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Economic Agenda for the Twenty-first Century

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# The Economic Agenda: a View from Europe

*Karl Aiginger\**

## Abstract

Over the course of the 1990s, the US outperformed Europe not only in output growth, but also in productivity and employment generation, thereby stopping Europe's decade-long period of catching up. The author shows that the growth difference originates at least partly from insufficient investment by Europe into the determinants of long-run growth (research, education, and the diffusion of new technologies). Northern European countries with comprehensive welfare systems performed better than the big economies in continental Europe, owing to their timely realization that these costly systems require the highest possible levels of productivity and fast growth. The European agenda for the next decade is based on this analysis. It stresses the importance of accelerating economic growth, primarily through investment into growth drivers. Labor market reforms are necessary, as is the redefinition of macroeconomic policy, a regional policy adequate for European enlargement, and reforms in the public sector. Distributional and ecological issues are also on the agenda, even though Europe outperforms the US in these fields, as is reflective of European preferences.

## 1. Introduction and Outline

For several decades, Europe was successfully catching up with the US in productivity. Productivity per worker and per hour increased faster, closing the respective gaps to 25% and 5%. However, in the 1990s, European productivity decelerated and the productivity difference relative to the US again began to increase. At the same time, Europe was transformed into the European Union (EU), in which the majority of members agreed to use a single, common currency and harmonized many policy areas. Over the course of the decade, the EU extended its political and economic realm to economies that were formerly socialist. The next enlargement in May 2004 adds ten new countries to the EU, among them eight formerly socialist countries. Europe has a welfare economy with a comprehensive social net and government expenditures of about one-half of GDP. Owing to low birth rates and limited immigration, its population is aging. Agriculture is subsidized and skepticism to genetically modified crops is rather strong. These are all reasons why Europe's economic agenda looks somewhat different from that of the US and is more likely to be affected by rising tensions.

## 2. European Integration: a Success Story Lacking Growth

Looking at the priorities of the European agenda over the past 20 years, it is evident that integration was at the very top of the list. Initially, Europe was preoccupied with the creation of a Single Market, then with the introduction of a common currency, and finally with the management of the enlargement. Everybody familiar with the fragmentation of Europe when integration began in the 1950s, with its historical complexities in law and regulation, with the differences in income and productivity

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between the core and the periphery and between the North and the South, has to acknowledge that European integration—however slowly and bumpy the process was at times—has been a success. Today, many policies are negotiated at the European level, for some there are mandatory targets, while for other policy areas the instrument of “open coordination” (benchmarking) is used. Goods and services, persons and capital are now free to move across borders. Europe has a single currency (with three countries pondering whether or when to join), and ten or twenty more countries pegging their currencies as closely as possible to the euro.

However, since the beginning of the 1990s, European integration has been disappointing in one, specific respect. The European economy has not grown at a satisfactory rate, neither in output nor in productivity, nor in employment. Employment creation has been slow relative to the US and relative to the number of people willing to work. The share of employment relative to the population, as well as the number of hours worked per person and year, is now—in contrast to the situation 30 years ago—lower in Europe than in the US, and a substantial part of the low labor input is involuntary. Boosting economic growth should therefore be priority number one on the future economic agenda, with the creation of employment and increasing productivity being of equal importance.

### 3. Underperformance in the 1990s

Before arguing in detail as to how certain priorities should be ranked, let us put the European growth problem into numbers and figures (see Table 1). Europe is currently stuck in a slow growth period, with several countries at the brink of recession. Some economists are cautiously indicating that deflation may be around the corner and that Europe might perhaps follow Japan on its way into a longer recession. The fact is that growth has been lingering around 1% over the period 2001/03. For 2004, the European economy is expected to grow by 2% or less, the US by 3% or more.

Sluggish growth during these last years confirms Europe's disappointing performance during the 1990s. In Europe, growth of real GDP decelerated to 2.1% (following rates of 2.6% in the 1980s and 3.0% in the 1970s), productivity to 1.7%. During the same period, macroeconomic growth in the US was one percentage point higher.<sup>1</sup> The sum of annual growth since 1990 amounts to cumulated growth of 26.5% for Europe and 40.7% for the US. For productivity per worker, the US lead—which had

*Table 1. Data showing that the US Outperforms Europe with Respect to Output, Productivity, and Employment Growth (p.a.)*

	<i>Growth of real GDP</i>		<i>Productivity growth per worker</i>		<i>Employment growth</i>		<i>Productivity growth per hour</i>	
	<i>EU</i>	<i>USA</i>	<i>EU</i>	<i>USA</i>	<i>EU</i>	<i>USA</i>	<i>EU</i>	<i>USA</i>
1991–1995	1.59	2.39	2.06	1.37	–0.46	1.01	2.45	1.14
1996–2000	2.65	4.04	1.22	2.40	1.41	1.60	1.42	1.97
2001–2002	1.29	1.27	0.41	1.58	0.87	–0.30	0.88	1.59
1991–2002	1.98	2.88	1.43	1.83	0.54	1.03	1.76	1.56

*Source:* WIFO calculations using data from Groningen Growth and Development Centre.

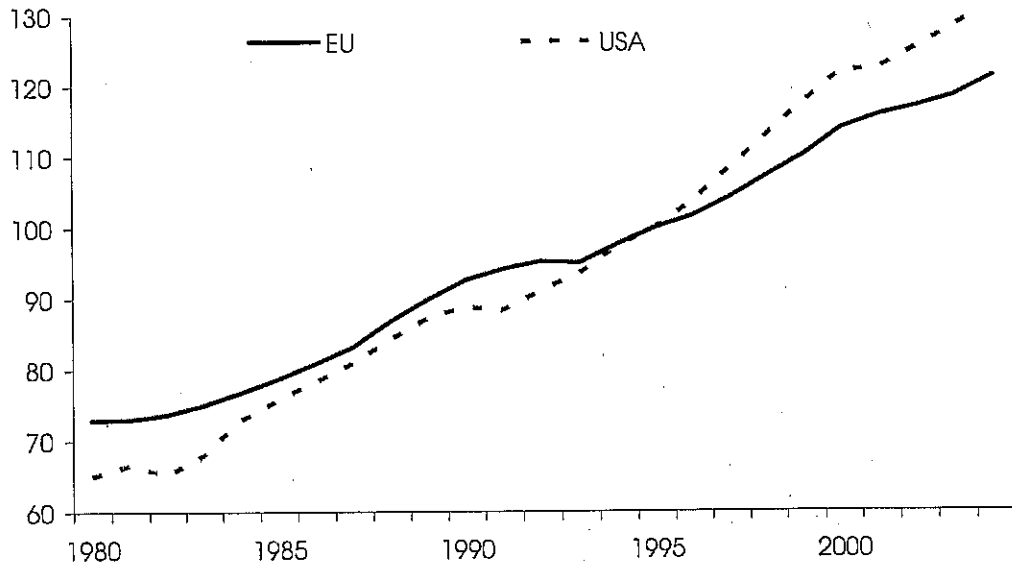


Figure 1. *Different Dynamics of Real GDP in the US and Europe (1995 = 100)* (source: WIFO calculations using AMECO)

been decreasing for decades—widened from 20% in 1995 to 30% in 2002, for productivity per hour from 5% to 9%. Thus, after decades of European catching up in productivity, the US is forging ahead, reversing the long-term convergence process.<sup>2</sup>

Alternative indicators of economic performance, specifically employment and unemployment, do not offer much consolation: European unemployment has remained persistently high at about 8%, after peaking in 1994 at 11%. The employment rate, which up to the 1980s was higher in Europe, is now 13 percentage points lower than in the US. It is important to stress that employment increased at both ends of the quality scale in the US: “High Tech” and “Big Mac” together created about 21 million jobs between 1990 and 2000.<sup>3</sup>

A comparison of the US and European performances becomes less clear-cut when a broader set of economic and social goals is included. It is well known that in the US, energy efficiency is very low and the emissions of greenhouse gases are high and rising. A substantial part of the population is not covered by health insurance, and the distribution of income and wealth is far less equal than in Europe.<sup>4</sup> These contrasts partly reflect differences in preferences, and are partly based on differences in the political and social systems of the US and Europe. A full comparison of a broader set of social and environmental goals is beyond the scope of this paper (see Aiginger (2003c) for such an attempt), but it is important to note that differences between Europe and the US widened in most of these fields during the 1990s. This may lead to tensions between the US and Europe, for example in negotiations on world trade agreements. Current performance and preferences regarding “green issues,” as well as equity and social security, will be of consequence to the policy agenda (see below for the European agenda, and see Arrow (2004) for the US).

