

The Three Tier Strategy Followed by Successful European Countries in the 1990s

KARL AIGINGER

Austrian Institute of Economic Research (WIFO) and University of Lint

ABSTRACT *In general, the economic performance of European countries was disappointing in the 1990s. However, country differences increased, and in some European countries economic growth matched US rates. This paper uses a set of performance indicators to carve out a group of successful European countries and to compare their economic strategies to those of the more poorly performing, big continental economies. The analysis shows that the successful countries implemented a policy mixture of cost cutting, improving institutions, and investing in future growth. We consider the first two strategy elements to be preconditions, while investment in growth drivers such as research, education and technology diffusion is the sufficient condition for long-run growth. The difference between top and low performers is larger with respect to the dynamics of future investment than in cost cutting. In research expenditures, the top countries surpassed the big continental European countries in 1987, and have been increasing their lead steadily since that time. They are welfare states with a comprehensive social net, which they have maintained in principle, while improving institutions and incentive structures. The results are not in line with the usual twin hypotheses that high welfare costs and insufficient labour market flexibility are the main culprits in European underperformance.*

KEY WORDS: Economic growth; country strategy; welfare reform

Introduction

It is now well documented that the nineties were a disappointing decade for Europe. Relative to the 1970s and 1980s, macroeconomic growth decelerated. Productivity catching up *vs* the USA came to a halt during the second half of the 1990s: the gap between Europe and the USA increased in terms of per worker and per hour GDP. In Europe, the employment rate remained lower and unemployment was higher. The successful launch of the Euro, the catching up of the Accession Countries are bright spots for the European Union (EU), yet they did not boost growth, productivity or employment to a significant extent.¹

Correspondence Address: Karl Aiginger, Austrian Institute of Economic Research, WIFO, PO Box 91, 1103 Vienna, Austria. Email: Karl.Aiginger@wifo.ac.at

Most international studies and specifically the OECD, the IMF and the European Commission (EC) explicitly or implicitly blame high welfare costs and low market flexibility for European underperformance. Welfare states are suspected to suffer from high labour costs and taxation. Comprehensive reforms of labour and product markets should be the first priority for European countries, if they are to regain economic growth.

We group the European countries according to their performances in the 1990s. This is not an easy task because first, some countries experienced severe crises, and measured performance varies according to the exact time period and indicator chosen. Second, economic policy differed in its priorities focussing either on enhancing productivity or on spreading employment among a larger number of persons. Third, the burden of past deficits, as well as the challenges raised by geographical position and industry structures differed from country to country. However, a broad set of indicators urges us to carve out Sweden, Finland and Denmark as countries that were successful in the 1990s and to assess the performances of big continental economies such as Germany, France and Italy as less impressive. This grouping is similar to that in other rankings such as the European Structural Indicators or the World Economic Forum.²

If we look at the strategies of the successful countries, we see that all three countries combined a set of strategy elements from three fields, designed

- to reduce or contain private and public costs, specifically to balance wage dynamics and productivity as well as public expenditures and taxes;
- to reform institutions, and to make labour and product markets more competitive, but not by means of a simple deregulation strategy, but by targeted reforms such as training, education, and increasing geographical mobility and incentives to work;
- to boost long-run growth and productivity by supporting and encouraging innovation, education and the diffusion of new technologies.

Carving Out a Group of Successful Countries

Choosing Indicators of Performance

Measuring performance, welfare or the competitiveness of countries has been the subject of intensive and controversial discussion, including the question of whether any of these notions exists at the aggregate or country level. We pragmatically decided to measure economic performance by the dynamics of GDP, the ability to increase productivity, to create employment and to provide stability. The

Table 1. Europe underperforms relative to the US

	Growth of real GDP		Productivity growth per worker		Employment growth	
	EU	USA	EU	USA	EU	USA
1993–1995	1.62	3.15	2.03	0.75	-0.38	2.05
1996–2002	2.27	3.28	1.12	1.90	1.20	1.29
1993–2002	2.07	3.24	1.39	1.56	0.73	1.52

Source: WIFO calculations using AMECO (April 2003).

indicators include data on manufacturing, because output may be better measured in this sector than in services. It contains an indicator for correcting growth for the cyclical component (potential output) and total factor productivity. Employment is measured by unemployment and employment rates, stability by the inflation rate and the fiscal position (deficits, debts and taxes). The period we chose covered the last 10 years up to 2002; the ranking does not change in substance if we start in 1990 instead of 1993. The 13 indicators presented in Table 2 are for 14 EU member countries; Luxembourg and new members (after the 2004 enlargement) are not reported. The second-to-last row ('superrank comprehensive') shows the average of the ranks of each country for the 13 indicators. The last row ('superrank final') ranks this 'average' to determine the final position for each country.

Selection of Best Performers

The top performers according to Table 2 are Ireland, Finland, Denmark and Sweden. Sweden excels in productivity growth, the employment level and fiscal stability; per capita GDP fell below the European average following the devaluation. Denmark enjoys the highest level of GDP per capita income, and a very high employment rate. Finland excels in productivity growth, but still has a high unemployment rate. Ireland has the best ranking for growth in output and productivity, as well as the best overall rank, but ranks low in the categories employment rate and inflation rate.

We decided not to include Ireland in that group of countries whose strategy we will investigate more closely. The main reason is that Ireland achieved its remarkable catching up partly through the implementation of a specific set of strategy elements, which would not be feasible for other countries. Countries with medium or high income levels were not the recipients of large amounts of European regional funds, were not allowed to differentiate between the taxation of national and international firms, and consequently cannot attract multinational firms to the same degree that Ireland did. Furthermore, wages and per capita national income are still low in Ireland, while profits and GDP per capita are above the European average. Finally, a certain extent of the measured success of Ireland stems from transfer prices.³

The low performers are the three big continental countries: Germany, France and Italy. All have below average growth, high and rising unemployment and fiscal deficits at or beyond the limit allowed by the European Stability Pact.⁴

The three southern periphery countries – Portugal, Greece and Spain – are ranked eighth, ninth and tenth, because the dynamics of catching up is combined with price and budgetary instability. The small continental countries – Austria, Belgium and the Netherlands – enjoy high income levels, but have lost their former growth advantage in output and productivity; with regard to dynamics, they seem to be somewhat 'stuck in the middle'.

From now on, we will refer to Sweden, Finland and Denmark as the top three economies, and Germany, France and Italy as the big three (or more accurately the big three continental economies, big 3c).

