpalatable. Some countries have been able to overcome this hurdle and now enjoy a renewed dynamism. Others have not and sometimes hope that the solution can come outside, through more centralization, formal or informal, at the EU level of government. Is such a strategy the way out? Our analysis leads to a generally negative answer, with some important exceptions.

Centralization has a vital role to play to take advantage of important externalities and increasing returns. This is why the Single Market has been established, complete with a single currency, and why it has been so successful. It is by now nearly complete. A few more steps are needed to reap all its benefits. In particular, various distortions remain in the utilities sector, in the service industry and in financial markets. What remains to be done is mainly to fully apply existing agreements. This might also require some institutional changes, reinforcing the prerogatives of European policymakers. Elsewhere, with the important exception of research and higher education, there are no significant externalities and increasing returns, hence no case for centralization.

The domestic policy failures that hinder the supply side originate in the power of interest groups that have managed to capture or intimidate their governments, usually irrespective of their political orientation. This could provide another argument in favor of centralization. Indeed, if the interests of national pressure groups are not well aligned across countries, the EU level of government could exploit their conflicts of interest to push through measures that are blocked at the national level. This is a valid argument, but it faces two important counter-arguments.

If the problem lies with benevolent governments' weakness in the face of entrenched interests, the first best solution is to bolster their resolve. If the governments are fully



captured, the solution is to alert and inform the public opinion of the costs. In either case, supply-side policy failures generate their own antidote: the affected country's economic decline provides the government with potentially large political rewards if it succeeds in pushing a vigorous reform agenda.<sup>28</sup> Put differently, competition among governments' reform actions sets the incentives straight. Centralization, on the other hand, may take the form of collusion and generate perverse incentives.

The second argument notes that failures to reform inefficient economies originate in the political sensitivity of the required policy actions. Attempting to bypass this hurdle by importing measures crafted at the EU level of government is bound to fail for two reasons. First, dealing with political sensitivities requires an elaborate understanding of national politics and calls for an astute design of policies. Second, the European level of government does not have the political legitimacy needed to arbitrate among opposing interests.

All in all, the case for the centralization of supply-side policies is weak. Except in the area of the single market, where strong externalities exist, centralization should not and cannot substitute for domestic policy failures. Yet, centralization needs not be an all-or-nothing process. Soft methods of coordination can be useful in some instances and, this is precisely what the Open Method of Coordination is designed to achieve. It is currently framed as part of the Lisbon strategy, but that strategy is misguided in its ambitions, muddled in its endless list of priorities, undercut by the illusory precision of its quantitative targets, and flawed in its reliance on improbable peer pressure.

This report makes three main proposals that combine centralization where justified and soft coordination in a few selected areas. More precisely:

- Completion of the single market requires opening up some markets that are still protected (mainly utilities, energy and financial services). This is a case for centralization. It is highly unlikely that peer pressure or other forms of soft coordination will succeed in breaking powerful interests. This calls for increasing the powers of the Commission or, preferably, for setting independent agencies with the

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<sup>28</sup> It is true that the positive effects of supply-side reforms are very slow to set in, while the political costs are front-loaded. But policy coordination in itself cannot remedy this difficulty. And, as argued in the introduction, the evidence suggests that expansionary aggregate demand policies do not help either, perhaps because they foster the illusion that reforms are not urgent.

power to enforce existing rules. The reason for preferring independent agencies is that the EU level of governments is likely to be captured by the very same private interests that block progress at the national level.

- In several countries, the labor markets need politically difficult reforms. Soft cooperation has a role to play but peer pressure exerted through the Lisbon strategy has not delivered yet, and is unlikely to deliver. Where peer pressure fails, public opinion pressure is called forth, and has vastly superior legitimacy. So far, however, public opinion pressure has not been effective in several countries either. Combining the two ought to be tried. A simple solution would be to require that the conclusions of peer discussions – as currently conducted at the Spring meeting of the EU Council – backed by the annual Commission report be debated in national parliaments once a year. This would lead both the majority and the opposition to publicly take position on recommendations informed by other EU experiments.