#### 4. The Reason Behind Disappointing European Growth

Most international studies—and specifically those of the OECD, the IMF, and the European Commission—explicitly or implicitly blame high welfare costs and low market flexibility for Europe’s underperformance. While it is true that welfare costs are higher and labor as well as product markets are more regulated in Europe, there

Table 2. Differences between Regulation in Europe and the US

	PMRDYN			EPL total			EPL regular contracts			EPL temporary contracts		
	1990	1998	1998/1990	1990	1998	1998/1990	1990	1998	1998/1990	1990	1998	1998/1990
EU	4.73	3.26	-30.93	2.9	2.4	-15.00	2.7	2.5	-5.38	3.1	2.3	-23.36
USA	2.21	1.36	-38.54	0.2	0.2	0.00	0.1	0.1	0.00	0.3	0.3	0.00

PMRDYN: product market regulation; dynamic indicator for network industries. EPL: employment regulation.  
 Source: WIFO calculations using OECD database on Regulatory Indicators.

are some doubts as to whether market regulation and welfare costs are a sufficient explanation for low growth in the 1990s. First, differences in regulation were also present during decades of high European growth and catching-up periods. Second, the difference in labor market regulation narrowed to some degree<sup>5</sup> during the 1990s (see Table 2); markets in the United Kingdom are equally or even more deregulated than in the US. Third, there is no robust relation between the degree of regulatory change during the 1990s and economic performance (Aiginger, 2003b).<sup>6</sup> Finally, the European countries which according to growth, employment, and fiscal stability performed best during the 1990s were Sweden, Finland, and Denmark—all of which are high-welfare countries (Aiginger, 2003a)<sup>7</sup> with moderate regulation of regular contracts and high benefits.

An alternative explanation of the growth difference is macroeconomic policy (Table 3). US monetary policy during the 1990s actively paid attention not only to price stability, but also assumed responsibility for economic growth and output stability. The US reduced interest rates early and courageously, in order to support economic growth, ultimately pushing the interest rate down to 1% in mid-2003. The strategy was enabled by the reputation of the monetary authority to be tough and inflation-minded; monetary policy was steered by a chairman, who enjoyed exerting his authority and accepted responsibility for the economic fate of his country. The European Central Bank began lowering its interest rate late and did not dare to decrease it to the US level. The US fiscal deficits during the recession of 2001–03 were not restricted by fiscal policy rules. During the recession, the budget balance tipped from a surplus of 2% of GDP to a deficit, initially as a result of automatic stabilizers, secondly through discrete expenditure hikes (*inter alia* for security and war), and thirdly as a result of the continuation of a generous long-term tax reduction plan. In mid-2003, the overall government deficit was approaching 5% of GDP in the US, while it was 2.5% in the European Union.<sup>8</sup>

While differences in market regulation and in macroeconomic policy may explain some of the growth difference, both cannot explain the increasing differences in long-term growth or in potential output. A widely overlooked explanation for the deceleration of growth in Europe during the 1990s is that Europe did not invest enough in the factors responsible for long-run growth. Taking a look into economic theory reveals that there are three main determinants of long-run growth in high-income countries: research and innovation, human capital, and the speed at which new technologies are diffused (see Figure 2). Aiginger (2002) developed a system of 16 indicators to measure the investments of countries into those variables which theory and empirical studies have shown to be important to long-run growth. The set comprises indicators of research input and research output, education expenditures and educational attain-

Table 3. Indicators of Macroeconomic Policy in the EU and the US

	Deficit in % of GDP		Government expenditures in % of GDP		Taxes in % of GDP		Nominal short-term interest rates		Real short-term interest rates	
	EU	USA	EU	USA	EU	USA	EU	USA	EU	USA
	1990	-4.77	-4.36	48.87	35.50	43.52	31.13	10.91	7.75	5.78
1991	-5.48	-5.05	50.07	36.21	44.66	31.17	10.83	5.53	5.41	1.82
1992	-5.83	-5.92	51.40	36.90	45.60	30.98	11.12	3.52	6.69	1.05
1993	-5.63	-5.02	52.41	36.23	46.77	31.22	8.43	3.08	4.85	0.67
1994	-5.27	-3.67	51.35	35.15	46.08	31.48	6.43	4.67	3.78	2.54
1995	-4.91	-3.09	51.22	35.01	46.31	31.93	6.62	5.97	3.70	3.71
Average 1990-1995	-5.32	-4.52	50.89	35.83	45.49	31.32	9.06	5.09	5.03	2.25
1996	-3.68	-2.22	50.90	34.56	47.22	32.35	5.10	5.46	2.77	3.45
1997	-2.12	-0.95	49.24	33.60	47.13	32.65	4.76	5.68	2.95	3.65
1998	-1.63	0.28	48.27	32.72	46.64	33.00	4.61	5.50	2.66	4.20
1999	-0.97	0.73	47.75	32.46	46.78	33.18	3.53	5.41	2.13	3.91
2000	-1.13	1.46	47.07	32.33	45.94	33.79	4.77	6.53	3.19	4.33
Average 1996-2000	-1.91	-0.14	48.65	33.13	46.74	32.99	4.55	5.72	2.74	3.91
2001	-1.48	-0.47	47.22	33.41	45.74	32.94	4.40	3.77	1.99	1.36
2002	-1.95	-3.18	47.43	34.78	45.48	31.60	3.48	1.80	0.99	0.66
Average 2001-2002	-1.72	-1.83	47.33	34.09	45.61	32.27	3.94	2.79	1.49	1.01
Average 1990-2002	-3.45	-2.42	49.48	34.53	45.99	32.11	6.54	4.97	3.61	2.70
Average 1996-2002	-1.85	-0.62	48.27	33.41	46.42	32.79	4.38	4.88	2.38	3.08
Average 2002-1998	-0.32	-3.46	-0.84	2.06	-1.16	-1.40	-1.12	-3.70	-1.67	-3.54

Source: WIFO calculations using AMECO.

ment, and the ICT share in production and in consumption (as a proxy for the diffusion of new technologies) (see Figure 3).

The astonishing result is that in 1990, the US was leading in all 16 indicators. At the end of the 1990s, the European Union was catching up in five of the indicators, and had surpassed the US in two; the difference was increasing for the other 11 indicators. In light of this evidence, it is no surprise that growth rates have been higher in the US since the 1990s.<sup>9</sup> Figure 3 illustrates European performance and expenditures on determinants of future growth in comparison to the US: the dotted line indicates the situation at the beginning of the 1990s, the continuous line, the situation at the end of the decade. Each value inside of the unit circle indicates underinvestment in Europe relative to the US. Table 4 reports investment in future growth.