A First Comparison According to Average Performance

Figure 1 summarises the performances of the top three countries and the big 3c. The top three countries enjoyed average growth of 2.9% (1993/2002), as

Table 2. Economic performance across countries: 13 indicators

	Belgium	Denmark	Germany	Greece	Spain	France	Ireland	Italy	Netherlands	Austria	Portugal	Finland	Sweden	United Kingdom	Top three	Big 3c
Real growth of GDP 1993/2002	2.0	2.5	1.3	2.8	2.8	1.9	7.9	1.6	2.7	2.0	2.5	3.3	2.9	2.8	2.9	1.6
Macro productivity growth 1993/2002	1.4	1.8	1.1	2.1	1.0	1.3	3.6	1.3	1.1	1.7	1.7	2.5	2.7	1.9	2.4	1.2
Manufacturing growth 1993/2002	1.7	3.2	1.2	1.7	2.4	1.8	13.1	1.4	1.5	4.2	2.5	6.1	3.8	0.9	4.4	1.4
Productivity growth in manufacturing 1993/2002	3.1	3.4	3.2	3.7	3.4	0.6	14.1	-0.2	1.9	4.7	3.6	7.2	2.8	1.4	4.5	1.2
Potential output 1993/2002	2.1	2.2	1.7	2.6	2.9	2.0	7.5	1.6	2.8	2.2	2.8	2.7	2.4	2.5	2.4	1.8
Total Factor Productivity 1993/2002	0.7	1.6	0.4	1.4	0.4	0.9	3.6	0.8	0.9	0.8	0.7	2.7	2.4	1.6	2.2	0.7
Employment rate, average 1993-2002	57.5	76.2	67.7	54.3	54.1	61.1	60.6	56.8	71.3	72.9	69.0	63.2	73.2	74.9	70.8	61.9
Unemployment rate, average 1993-2002	8.6	5.8	8.4	10.0	15.4	10.7	9.0	10.8	4.5	4.1	5.7	12.5	7.7	7.1	8.7	9.9
Inflation rate, average 1993-2002	1.9	2.2	1.9	6.6	3.4	1.5	2.9	3.1	2.6	2.0	3.7	1.6	1.6	2.4	1.8	2.2
Budget deficit in % of GDP 2002	-0.1	-1.8	3.3	1.7	0.4	3.4	1.7	2.3	1.5	0.6	3.0	-4.4	-0.8	1.3	-2.3	3.0
Public debt in % of GDP 2002	105.3	45.2	60.8	97.8	54.0	59.5	33.3	106.7	52.6	67.6	58.1	42.7	52.4	38.4	46.8	75.7
Taxes in % of GDP 2002	50.1	57.1	45.3	44.7	39.3	50.6	32.6	45.2	45.9	51.3	43.2	53.7	59.1	39.4	56.6	47.0
GDP per capita at PPP 2002, 1000 Euro	26.1	27.2	24.6	15.9	20.2	24.5	29.3	24.5	27.0	26.4	16.6	24.4	24.3	24.7	25.3	24.5
Superrank comprehensive*	9.0	5.6	10.0	8.7	8.8	9.8	3.6	11.2	7.2	6.6	7.7	5.0	5.8	6.1		
Superrank final**	11	3	13	9	10	12	1	14	7	6	8	2	4	5		

*The countries are ranked first for all indicators (e.g. 1 = highest real growth of GDP in all countries); the superrank comprehensive is the unweighted average over the 13 indicators.

**The superrank final is the ranking of the superrank comprehensive to determine the final position.

Source: WIFO calculations using AMECO (April 2003).

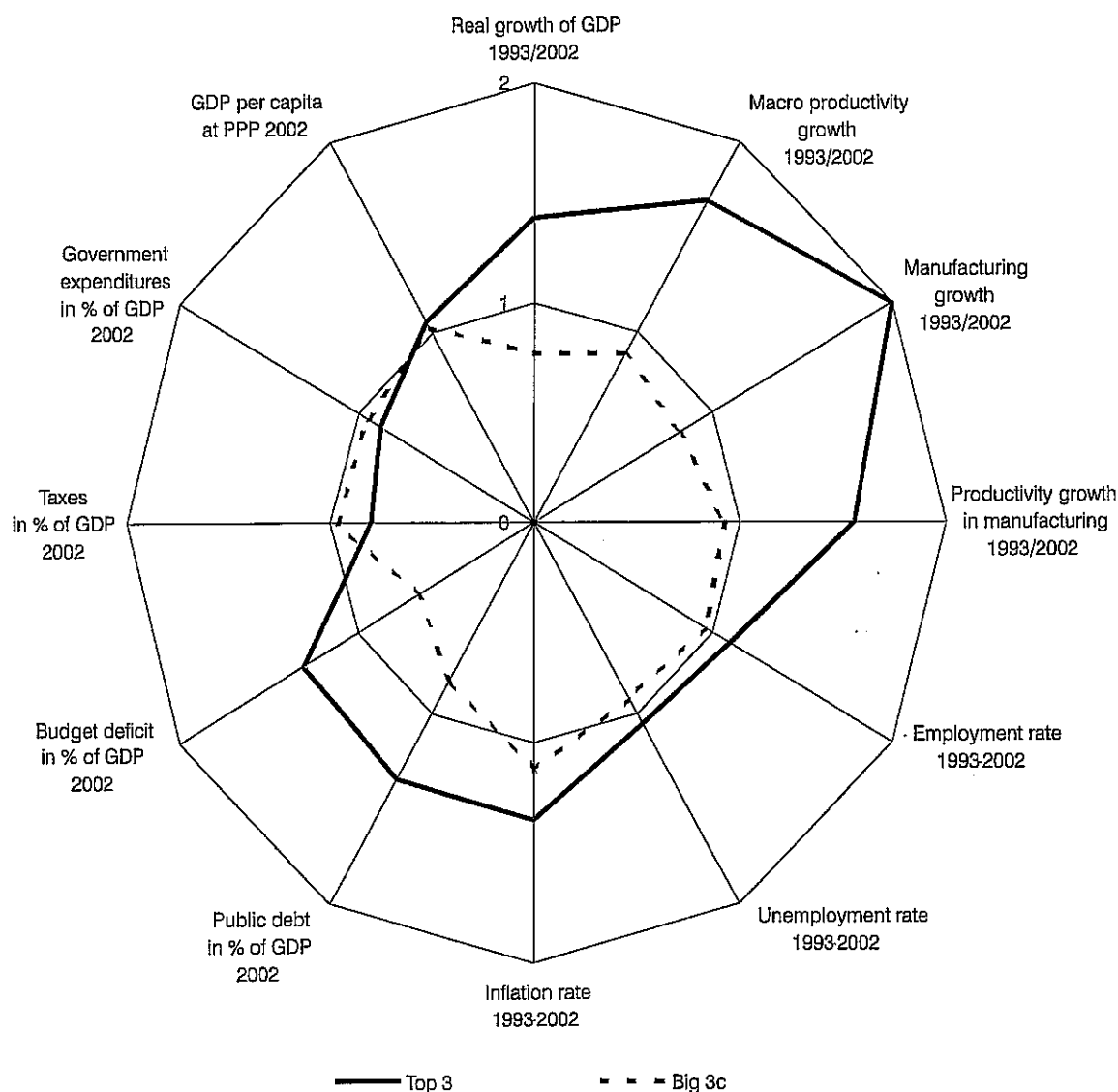


Figure 1. Performance difference top three and big 3c vs EU.

Notes: Values outside the unit circle represent a better performance (e.g. lower inflation, a higher employment rate; lower tax rates and government shares) of the group relative to the EU. The top three countries had a budget surplus of 2.3% in 2002, the EU a deficit of 2%; for graphical reasons a value of 1.5 (which is not a full arithmetic equivalent, but does indicate the better performance of the top three countries vs the large three) was set for the top three countries.

compared to 1.6% for the big three countries. Manufacturing growth in the top countries nearly tripled that of the big countries. The productivity difference is 1.2 points for the total economy and 1.7 points for manufacturing. Per capita income is €25,300 for the top three and €24,500 for the big three. The employment rate was 71% in the top economies and 62% in the big countries, the reverse is true for unemployment (8.7% vs 9.9% on average for 1993/2002). Inflation is slightly lower in the top three group.

Strategies in Three Successful Countries (Top Three Countries)

In this section we describe the strategies pursued in the three top economies. We structure our analysis according to cost strategies, strategies to change incentives and to enhance economic growth.