- Europe's failure in intellectual and scientific innovation is all the more shocking since Europe does not lack human capital. The failure is due, again, to the power of insiders. The solution is to abandon so far ineffective attempts at gradual reforms by creating new universities and research centers. This is an area where the responsibility mainly lies with national governments but some coordination is needed to exploit some returns to scale and to avoid wasteful duplication of efforts. The EU's research budget – currently misused in dispersing a large number of small grants according to an ill-conceived top-down approach – should be used to provide matching grants for setting up new universities and research centers. In order to avoid obvious turf battles, these grants should be awarded by an independent jury of education and research experts on the basis of bids submitted by the member states.

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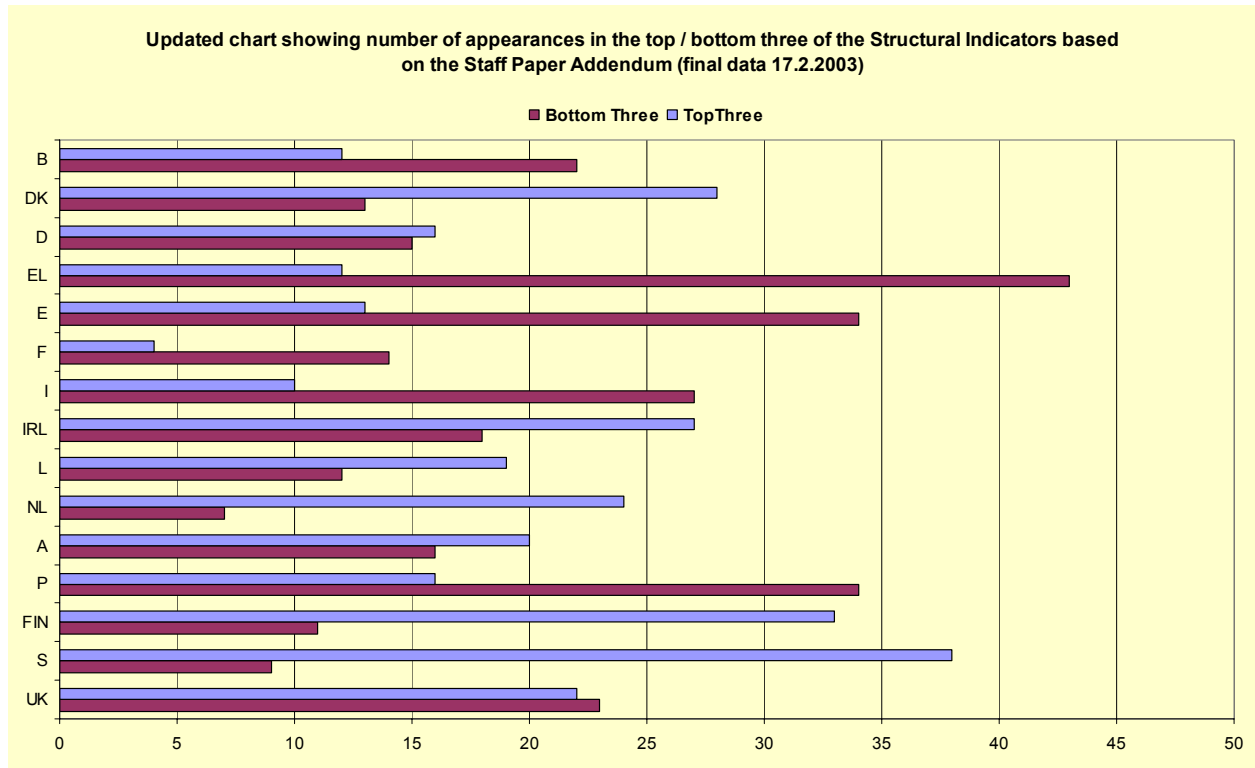
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## Appendix A. Spring 2003 Evaluation of Country Performances



Source: European Commission (2003)