## 5. Towards a New European Model of a Reformed Welfare State?

Unsatisfactory European growth is to a great extent the result of disappointing economic developments in the three large continental economies, Germany, France, and Italy. Average growth in these three countries amounted to only 1.6% between 1990

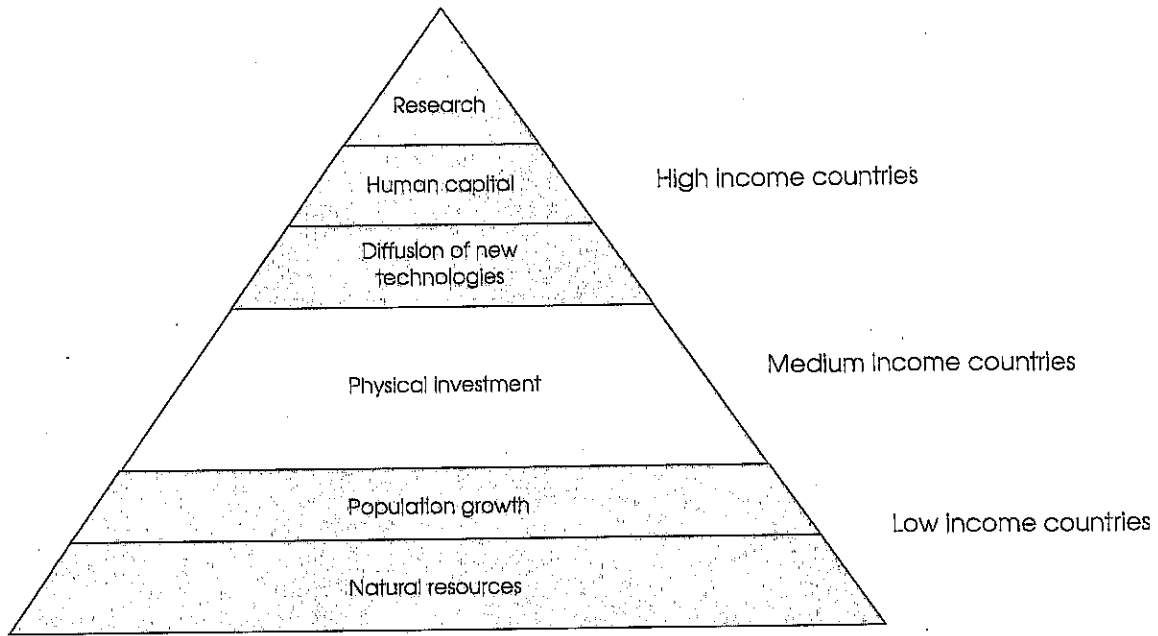


Figure 2. The Hierarchy of Growth Drivers

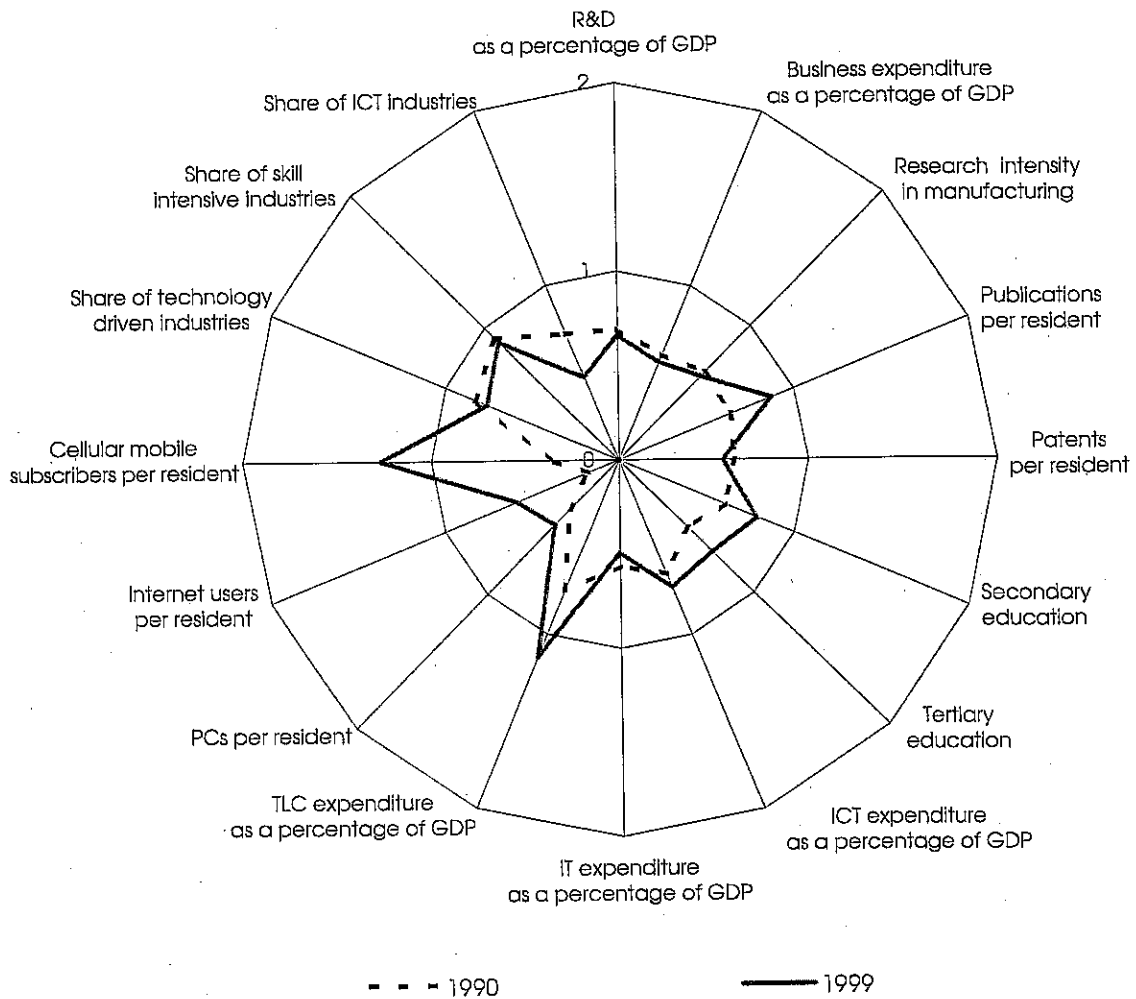


Figure 3. Growth Drivers in Europe vs the US (each indicator outside the unit circle shows superior performance of Europe versus the US; source: WIFO calculations)

Table 4. Investment in Future Growth

	1990		1999		Lead of US (+) resp. EU (-) 1990	Change in favor of US (+) resp. EU (-) 1999
	EU	USA	EU	USA		
<i>Indicators on R&amp;D: input and output</i>						
Total expenditure on R&D in % of GDP 1992/98	1.88	2.65	1.86	2.66	+	+
Business Enterprise Expenditure on R&D (BERD) in % of GDP 1992/98	1.20	1.98	1.15	2.04	+	+
Research intensity in manufacturing 1990/98	2.00	3.07	2.01	3.23	+	+
Publications per inhabitant 1992/99	6.15	9.52	8.14	9.27	+	-
Patents per resident 1990/97	2.24	3.63	2.48	4.48	+	+
<i>Indicators on education system: input and output</i>						
Percentage of the population that has attained at least upper secondary education by age group (1998)	53.00	87.00	70.00	88.00	+	-
Percentage of the population that has attained at least tertiary education, by age group (1998)	19.00	37.00	25.00	36.00	+	-
<i>Indicators on ICT: production and use</i>						
ICT expenditure in % of GDP 1992/2000	3.69	5.65	6.40	8.75	+	+
Information technology (IT) expenditure in % of GDP 1992/2000	1.69	2.97	2.71	5.50	+	+
Telecommunication (TLC) expenditure in % of GDP 1992/2000	2.00	2.67	3.69	3.25	+	-
PCs per 1000 inhabitant 1992/99	0.93	2.53	2.49	5.17	+	+
Internet users per 1000 inhabitant 1992/99	0.03	0.18	1.59	2.72	+	+
Cellular Mobile Subscribers per 100 capita 1992/99	1.52	4.25	39.59	31.16	+	-
<i>Indicators on share of "progressive" industries</i>						
Share of technology-driven industries in nominal value added 1990/98	21.85	26.46	22.92	30.27	+	+
Share of skill-intensive industries in nominal value added 1990/98	16.81	18.27	16.67	18.64	+	+
Share of ICT industries in nominal value added 1990/98	7.28	10.07	6.80	14.31	+	+

Remarks: 1990 (1999) means that year in the 1990s for which the earliest (or latest) data are available (both are indicated following the name of the variable). For the percentage with secondary and tertiary educations, the older (45-54) and the younger (25-34) age groups are compared.