Denmark

Denmark experienced a particularly sluggish period of growth, amounting to only about 1.4% between 1985 and 1992, with unemployment tripling to 9.6% in 1993. The policy reaction to the crisis was a smooth and gradual reform of institutions in several policy areas, with a special form of cost moderation, an innovative reform of the labour market and a cluster oriented industrial policy

A mild version of cost management. In order to moderate wage increases, the automatic indexation of wages on inflation was suspended.⁵ Consequently, wages increased slowly between 1987 and 1994, but in the long run – as a result of recovering economic growth – wage dynamics proved to be stronger than the European average. Denmark did not devalue but fixed its currency relative to its European partners. The government set a long-run expenditure ceiling and reduced government consumption and transfers (together by 4% of GDP, OECD, Denmark, 1997, p. 48f). Controlling the growth of local government expenditures is important in Denmark, because local governments are responsible for education, health and social services, and are allowed to raise taxes. The central government fixed a ceiling for the highest marginal tax rate on wages, and committed to reduce taxes if local authorities increased them.⁶ Denmark today enjoys a budget surplus, government expenditures in relation to GDP are 6 percentage points below their peak (1994), taxes now amount to 57% of GDP, as compared to 61% in 1993. The overall tax rate is still 11 points above the EU average; social expenditures relative to GDP have remained at about 29%, the fourth largest rate among EU countries.

Innovative reform of labour market institutions. Labour market reforms attempted on the one hand to spread existing work among more employees (as in sabbatical schemes), to upgrade qualifications and to activate the labour supply with some elements of the welfare to work concept (see Blundell, 2000; Layard, 2001). Labour market policy was decentralised, jobs were subsidised for people with a reduced ability to work (flexi jobs), specifically in the home service area (OECD, Denmark, 1994, p. 47 and 2002, p. 15).

Paid leave schemes were introduced for child care, education and non-specified purposes (sabbaticals). Payment continued to be between 60% and 100% – the latter for educational purposes – for a period of up to one year. For sabbaticals, the substitution of the person on leave was mandatory. A maximum of 140,000 persons utilised such schemes; more than one half of them used them for education, a very small share for sabbaticals. The average leave was for 200 days. Three-quarters of the persons on leave were substituted, the majority not from the ranks of the unemployed, but rather from the formerly employed.⁷

Labour market policy was decentralised ('steering reform'). Regional labour market councils (composed of employer's representatives, trade unions and local authorities) should design programmes in line with local need and implement a regional policy that complied with national goals. The 'activation reform' created a two-stage system of unemployment benefits, with unconditional support in the first phase and strong emphasis on activation in the second.⁸ The unemployed were not only granted the right, but were in turn obligated to education or job training during the activation period and had to recur to means tested social security if they refused or failed to obtain an unsubsidised job before the end of the

maximum period. The maximum duration of unemployment benefits was reduced from nine years to five years, passive support from four to two years and finally to one year and to six months for unemployed youth.

Formal labour market regulation had historically been low, well below the EU average for fixed contracts even in 1990 (1.8 *vs* 2.7).⁹ Replacement ratios¹⁰ had been high, particularly for low wage jobs, and were reduced parallel to the shortening of the length of benefits reported above. Nearly all restrictions on temporary contracts were removed in the nineties; the number of renewals, and the maximum duration of succeeding contracts was increased. The deregulation of restrictions on temporary contracts, combined with the already low amount of regulation on fixed contracts, made Denmark the country with the steepest decline in labour market regulation (-37.5 %) and the third least-regulated labour market in 1998 (1.5 *vs* 2.4 in EU average).¹¹

Cluster policy and information technology. On the technology front, Denmark emphasised diffusion and cluster policies. A ministry for Business Policy Coordination was created to provide a favourable environment for 'national strongholds', introducing a cluster type industrial policy in a country with traditionally low public support and a low share of technology intensive industries (OECD, Denmark, 1994, p. 84). The diffusion of information and communication technology was encouraged in an ICT Growth Strategy¹². Existing strengths stemming from high health and food safety standards were used to create a medical cluster. Biotechnology was embraced, start ups and venture capital encouraged. Denmark is leading in lifelong learning, offering adult educational centres for persons above 25 years of age, adult vocational education and post graduate part-time PHD programmes (OECD, Denmark, 1997, p. 15). Denmark had been a laggard in research expenditures with a level of about 1 % of GDP in 1980; it crossed the EU average in 1995 and its rate is now 2.1%. Taking all 16 indicators of research, education and the diffusion of new technologies (growth drivers) into consideration, Denmark ranked fourth at the start of the 1990s and third at the end.

In summary, Denmark did implement a moderate version of limiting the dynamics of wages and government expenditures, with few general cuts and no devaluation. Fiscal, as well as labour market institutions were reformed, not through an ideological deregulation programme, but by the use of decentralisation, innovative experiments and better incentives, offering personal assistance to the unemployed (e.g. by personal re-employment plans). Welfare to work elements were introduced with the true and accepted intention of supporting and upgrading qualifications, without the offending rhetoric often used in US reforms. Flexibility for firms was combined with security for employees, since a committed active labor market policy provided the training opportunities and finally of enforced re-employment for those dismissed ('flexicurity'). Research was promoted, education upgraded and information technology embraced. Cluster policy focused primarily on the health sector, on ICT, and biotechnology, but also in toys, entertainment and food helping to increase productivity

Sweden

As a result of its underperformance in growth over the largest part of the post World War II period, Sweden gradually lost its position as one of the leading

countries in per capita GDP. In the early 1990s, exports, GDP and employment decreased dramatically, leading to a 'recession ... comparable in depth to that of the 1930s' (OECD, Sweden, 1994). There were several reasons for the particularly severe crisis: the Russian crisis effected Sweden more strongly than the continental countries, Sweden suffered a specific crisis in its financial sectors (following deregulation without regard for high risk loans and a tax system that favoured borrowing), Swedish industry had maintained its specialisation in capital intensive basic goods under strong price competition, as in steel and paper.¹³

Restoring balances. The short run policy reaction in 1991 and 1992 was to bring costs into balance. The first step was yet another devaluation of the Swedish Krona, namely by 18% vs the Euro.¹⁴ Second, a fiscal stability package amounting to 7.5% of GDP was negotiated between the government and the Socialist party, which was in opposition at that time. The package included tax increases as well as moderate cuts in social benefits and transfers, but did not change the welfare system in principle: higher incomes carried a greater burden, in order to inspire the willingness of the opposition and the trade unions to accept the package. The government committed itself to long-term expenditure limits, with different targets for 27 expenditure categories (Brandner, 2003). The fiscal stability package, the expenditure ceilings, the declining costs of bailing out the banks and a strong cyclical element inherent to Swedish budgets led to a switch from a deficit of nearly 10% in 1993 to a surplus of about 1% in 2002. The present policy goal of the government is to achieve a surplus of 2% for a full business cycle.

Changing incentives. Institutional reforms redesigned competition policies and the operation of the monetary authority with the goal that tough 'after care' would this time ensure the long-term success of the devaluation. This strategy focused – aside from wage moderation and dampening of government expenditures as already mentioned – on moderate changes in the labour market regulation. For temporary labour contracts, existing tight regulation was suspended, resulting in one of the least regulated frameworks. The overall index for labour market regulation dropped from 3.4 in 1990 to 2.4 in 1998, the fourth lowest rank (see table 3). Aside the UK, Sweden has the most deregulated product market.