Source: WIFO calculations.



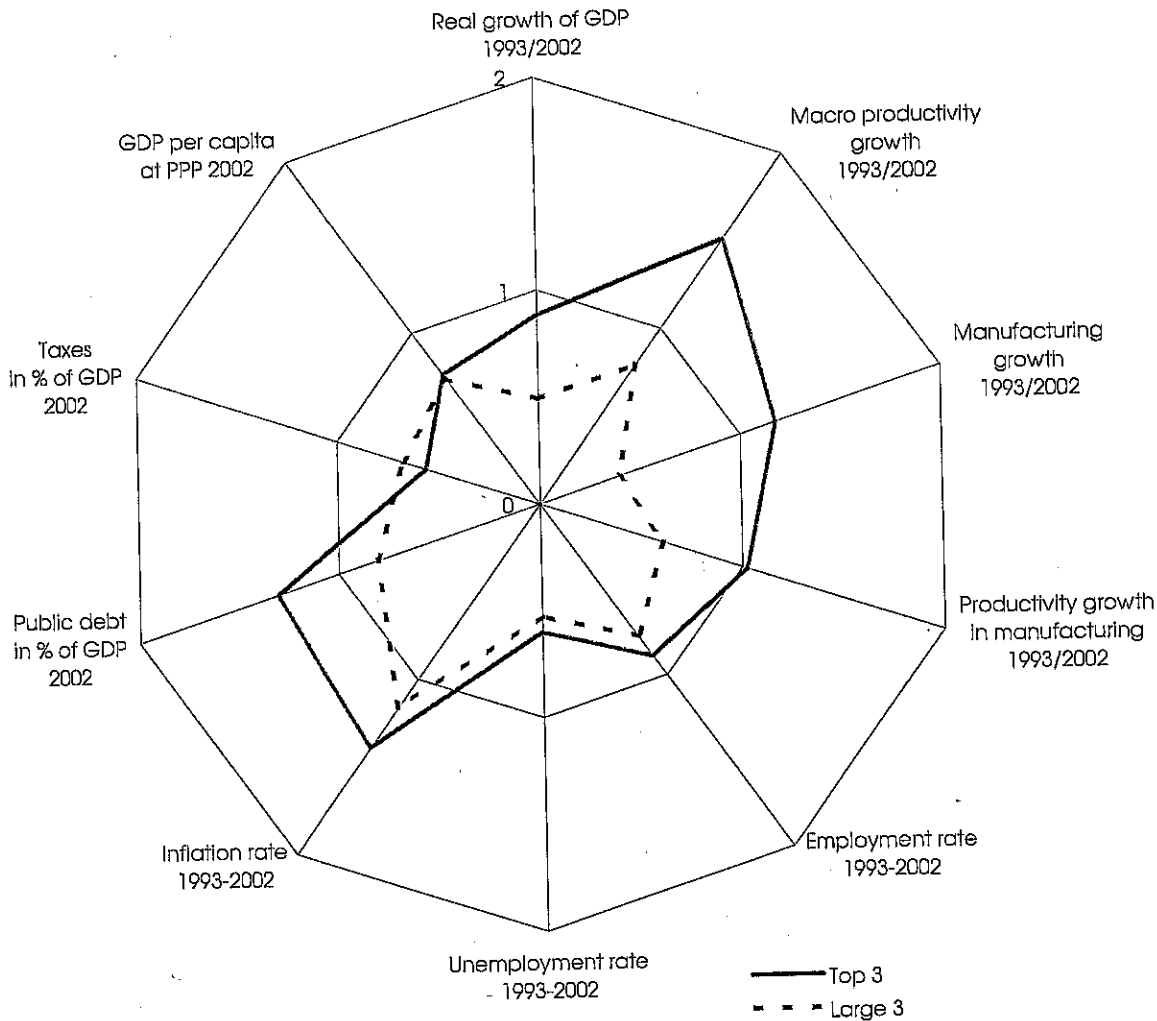


Figure 4. Performance of Top Three Countries Close to the US (top 3: Denmark, Finland, Sweden; large 3: Germany, France, Italy; unit circle = US; source: WIFO calculations using AMECO)

and 2003. While the nature of some of their problems may be different (the North-South divide in Italy, unification in Germany, preoccupation with the distribution of work among employees in France etc.), the performances of these three countries, as well as their policy strategies, are strikingly different from those in the three best performing countries, the Nordic economies of Sweden, Finland, and Denmark.<sup>10</sup> They managed growth at 2.9%, very close to the US figure. I want to describe these countries in terms of structure, performance, and policies pursued during the 1990s (see Figures 4 and 5).

As for their structures, the three countries are small open economies, with comprehensive welfare systems. This specific type of system is called the Northern European Welfare System, insofar as it stresses redistribution and extends welfare payments to all citizens (not only workers), and social benefits are financed by taxes rather than wage contributions. All these countries experienced severe crises in competitiveness, either in the 1980s or at the beginning of the 1990s. The countries are high-cost and high-tax countries, the government plays an active role, decision-making is shared among social partners, and great weight is placed on consensus and continuity.

As far as performance is concerned, the top three countries are enjoying macro-economic growth of 2.9%, as compared to 1.6% in the big continental economies.