Welfare to work elements were introduced. An active labour market policy and low corporate taxes had long been constituent elements of the Swedish system (Marterbauer, 2000). The responsibility of financing the first two weeks of sick leave was transferred to the employers, whose contribution to social security was in turn reduced. Compensation for the first day of sick leave was cancelled. Sickness compensation which had been as high as 100% of past wages was reduced to between 65% and 90% depending on the length of insurance and supplementary insurance (OECD, Sweden, 1994, p. 95). The replacement ratios for the unemployed were reduced from 90% to 80%, with the first five days uncompensated. Transfers from the central to local governments were reduced if local authorities increased taxes. Government agencies enforced competition by contracting out and providing vouchers for private schools. General practitioners were allowed to compete with public services in the health sector (OECD, Sweden 1994, p. 91).

Leader in research and ICT. Sweden developed the most pervasive and comprehensive programmes to increase medium term growth, with a consistent long-run government assisted innovation strategy, which was prudently

maintained even during the big crisis. In order to promote information technology, PCs for private use were made attractive by tax deductions, while support was provided for educational expenses, and the use of ICT by the government was made compulsory. Sweden is today the European leader in information technology, having surpassed the US according to many indicators. Expenditures on education are now the highest in Europe. Expenditures on research and development have increased from 2% of GDP in 1981 to 3.8%. Sweden is ranked first in the set of 16 growth drivers presented in Table 3. It is among the top three countries in 15 indicators and leads in seven.

In summary, Sweden implemented effective tools to cut costs, including a significant devaluation and a large discretionary package of tax increases and expenditure cuts. It improved incentives and labour market institutions, on top of the existing elements of active labour market policy. Sweden deregulated temporary contracts and now has one of the least regulated systems of labour and product markets. The most impressive part of the strategy was the acceleration of research and the promotion of information technology, making Sweden a leading country in all long run growth determinants. Growth rebounded in the second half of the 1990s and continued throughout the following years, in contrast to other countries and despite specialisation in the crisis stricken telecommunications sector (in which Ericsson, as the largest Swedish firm, suffered a severe crisis). The budget deficit has been eliminated – with a key factor being the acceleration of economic growth – encouraging the government to set a 2% surplus target for the full cycle. The main institutions of the welfare state were maintained, with government expenditures, as well as taxes, still significantly higher than in other countries. The echo of the past devaluation is reflected in the level of real GDP per capita, which is below that in Europe.

Finland

Finland has incurred the most radical change in its industrial structure over the past 10 years. It was hit severely in the early 1990s by the double breakdown of its regional markets (in the Soviet Union) and of its product market (resource-intensive products such as textiles, wood, and paper).¹⁵

Devaluation, fiscal rules and the convergence programme. Finland regained its price competitiveness in a similar manner as Sweden, through a steep devaluation of the markka in 1992/93 (by 15%). Nominal wages were frozen by a two-year contract in 1991, which implied a decrease in real wages in 1992 and 1993.¹⁶ The government tried to reduce its budget deficit, first by committing to expenditure ceilings. Second, the central government changed the system of grants to local authorities from one based on historical costs to a problem-oriented system (demographic, geographic, and health criteria). A 'convergence programme' to pave the way for EU membership (this included a package of additional cuts totalling 3.9% of GDP) was also introduced. Taxes on capital income, environmental taxes and indirect taxes were raised, while employers and employees' contributions to occupational pensions were decreased (OECD, Finland, 1996).

Latecomer in welfare spending. Finland is a latecomer among the welfare states of the Scandinavian type, developing several of its characteristic elements as late as in the 1980s. At 25% of GDP in 1990, social expenditures in relation to GDP were

below the EU average and far below those of Sweden or Denmark; they were kept constant through the 1990s, remaining two percentage points below the EU average. Replacement rates for unemployment were increased in the 1990s and a means tested labour market support scheme was created in 1994, as the number of people who had exhausted their 500 working days limit for benefits increased. Nevertheless, Finland is also one of the few European countries that waived some of the regulations for permanent contracts.¹⁷ It never had comprehensive regulations for temporary contracts. Finland liberalised network industries, but retained some state-owned firms.

The decision to promote new technologies. An active technology policy was enacted in the early 1980s 'when the Finns came to realise the strategic importance of research and development as a requirement for the country's economy. ... National objectives were set for research inputs' (Pohjola, 2003, p. 1). A milestone was the establishment of Tekes in 1983, which is a government agency providing financing and expert services for R&D in Finland (Hutscherreiter, 1990). Complementary institutions supporting cooperative networks, training, and the exploitation of inventions were created. Start up companies and internationalisation were encouraged, venture capital provided. Defining innovation as the key figure of success and sticking to this strategy was one decisive factor in Finland's success at regaining growth while facing such a severe crisis, and then forging ahead in productivity and output dynamics. The second decisive factor was the early embracement of information technology, as seen by Finnish concepts in the telecommunication society in the early 1990s.¹⁸ The technology strategy was comprehensive, consistent and consensual. Technology parks were created, universities and technical schools were upgraded, and new sites in disadvantaged regions were founded. Education in general, but language skills specifically, was promoted. Industry experts estimated that half of the new employees should be academically trained and the other half should have completed a vocational education (Pohjola, 2003, p. 2). Outlays for education had always been high; the quality was upgraded, pushing Finland into first place in international evaluations of educational performance. Today, Finland has the highest share of workers with tertiary educations. In the overall set of indicators for the determinants of future growth, Finland is ranked second; it has made the fastest leap forward in the 1990s. What is specifically impressive is the share of research and development in GDP: this ratio had been at about 1.2% in 1980, well below the EU average; it increased steadily, even during the period of crisis, reaching 3.4% of GDP in 2000, nearly double the EU rate (see Figure 4). Finland is a leader in many indicators of ICT use, even though expenditures are not as high as in Sweden.¹⁹

Summing up, Finland has partly regained competitiveness through the devaluation of its currency and moderation in wage increases. Government expenditure was contained by changing the financing of lower level government, by setting expenditure limits and implementing a cost cutting package. Government expenditure in relation to GDP has now returned to the EU average. The budget is in surplus and debt is relatively low. Product market regulation fell below the EU average, as is also the case for labour market regulation. Finland invests efficiently in all three types of growth drivers. Research expenditures boomed and Finland has twice as many patents per capita than the EU average. Education outlays are high, as is the quality of education, which is reflected in the OECD's Pisa ratings. The share of workers with tertiary educations is the highest in Europe. The ICT

share in manufacturing is large, as is Internet use. Finnish success in information policy is not only the success of Nokia, but also of a carefully designed innovation policy and a set of institutions created in the 1980s. Policy adhered to this strategy and enforced it even during the severe crisis in the 1990s.

Strategy Differences Between the Top Three and the Big Three Continental Countries and their Relation to Performance

In this section we analyse the differences between the strategies of the top three countries and the big three continental countries and relate the strategies used to the performance rankings as developed in the second section (see Figure 5).