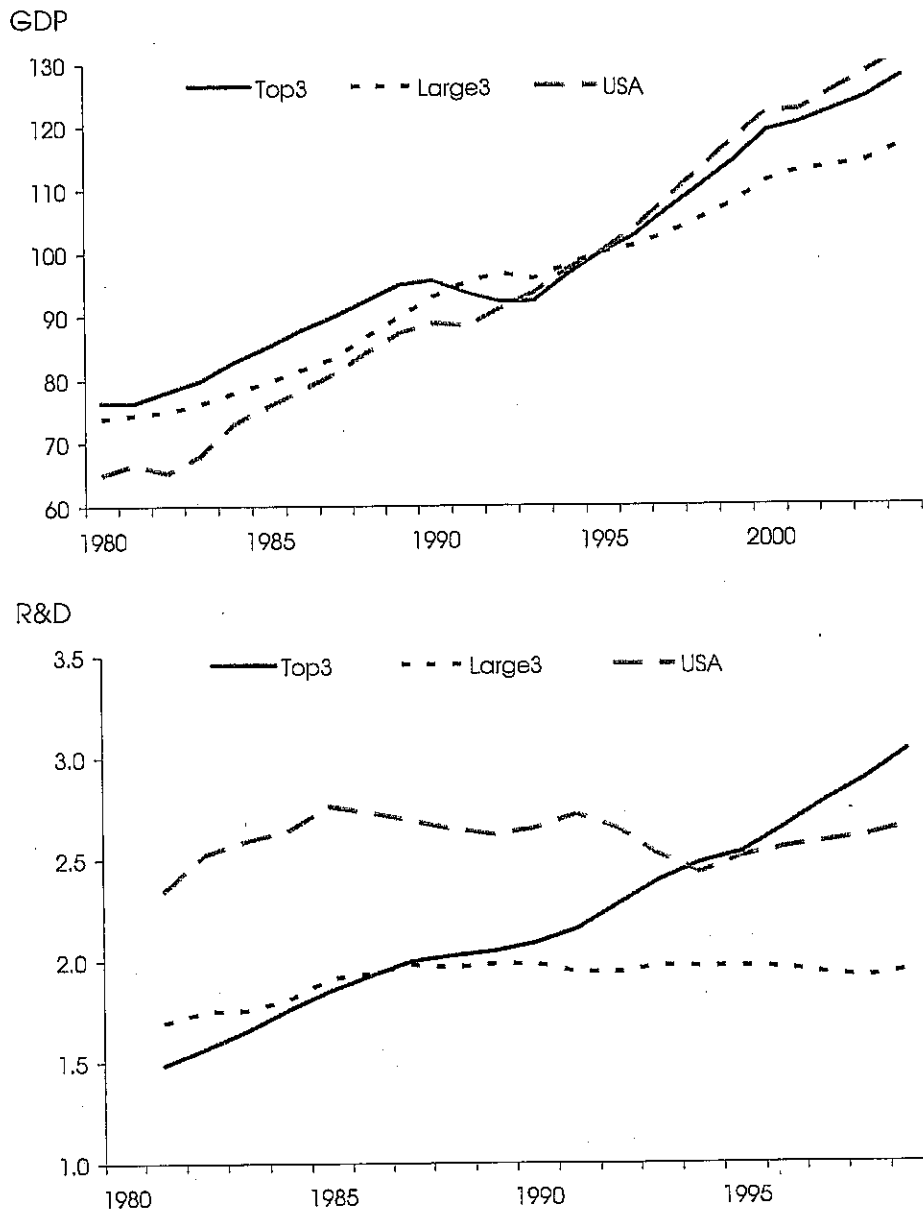


Figure 5. Differences Between the Top Three, the Large Three, and the USA in Real GDP and Research (percentage of GDP)

Productivity increased by 2.4% relative to 0.5%, and the employment rate is 71% in the top performers relative to 62% in the big three continental economies. The top countries combined fiscal prudence with large governments; budgets have been in surplus, even in 2003. However, government expenditures still amounted to 54.3% in 2003 and taxes were 56.5% of GDP. Both figures are higher than in the big continental countries and far above rates in the US.

The policy strategies of these successful countries relied on three elements. The first pillar was the restoration of the balance between production costs and productivity in the private sector and between taxes and revenues in the public sector. Sweden and Finland did devalue their currencies, while Denmark maintained its currency value relative to its main trading partners. Wage moderation was implemented specifically in Finland, less in Denmark and Sweden. Government expenditures decelerated, but levels remained above average. Finland decreased taxes slightly; taxes remained relatively unchanged in Sweden and Denmark, and well above the level of the big countries.

The second strategy element was improving the incentive structure. Product markets were deregulated faster than in the big countries. The main changes in labor market regulation pertained to temporary contracts. Labor market regulation for regular contracts was not changed dramatically. It is stricter in Sweden, far below the EU average in Denmark, and a little bit lower in Finland. Training schemes were made obligatory and personalized, welfare to work measures with true assistance and without offensive rhetoric were installed. Replacement ratios were reduced marginally, and extremely long benefit periods were shortened. In Denmark, labor market policy specifically tried to increase the flexibility of firms, while increasing security for people by assisting in search of new jobs. This system has been labeled flexicurity (flexibility plus security).

The third and most important strategy element was raising the long-term growth path. All these countries invested into growth drivers and new technologies. The top three countries increased research expenditures, maintained or upgraded quality in education, and invested into new technologies, specifically ICT and biotechnology. Denmark concentrated more on a strategy diffusing ICT and supporting successful clusters (IT bridge, medical sector). Finland increased research expenditures dramatically, even during a period when total government expenditures were reduced. Sweden supported the production and diffusion of telecommunication to such an extent that in most ratings it became the number one technology in the information society. R&D expenditures in the top three countries surpassed those of the big countries in 1988 and are now twice as high. The top three countries increased their lead over the large countries in education expenditures and they also excelled in the performance ratings of their education systems (the OECD's Pisa-rating). The lead of the top three countries in information technology is increasing. The correlation between the performance ranking and increasing investment in growth drivers is highly significant.

In contrast to the traditional European welfare model, the balance between costs and productivity is of high priority. The budgets in all three countries are balanced or in surplus, despite the trough of 2001–03. Firms are more flexible with regard to their use of labor, and workers receive efficient assistance in their efforts to find jobs (active labor market policy). Replacement ratios have been somewhat reduced from their very high levels, but remain way above the European average. Benefits are conditional to search efforts. Some of these measures resemble US rules of workfare but, unlike their US counterparts, they are administered by labor offices and trained personnel sincerely engaged in helping the unemployed and without the rhetoric that the unemployed may be too lazy to work. Labor markets, as well as product markets, are less regulated than in the big three continental economies, but much more strongly than in the US. For a synopsis of the differences between the old and new models, see Table 5; for a more thorough discussion, see Aiginger (2002).

## **6. A Tentative European Agenda**

### *Growth is Essential*

Europe's top priority should be to increase economic growth. Although income and income growth are only two components in a utility function, they facilitate the realization of other economic goals (employment, the financing of social and old-age systems, redistribution, and environmental costs) and help to eliminate policy blockers (debt, deficits, uncertainty, conflicts). European policy has lately and reluctantly acknowledged the importance of growth: at the Lisbon Summit 2000, the European

Table 5. *Old European Model versus New European Model*

<i>Old European Welfare Model</i>	<i>New Model of the Reformed Welfare State</i>
<i>Welfare pillar</i>	
Security in existing jobs	Assistance in finding a new job
High replacement ratios	Incentives to accept new jobs (return to labor force)
Structural change in existing firms (often large firms)	Job creation in new firms, service, self-employment
Comprehensive health coverage, pensions, education	Coverage dependent on personal obligations
Regulation of labor and product markets	Flexibility as a strategy for firms and as a right for employees
Focus on stable, full-time jobs	Part-time work as individual choice (softened by some rules)
<i>Policy pillar</i>	
Focus on (price) stability	Focus on growth and new technologies
Asymmetric fiscal policy (deficits)	Fiscal prudence
Incentives for physical investment	Research, education, and new technologies are the basis
Subsidies for ailing firms (public ownership)	Industrial areas, university nexus
Industrial policy for large firms	Start ups, venture capital, services
Encouraging cooperation or mergers	Enforce current strengths (cluster and regional policy) and competition

Union set the target of achieving 3% growth, and defined its commitment to become the most competitive knowledge-based area. The policy instrument used to attain this goal is, however, the softest one implemented in all of the EU policy strategies; it is known as the method of "open coordination." This means that each country can go its own way; the Commission just provides a set of policy guidelines.<sup>11</sup> The performances of countries are evaluated according to these annual guidelines, against the background of a set of structural indicators. Such a benchmarking process should enable countries to learn from each other. Sub-goals are defined for total employment, for the employment of young people and elder workers, and for expenditures on research and education.

The problem with this soft policy approach is that it is not tremendously effective. In contrast to the Stability and Growth Pact, sanctions are not possible; and if no country is meeting a target, the deficiency will not even be reflected in the ranking.