Differences in Cost Reduction Strategies

The leading countries applied cost reduction strategies to a wider extent in the private and public sectors than the big continental economies, but the differences within each group were considerable. Sweden and Finland strongly devaluated their currencies; Denmark did not. Among the big countries, Italy devalued; France and Germany did not. Wage moderation was applied in all top countries,

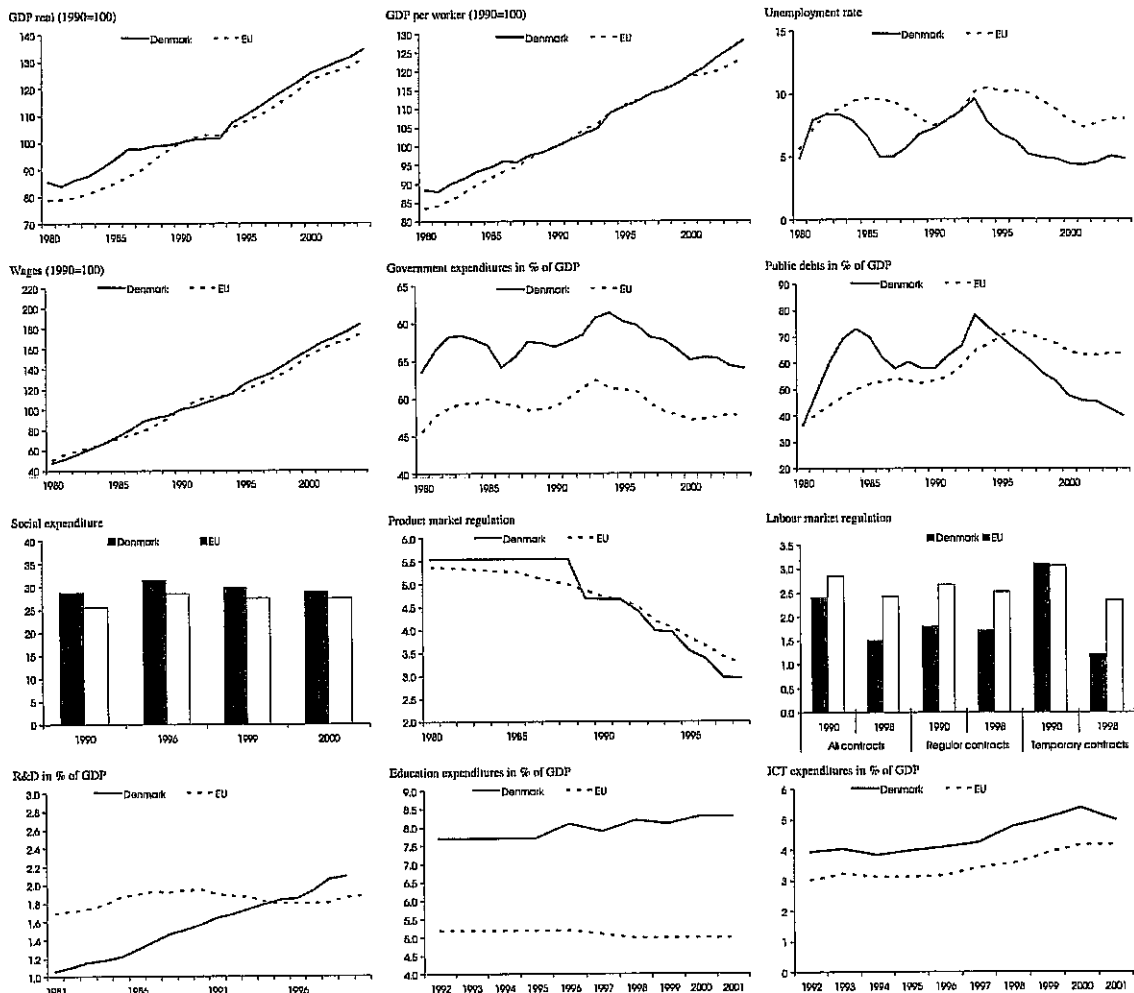


Figure 2. Danish policy strategies in a nutshell.

yielding an absolute decline in wages and unit labour costs during the period of crisis. After that, wages increased faster in the top countries, while surging productivity limited the increase in unit labour costs. The largest difference between the top and big countries was in public expenditures. Government expenditures relative to GDP dropped from 66% in the top countries in 1993 to 54% in 2002, or by 12 percentage points, but decreased only moderately (from 54% to 50%) in the big countries. In the top countries, debt in per cent of GDP fell down to 47%, far below the peak of 68% in 1993, but still higher than in 1990 (38%). In the big continental countries, the debt ratio increased from 57% (1990) to 76% in 2002.²⁰ The top countries enjoyed a budget surplus in 2002/2003. In Germany, France and Italy, deficits are at the brink of or outside the range defined by the stability pact criteria.

Differences in Incentives and Welfare Institutions

The top countries are welfare economies of the Nordic type. The welfare system was kept in principle, but costs were reduced, markets and institutions were made more efficient and for workers, the burden of flexibility was reduced by innovative arrangements, additional assistance and the extension of social coverage to part time work. The decentralisation of labour market agencies, activation strategies, increasing geographical mobility, sabbaticals and welfare to work are all elements of this reform agenda. In the top countries, social outlays in per cent of GDP amounted to 29% in 1990, and have marginally decreased to 28.8%. The big countries spent 26% and increased their share by two percentage points to 28.1%. The top countries had and still have high replacement ratios (specifically unemployment benefits for low incomes), which were decreased only marginally. The index of labour market regulation published by the OECD indicated less regulation in the top countries as early as 1990. This gap increased, mainly as a result of the deregulation of temporary contracts. However, we must acknowledge that some rules important to the protection of temporary workers against marginalisation (pro rata social benefits, priority in switching to full-time contracts, etc.) are not incorporated in the OECD regulatory database. Regulations for regular contracts were reduced marginally in the top countries. The top countries deregulated product markets, and liberalised network industries. Summing up, even if the top countries now have less regulated product and labour markets, they did not follow a 'low road labour flexibility practice'.²¹ The reforms were targeted, enforced activation strategies, applied innovations and were understood as assistance in regaining employment.

Differences in Investment into Future Growth (Growth Drivers)

The largest and most important difference is to be seen in the investments into future growth. The top countries are leading the big countries in 14 of 16 indicators for research, education and information technology (Table 3 and Figure 6). The lead is specifically large for R&D expenditures, scientific publications per resident, educational attainment and the diffusion of information technologies. The difference widened in the 1990s for most indicators.

For example, in the top three countries, R&D expenditures were 1.6% of GDP in 1982; they exceeded those of the big countries in 1987, and the lead increased

Table 3. Regulation in product and labour markets

	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
	Denmark	4.68	2.95	-36.9	2.4	1.5	-37.5	1.8	1.7	-5.6	3.1	1.2
Germany	4.13	2.59	-37.3	3.6	2.8	-22.2	2.9	3.0	3.4	4.2	2.5	-40.5
France	5.01	3.92	-21.8	2.7	3.1	14.8	2.4	2.5	4.2	3.0	3.7	23.3
Italy	5.78	4.32	-25.1	4.2	3.3	-21.4	3.0	3.0	0.0	5.3	3.6	-32.1
Finland	4.59	2.59	-43.4	2.2	2.1	-4.5	2.5	2.3	-8.0	1.9	1.9	0.0
Sweden	4.08	2.19	-46.3	3.4	2.4	-29.4	3.1	3.0	-3.2	3.8	1.8	-52.6
EU	4.73	3.26	-30.9	2.9	2.4	-15.0	2.7	2.5	-5.4	3.1	2.3	-23.4
Top three	4.45	2.58	-42.0	2.7	2.0	-25.0	2.5	2.3	-5.4	2.9	1.6	-44.3
Big 3c	4.97	3.61	-27.4	3.5	3.1	-12.4	2.8	2.8	2.4	4.2	3.3	-21.6

PMRDyn = Product market regulation; dynamic indicator measuring competition for network industries;

EPL = Employment regulation

Source: OECD Regulatory Indicators.