### *Growth Needs Investment into Growth Drivers*

The second priority should be to increase investment into determinants of future growth.<sup>12</sup> This may not be a second objective, but rather a means of achieving the first. It is surprising that the importance of investment into growth drivers is presently so very low on the European agenda and practically absent from the economic discussion in the big continental economies. While France was very concerned about losing technological competitiveness to the US after World War II, and while in the 1970s, Germany had well realized its problem of being strong only in medium technologies,

and weak in high technology, these discussions were totally overshadowed by other current problems (unemployment, migration, German unification). Research expenditures were at best stagnant in the 1990s, decreasing in relation to GDP in France (1990: 2.4%; 2000: 2.2%) and in Germany (1990: 2.8%; 2000: 2.5%), and remaining far below the European average in Italy. The big three continental economies are investing less than the US in the majority of the growth drivers, and differences also increased for 10 indicators during the 1990s. Expenditures on information technology are lower than in the US, as is the speed of diffusion of the Internet and PCs. Expenditures on tertiary education and the share of workers with university degrees are lower. These deficits exist for the large European economies, and not for some of the smaller ones.

### *Labor Market Reforms are Needed, but will not Boost Growth in the Short Run*

One reason why Europe has neglected to stimulate growth is that many analysts—including those from the IMF, the OECD, and the European Commission—believe that rigidities in the European labor market are the main culprit for unemployment and the insufficient generation of employment. These conclusions come from observing the high degree of regulation on European markets with low employment dynamics.<sup>13</sup> While there is some evidence that specific features of the European labor market are detrimental to employment (like high and unlimited benefits without obligations, and high unionization without sufficient coordination between unions or employees), and while the large continental countries did not reform their labor markets, the overall evidence that labor market institutions depress economic growth is not completely convincing. We have to keep in mind that the same institutions enabled Europe to grow faster, to catch up with the US in productivity, and to attain full employment in the decades before. It is plausible that flexible labor markets are more important in times of external shocks and economic turbulence, and the importance of flexibility increases in a globalized world where information technology has decreased transportation costs. On the other hand, policy which increases wage flexibility may at least have a negative demand effect (via higher layoffs or reduced wages) in the short run. Later, this effect should be more than compensated by an increase in supply, which may come sooner, if firms and consumers are confident about the long-run consequences. Some smaller European countries, most notably Denmark, Sweden, and Finland, showed that the fine-tuning of incentives (higher obligations for benefits are coupled with true assistance and training) may result in higher medium-term growth, when it is coupled with boosting investment into long-term growth. These countries also show us that returning to full employment is much easier if the economy is growing. In a period of declining demand, expensive exits into disability or pension schemes had to be used even in Sweden and the Netherlands.

### *A Proactive Policy in Research and Education is Important in Europe*

Both government expenditures and public institutions are important throughout Europe. The government is currently financing between one-third and one-half of R&D expenditures in Europe directly, and is intervening in the private sector through research grants, tax incentives, and procurement. Ninety percent of education expenditures in Europe come from public sources; the development of ICT has its roots in public institutions, in universities, and in telecom firms which have not yet, or have just been privatized. Common standards were developed at a European level (e.g., the GSM technology for mobile phones). European research projects are extremely impor-

tant in the fragmented and immobile research landscape. The current trend is to reduce the influence of public funds; the European Commission has set the goal that two-thirds of research should be done in the private sector. Private schools and universities increasingly complement the public education system. Given the historic share of the public institutions, a proactive role of government will be indispensable in the short run, if research and education expenditures have to increase. Even a shift from the public sector to the private sector will have to be monitored and accelerated with incentives and stimuli.

### *Public Sector Reforms*

Rethinking the public sector should be another policy priority. Public expenditures relative to GDP have surpassed 50% in many countries, as compared to 35% for the US. One main category is social or welfare costs. The extent of the difference depends on several measurement issues, but the fact that welfare costs are higher in Europe is not dependent on the indicator used. Most European countries pursue strategies to reduce government expenditures or to enable them to grow more slowly than GDP. As far as taxation is concerned, Europe is trying to reduce taxes, specifically those relevant to competitiveness or the decisions of multinational firms regarding their locations. More aggressive reductions are limited by the political strength of public workers or by conditions in the labor market where a reduction in the public workforce would increase excess supply. New management techniques will be necessary for the restructuring of the public sector, and for increasing competition within the public sector and between public provision and outside options.

### *An Aging Society Needs Money to Finance Pensions and Health*

The final reason why government expenditures will remain higher in Europe in the future is the aging of its society. This problem is now well understood, and reforms are under way albeit at different speeds across countries. An aging society relying primarily on public pension and health systems will require increasing expenditures in these two categories. If economic growth is high, this will be a solvable problem; for slow-growth economies, expenditures will increase dramatically (with the uncomfortable options of either reducing benefits or accepting higher taxes).

### *The Acceptance of the Market System Depends on Fairness and Sustainability*

Distributional issues are low on the current European agenda, but they will come up again sooner or later. In general, income and wealth distribution is more equal in Europe than in the US, with great differences between Scandinavian and other European countries. Income differences increased in the 1990s and many countries reduced or abolished property taxes, driven by the argument that capital is mobile and would go to low-tax countries. The increasing income differences will not be sustainable over the long run. If governments continue to reduce corporate and income tax rates in the highest bracket, fairness will dictate that property taxes be used to attain the contributions of the wealthy for the needs of society. Environmental taxes will have to be increased to bring pollution back into the cost calculation. Last but not least, the tax burden should be shifted from labor to resources.

Ecological issues are more important in Europe than in the US. The taxation of energy is expected to rise and emissions will also be taxed—on the one hand in order

to comply with the Kyoto rules, on the other hand to reduce tax wedges on labor. Limiting genetically modified (GM) food and the compulsory labeling of GM inputs are high on the European agenda. This objective will be difficult to pursue in a world in which other players are convinced about the safety of GM food or for strategic reasons eliminate unmanipulated crops.

Europe is currently shifting from a system of agricultural subsidies, which previously favored production and excess supply, to a system which guarantees (a decreasing number of) farmers a certain level of income. But the amount paid to farmers is still very high and is not really targeted at environmental contributions or obligations for alternative employment opportunities. Subsidies are too high by any economic rationale.

### *The Stability and Growth Pact and the Reemergence of Macroeconomic Policy*

A policy agenda for Europe cannot be closed without reference to the Stability and Growth Pact (SGP) and the need for rethinking macroeconomic policy. The European SGP, which limits deficits to 3%, was the answer to a permissive European fiscal policy. It produced fiscal deficits during recessions, without eliminating them during growth. Public deficits as a percentage of GDP soared to two-digit figures, with public debt surpassing GDP in several countries. The initial reaction of the European Union was to set targets for fiscal deficits and government debts (the so-called convergence criteria) as a precondition for membership in the Monetary Union. After the start of the European Monetary Union, the SGP postulated that budget deficits should be close to zero, and were not allowed to rise above 3% in any single year. A monitoring mechanism was created, with an admonition first, and then the final threat of penalties, if the warning did not result in lower deficits. In 2003/04, Germany and France came dangerously close to a fine, with Italy and Portugal not far behind. A more flexible interpretation of the pact has been discussed, with proposals ranging from taking specific expenditure items out of the calculation, or defining specific circumstances under which higher deficits can be allowed, or setting different limits for countries dependent on the existing debt. In connection with the GSP, but also with respect to the more growth-oriented monetary policy in the US, Europeans deplore the fact that fiscal policy as well as monetary policy was more effectively used in the US to maintain growth and to counteract the private business cycle throughout the crisis of 2001–03. The US, once the country whose economists preached the end of anticyclical policy and the importance of predetermined rules, returned in the 1990s to the fine-tuning of cyclical demand. Europe will hopefully return to anticyclical and growth-promoting policy, once its new monetary authority has gained a reputation of inflation awareness and fiscal deficits have moved close to zero over a full business cycle. For example, Sweden and the UK, feeling safely distant from the deficit ceiling of 3%, already started to boost growth via public expenditures in 2003.

### *Regional Policy and EU Enlargement*

For a long time, regional policy has tried to reduce regional variations, specifically income differences between the core and the periphery. It has been successful at the national level, insofar as Ireland has not only caught up, but even surpassed the EU average in per capita GDP (not in income per capita), and the southern countries—Greece, Portugal, and Spain—are also catching up, albeit slowly. The success has not been the same for intracountry differences, such as the regional divergence which has

proved very persistent in Spain and Italy. With the upcoming European enlargement, new countries with much lower incomes will be entering an area in which the free movement of goods and persons is guaranteed. Regional differences are large within the new member countries; areas which border the current European Union are the richer regions. The importance of regional policy is therefore increasing with the size of the European Union.

## **7. Will the Agenda be Pursued?**

The agenda is of course subjective. Many European economists would probably give higher priority to labor market reforms, with parallel emphasis on product market reforms and the reduction of government expenditures. Many European economists stress that increasing the number of low-paid and temporary jobs will almost automatically increase economic growth. While the causality between growth and employment is still undecided, it seems reasonable to remove as many obstacles to employment creation and business startups as possible. Job creation at all costs (e.g., with very low wages and no social net) is, however, not a feasible strategy for high-wage countries.

Most Europeans will not argue against the importance of economic growth. But many economists believe that setting market forces free through deregulation and tax reductions will do the job, while I am convinced that a region where research and education have historically been influenced strongly by the government needs a prudent, proactive, research-oriented policy and has to actively enhance education and retraining. The preference for a sustainable ecological policy and the necessity of fairness between the wealthy and the less endowed are objectives not high on the current agenda. The future costs of aging are being recognized more and more often by governments, and international organizations are giving them a very high priority.

The agenda proposed is quite close to the policy priorities of the northern European countries, notably Sweden, Finland, and Denmark. As already mentioned, these countries have comprehensive welfare systems and place great emphasis on ecological reforms. Most importantly, they have realized that their systems can be sustained only if costs and productivity are in balance and if investments into research, education, and new technologies are encouraged.

The emphasis on growth and the proactive role of government is also very close to the policy conclusions in the so-called Sapir Report (Sapir, 2003). It places priority on growth, research, education, infrastructure, and labor mobility; macroeconomic policy is seen as potentially effective and shifting European budgets from agriculture to research is recommended (see the Appendix).

## **8. Will the Next Decade See Growth Rebounding in Europe?**

In assessing the development of US growth relative to that of the European Union during the next decade, we have to be modest in what economists can predict about the long run (in light, for example, of the US fear of losing competitiveness relative to Japan in 1990). I present arguments in favor of a new period of European catching-up, but follow them up with a number of reasons why the US lead could persist, and finally recall three unsolved problems and a detrimental force facing the US.

Let me first enumerate the arguments in favor of European catching-up. First, the observed differences in fiscal and monetary policy will probably become smaller. The US will have to cope with its large and rising budget deficit. This will make it



necessary to either curb expenditures or to raise taxes dramatically. In Europe, the three large continental economies have deficits of around 3%, which is high, but nothing compared to the deficit in the US. Other European economies have budgetary positions which can potentially eliminate deficits, and even generate surpluses if the economies rebound. European monetary policy can become more expansive, with inflation at a level of 2% and a reputation for building up monetary responsibility.

Second, welfare reforms have been initiated, cost consciousness has increased, the relation of social payments to GDP is constant in some countries, and slightly decreasing in others. Taxes and government shares, which previously increased from decade to decade, are decreasing in relation to GDP, however from a level originally far higher than that in the US.

Third, Europe's strength lies in the diffusion phase of new technologies. The difference in growth drivers should decline, given the greater awareness for research and education evident in the Lisbon process. The benefits of integration and enlargement should materialize, thereby boosting growth.

Three unsolved problems in the US may dampen that country's performance during the next decade. The current account deficit increased to 5% of GDP, making the US even more dependent on the willingness of other countries to invest in its economy and/or a low exchange rate for the dollar. High profits and reliable corporate governance have therefore become necessary, and the situation is rather volatile and risky. A related issue is the low US savings rate, which reduced investment and growth (this situation will worsen parallel to the extent that foreign investors may no longer invest the lion's share of their money in the US). The costs of security and war are increasing expenditures directly; they are also distracting attention away from future investments. The peace dividend enjoyed in the 1990s has been reverted.

It is in the nature of economic interdependence that what is a problem for one area is not necessarily an advantage for the other. If US deficits lead to the depreciation of the dollar, European exports and growth could also be reduced.

The following arguments speak in favor of a continued US lead: the level of research and its efficiency is still higher in the US; the share of technology-driven and high-skill industries is larger and high value-added services are increasing faster in the US. Furthermore, taxes are low, labor flexibility is high, immigration is easier, and regulation favors cost competitiveness and the creation of firms.

My final assessment is therefore that the US lead will persist, although not to the extent of the 1990s. Should a forecast be requested, the most likely development seems to me that the US would again increase output and productivity faster than Europe. The difference between US and European growth may be smaller, since some of the reasons for the superior US performance have changed.

## **Appendix: Summary of the Main Findings and Proposals of the Sapir Report 2003**

### *Performance Evaluation of the European Union*

- Macroeconomic stability has improved in the 1990s.
- A strong emphasis on cohesion has been preserved.
- Nevertheless the EU system has failed to deliver a satisfactory growth performance.

Underperformance is striking in contrast to expectations, past performance, and recent US achievements. Per capita GDP has stagnated at about 70% of the US level since

the early 1980s. Growth must become Europe's number one economic priority—not only in declarations, but first and foremost in actions.

### *The Basic Failure of Europe*

Unsatisfactory growth performance is a symptom of Europe's failure to transform itself into an innovation-based economy. What is needed is more opportunity for new entrants, greater mobility of employees within and across firms, more retraining, greater reliance on market financing, and higher investment in both R&D and higher education.

### *The Proposed Agenda Consists of Six Pillars*

*Making the single market more dynamic* Better coordination of regulation and competition policy; proactive intra-EU labor mobility programs; green cards for third-country nationals; infrastructure policy.

*Boosting investments in knowledge* R&D amounting to 1.9% of GDP and expanding tertiary education from 1.4 to 3%; excellence in postgraduate education; the creation of an independent European agency for science and research; tax incentives to encourage private research, especially by small, newly founded firms.

*Improving the macroeconomic policy framework for the EMU* Greater symmetry in monetary policy over the course of the cycle; short-term flexibility combined with the long-term sustainability of fiscal policy (fiscal policy should remain rules-based); improved incentives for surpluses during cyclical upturns; increasing the room for maneuver in bad times; rainy-day funds, taking the level of indebtedness into account.

*Redesigning policies for convergence and restructuring* Giving priority to the creation and expansion of institutions; investing in human and physical capital; restructuring and retraining displaced workers.

*Achieving effectiveness in decision-making and regulation* Focusing on open methods of coordination; relying on incentive-based methods; directing priorities towards spending on growth enhancers.