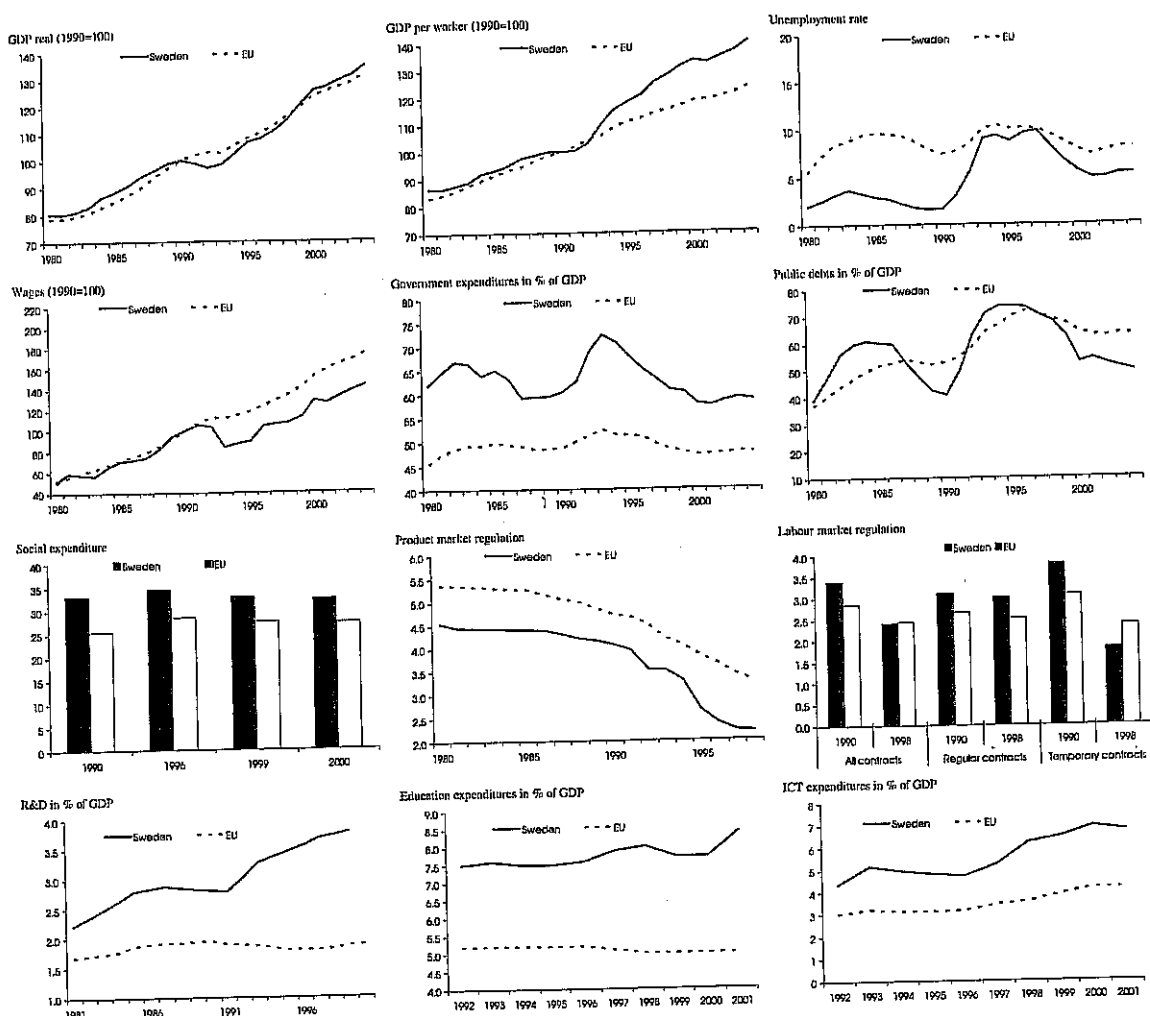


Figure 3. Swedish policy strategies in a nutshell.

continuously (despite the impact of the crisis) in the early 1990s to 3%. With 3.8%, Sweden has the highest R&D share in GDP of all EU countries. Finland has the second largest. In contrast to this trend, the share of the big countries peaked in 1987 and since then has been decreasing slightly. The top countries are also leading in business expenditures; patents and publications; they have higher shares of secondary and tertiary education and are leading in all indicators for the production and the diffusion of information technology. For a comparison of the top three countries with the EU average see Figure 3.²²

The Relation Between Strategies and Performance

Our claim is that cost cutting strategies and the decreasing regulation of product and labour markets were important preconditions, but that boosting investment into long-run growth was the most significant and probably most important aspect. To attain some quantitative evidence of the closeness of this relation, we plot the performance ratings of countries (as measured in Table 2 'performance indicators') against the rankings for cost cutting, deregulation and the dynamics of investment into the future. The fit between cost cutting and performance is positive, but insignificant, *inter alia* since Italy and Spain rank high in cost cutting

but not in performance, and since Denmark and Ireland rank in the middle for cost cutting. The fit between regulatory change and macroeconomic performance is closer, but still not significant. The reason is that on the one hand, Ireland did change regulations moderately and on the other hand, several low performers are ranked in the middle with regard to changes in regulation (Italy, Germany). It looks as if levels of, as well as changes in, regulations might be important and as though some facets of regulatory change, such as specific new rules for temporary workers, innovative measures of active labour market policy and decentralisation were not covered in the data. In contrast to the weak results for cost cutting and regulation, the correlation between the performance ranking and the ranking of the dynamics of investment is highly significant: Finland, Sweden, Denmark and Ireland have boosted investments and Italy, Germany and France have underinvested relative to other countries. These correlations are of course only indicative – they cannot prove causality. However, they support the results from the country studies that the third part of the strategy, namely boosting investment into the future was the most important component of the three tier strategy.

Table 4. Investment into future growth

	First year		Last year	
	Top three	Big 3c	Top three	Big 3c
<i>Indicators on R&D: input and output</i>				
Total expenditure on R&D in % of GDP 1992/98	2.3	1.9	3.0	1.9
Business Enterprise Expenditure on R&D (BERD) in % of GDP 1992/98	1.5	1.3	2.0	1.2
Research intensity in manufacturing 1990/98	2.0	1.8	2.7	1.8
Publications per inhabitant 1992/99	11.0	5.3	14.7	7.0
Patents per resident 1990/97	3.5	2.8	4.0	3.0
<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)	71.0	58.3	85.3	72.7
Percentage of the population that has attained at least tertiary education, by age group (1998)	27.7	17.0	31.3	21.0
<i>Indicators on ICT: production and use</i>				
ICT expenditure in % of GDP 1992/2000	4.0	3.5	7.0	5.8
Information technology (IT) expenditure in % of GDP 1992/2000	2.0	1.7	3.7	2.6
Telecommunication (TLC) expenditure in % of GDP 1992/2000	2.0	1.8	3.2	3.2
PCs per inhabitant 1992/99	1.4	0.8	4.1	2.4
Internet users per inhabitant 1992/99	0.1	0.0	3.7	1.3
Cellular Mobile Subscribers per 100 capita 1992/99	6.2	1.1	57.4	38.5
<i>Indicators on share of 'progressive' industries</i>				
Share of technology driven industries in nominal value added 1990/98	14.8	23.7	21.1	23.7
Share of skill intensive industries in nominal value added 1990/98	17.9	18.2	18.2	17.8
Share of ICT industries in nominal value added 1990/98	6.3	8.0	10.2	6.7

Notes: First year (last year) means that year in the nineties for which the earliest (or latest data) are available (both are indicated after 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. Large continental European countries: Germany, France and Italy. Leading European countries: Sweden, Finland and Denmark.