*Refocusing the EU budget* Shifting the focus of the budget away from traditional expenditures (such as the Common Agricultural Policy) to:

- (a) a fund for economic growth (subdivided into R&D and innovation, education and training, and infrastructure);
- (b) a convergence fund aimed at helping low-income countries catch up (with emphasis on the creation and expansion of institutions, as well as human and physical capital);
- (c) a restructuring fund aimed at facilitating the process of resource allocation (directing aid towards agricultural sectors and displaced workers).

### **References**

Aiginger, K., "The New European Model of the Reformed Welfare State," Stanford University, European Forum working paper (2002).

- Aiginger, K., "A Three-tier Strategy for Successful European Countries in the Nineties," WIFO working paper (2003a).
- , "The Importance of Labour Market Reforms for Economic Growth," WIFO working paper (2003b).
- , "Competition Between the US and Europe: Which Model is Economically Successful?" paper presented at the Alpbach Congress (2003c).
- Aiginger, K. and M. Landesmann, "Competitive Economic Performance: the European View," WIFO working paper (2002).
- Alesina, A., E. Glaeser, and B. Sacerdote, "Why Doesn't US Have a European-style Welfare State?" NBER working paper 8524 (2001).
- Arrow, K. J., "A Personal Agenda for the Next Decade," *Review of International Economics* 2004 (this issue).
- Bains, A., A. Dierx, K. Pichelmann, and W. Roeger, "Structural Reforms in Labour and Product Markets and Macroeconomic Performance in the EU," in *The EU Economy 2002 Review* (2002).
- Buti, M., D. Franco, and L. R. Pench, *The Welfare State in Europe: Challenges and Reforms*, Cheltenham: Edward Elgar (1999).
- Elmeskov, J., J. Martin, and S. Scarpetta, "Key Lessons for Labour Market Reforms: Evidence from OECD Countries' Experiences," Economic Council of Sweden, IVA, Stockholm (1998).
- Freeman, R. B., "War of the Models: Which Labour Market Institutions for the 21st Century?" *Elsevier Labour Economics* 5 (1998):1–24.
- Gordon, R. J., "Two Centuries of Economic Growth: Europe Chasing the American Frontier," paper prepared for the Economic History Workshop, Northwestern University, October (2002).
- Jorgenson, D. W. and K. J. Stiroh, "Raising the Speed Limit: US Economic Growth in the Information Age," Economics Department working paper 261, OECD, Paris (2000).
- Martin, J. P., "What Works Among Active Labour Market Policies: Evidence from OECD Countries' Experiences," *OECD Economic Studies* 30 (2000).
- Nickell, S., "Unemployment and Labour Market Rigidities: Europe versus North America," *Journal of Economic Perspectives* 11(3) (1997):55–74.
- Nicoletti, G., A. Bassanini, E. Ernst, S. Jean, P. Santiago, and P. Swaim, "Product and Labour Market Interactions in OECD Countries," Economics Department working paper 312, OECD, Paris (2001).
- Nicoletti, G. and S. Scarpetta, "Regulation, Productivity and Growth: OECD Evidence," OECD, Paris (2002).
- OECD, *The Sources of Economic Growth in OECD Countries*, Paris (2003).
- Peneder, M., *Entrepreneurial Competition and Industrial Location: Investigating the Structural Patterns and Intangible Sources of Competitive Performance*, Cheltenham: Edward Elgar (2001).
- Pichelmann, K. and W. Roeger, "The EU Growth Strategy and the Impact of Aging," *Review of International Economics* 2004 (this issue).
- Sapir, A., "Report to the President of the European Commission: An Agenda for a Growing Europe," European Commission, Brussels (2003).
- Schettkat, R., "What Impact Do Welfare State Institutions have on Economic Performance?" Cesifo Cice report 2 (2003):27–33.
- Schulmeister, S., "Globalization without Global Money: the Double Role of the Dollar as National Currency and as World Currency," *Journal of Post Keynesian Economics* 22(3) (2000).
- Tichy, G., "Die Risikogesellschaft," mimeo (2003).
- Visser, J., "From Keynesianism to the Third Way: Labour Relations and Social Policy in Postwar Western Europe," *Economic and Industrial Democracy* 21 (2000):421–56.
- , "The First Part-time Economy in the World: a Model to be Followed?" *Journal of European Social Policy* 12(1) (2002):23–42.

Wykoff, A., "Differences in Economic Growth across the OECD in the 1990s: the Role of Innovation and Information Technologies," DSTI/STP/ICCP (2000).

## Notes

1. Growth differences between Europe and the US are analyzed in Aiginger (2003a), Aiginger and Landesmann (2002), Alesina et al. (2001), Bains et al. (2002), Gordon (2002), and Jorgenson and Stiroh (2000).
2. The difference widened most for productivity per worker, less for productivity per hour and least for per capita productivity, where the US lead is nevertheless still about 40%. There are many caveats to be kept in mind with respect to international comparisons in productivity. For example, there is the problem of measurement in services and software, different methods of calculating inflation in information technology (more reliance on hedonic indices in the US), the impact of stock market bubbles etc. For an overview of databases and differences in productivity levels, as well as in catching up, see Aiginger (2003c).
3. Since the second half of the 1990s, the number of jobs in Europe increased by 15 million, but many of them were part time; per-worker productivity decelerated.
4. The lowest 20% get 8.3% of income in Europe as compared to 4.8% in the US. Energy in Mtoe per GDP is 0.15 in Europe, but 0.26 in the US, health-adjusted life expectancy is 70.1 years at birth in Europe, 67.6 in the US (Aiginger, 2003c).
5. Of course this change may have not been strong enough as seen from the perspective of heavier external shocks.
6. Nickell shows that some institutions matter for unemployment (Nickell, 1997). Elmeskov et al. (1998) report a correlation between the level of regulation and growth. For related literature see Buti et al. (1999), Elmeskov et al. (1998), Freeman (1998), Martin (2000), Nicoletti et al. (2001), Nicoletti and Scarpetta (2002), and Schettkat (2003).
7. We must acknowledge that while maintaining the comprehensiveness of their welfare systems, these countries did a lot of fine-tuning to improve the effects of incentives and to make markets more flexible: deregulating part-time work, combining obligations to the unemployed with training offers, shifting the responsibility for the first days of sick leave away from health insurance to firms, and allowing workers to retain part of the benefits when they accept low-paying jobs. These reforms were specifically enforced in welfare states and are summarized as flexicurity, welfare to work, and flexijobs.
8. For the role of monetary policy for growth differences, see Schulmeister (2000).
9. Some of the advantages of investment into future components of growth were already evident during previous decades, when Europe did grow faster than the US. Two explanations are available as to why insufficient investments in Europe did not hamper growth earlier. First, per capita GDP as well as productivity were initially much lower in Europe, so that the higher levels of European growth include an element of catching up. Second, it is argued that the European system of innovation may have been adequate during periods of imitation and diffusion, while the US system of innovation is better fitting to periods marked by the emergence of new general-purpose technologies such as ICT. As a new general-purpose technology emerged—the information and communication technology—the extent of a country's own research and close connections between universities and firms became more important. In the words of growth theory, the catching up of Europe had been conditional catching up, the condition being a set of technologies that were present before the emergence of ICT (Aiginger and Landesmann, 2002).
10. The highest growth in Europe was achieved by Ireland; this is however a catching-up story. Some of the policies used by Ireland are quite remarkable and could indicate successful policies for lagging regions and countries. Some elements of the strategies cannot however be copied, like tax differentiation between foreign firms and endogenous firms, high regional subsidies etc.

11. Economic policy in general lies in the competence of the individual member countries in the European Union; the European Community can set only general goals and coordinate activities.

12. For studies on economic growth, see OECD (2003), Peneder (2001), Pichelmann and Roeger (2003), Tichy (2003), and Wykoff (2000).

13. See Visser (2000, 2002).