Source: WIFO.

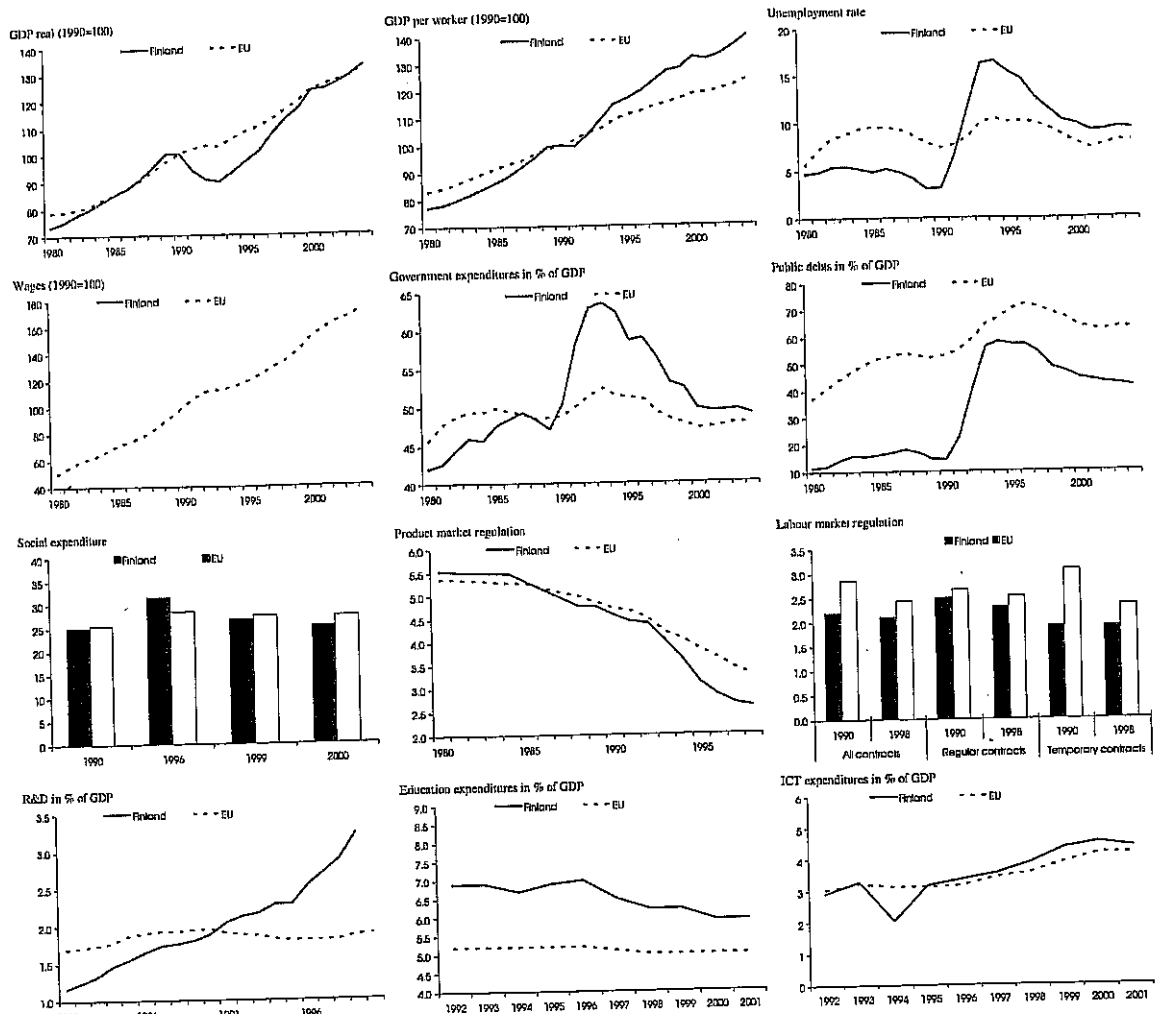


Figure 4. Finnish policy strategies in a nutshell

Conclusions

- (1) The economic performance of Europe in the 1990s was disappointing. Growth in output and productivity was lower than in the 1980s, and also less than in the USA. Unemployment was higher in Europe and employment rates were lower.
- (2) Analysing the reasons why Europe underperformed, many analysts refer to the twin hypotheses of the costly welfare state and insufficient labour market flexibility in Europe. If these hypotheses were correct, countries with a higher welfare burden or with higher taxes and government shares should have underperformed to a larger extent. The performance differences across European countries are not in line with this hypothesis.
- (3) Evaluating economic performance in the 1990s according to a set of indicators of output, productivity growth, employment and stability suggests that Sweden, Finland and Denmark are top performers. In contrast to these countries, the big continental European countries (Germany, France and Italy) clearly underperformed. A purely statistical grouping would have suggested placing Ireland into the group of top performers, but Ireland's strategy could not have been applied by a country with a medium or high initial level of GDP per capita.

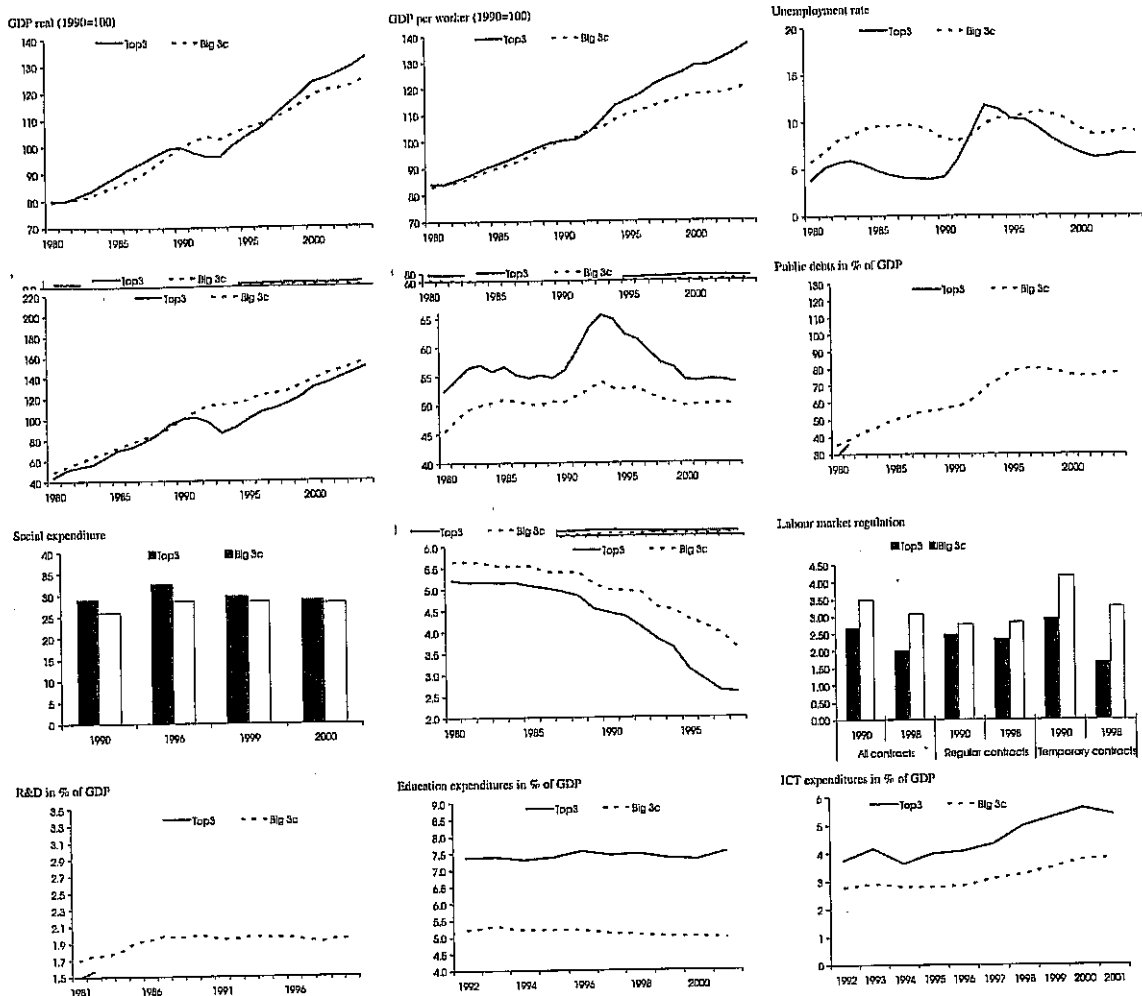


Figure 5. Policy strategies in the top 3 vs the big 3 continental European countries in a nutshell.

(4) We obtained a growth difference between the top three and the big three continental European countries of 1.3 percentage points for GDP and of 3 percentage points for manufacturing. Productivity is accelerating for the top three and decelerating for the big three. Employment is higher in the top three countries, unemployment lower. The most impressive differences can be observed in the fiscal indicators. The debt/GDP ratio, which had been the same as in the big countries in 1993, is now 30 percentage points lower in the top economies. In each of the big continental economies, budget deficits are approaching the upper limit permitted by the European Stability Pact, while the top three countries enjoyed surpluses in 2002/2003. The top countries improved their fiscal balances on the one hand by limiting expenditures, on the other hand, as a consequence of regaining growth.

(5) If we look for typical structural characteristics of these top three countries, we find that they are small open economies of the northern welfare type. Relatively high costs and taxes are combined with a consensual tripartite style of policy making. Additionally, all three countries were confronted with a severe crisis during the 1980s or 1990s.

(6) Looking at economic policy, we find three common strategy elements:

- The first pillar was the restoration of the balance between costs and productivity in the market sector and between taxes and expenditures in the public sector.

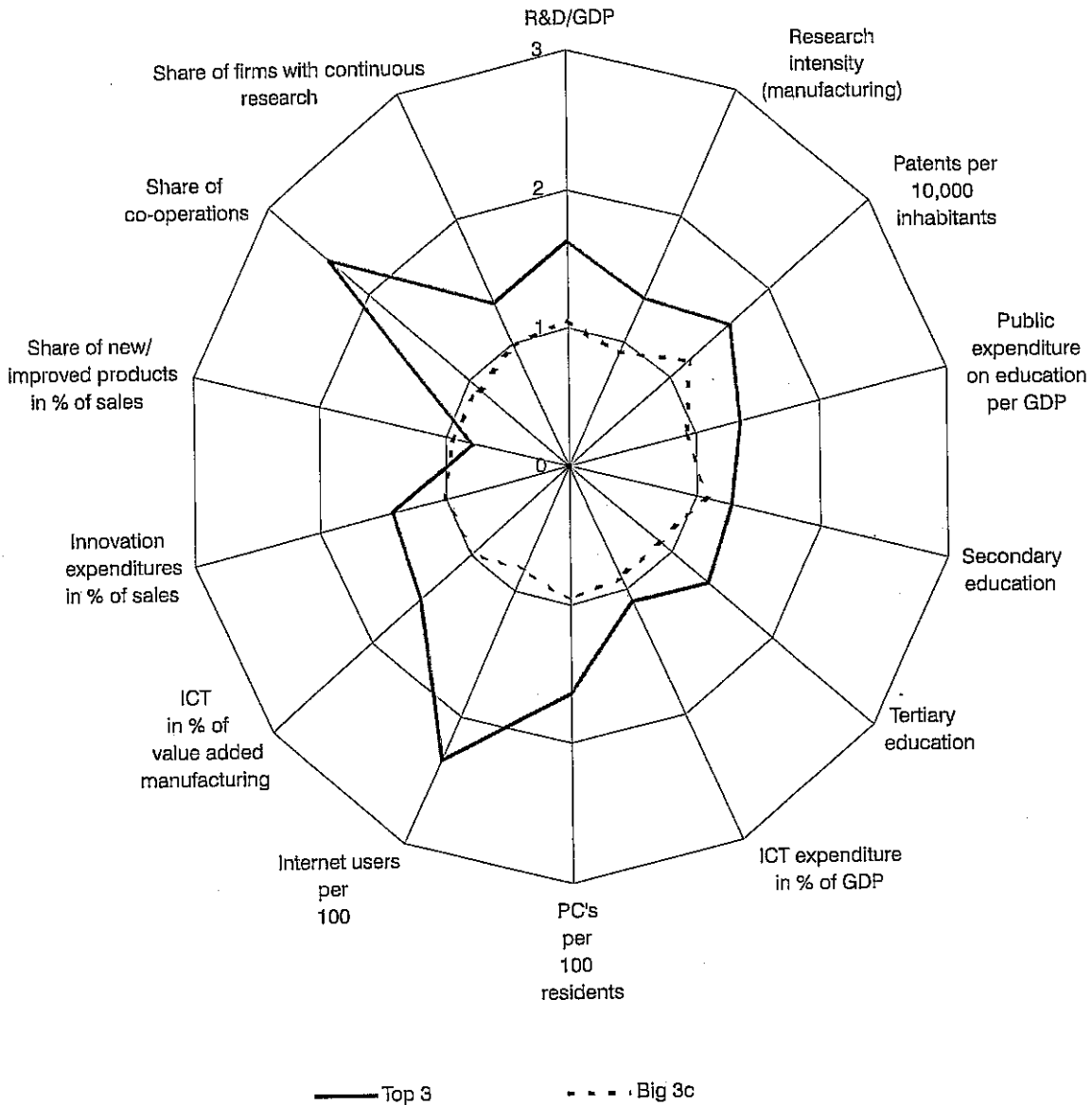


Figure 6. Investment into future growth; top 3 and big 3c vs EU.

Sweden and Finland devaluated their currencies – Denmark did not. Wage moderation was applied, leading to a small absolute decline in wages and the unit costs of labour during the first half of the 1990s. After regaining competitiveness, wages increased faster, not least as a result of higher growth. A resurgence of unit labour costs was limited since productivity accelerated. Government expenditures were contained by expenditure limits and reduced by discrete and socially balanced reform packages. The main elements of the welfare state were kept intact: the government sector is still larger in the top countries, but the difference to other European countries has grown smaller.

- The second pillar was the improvement of the incentive systems. Product markets were opened further and competition in network industries was encouraged. On the labour markets the regulation of temporary contracts was reduced. Limited regulation combined with an active labour market policy had been characteristic of the Northern Welfare States before, but in the 1990s, this double strategy was accentuated. Active labour market policy promoted requalification, skill

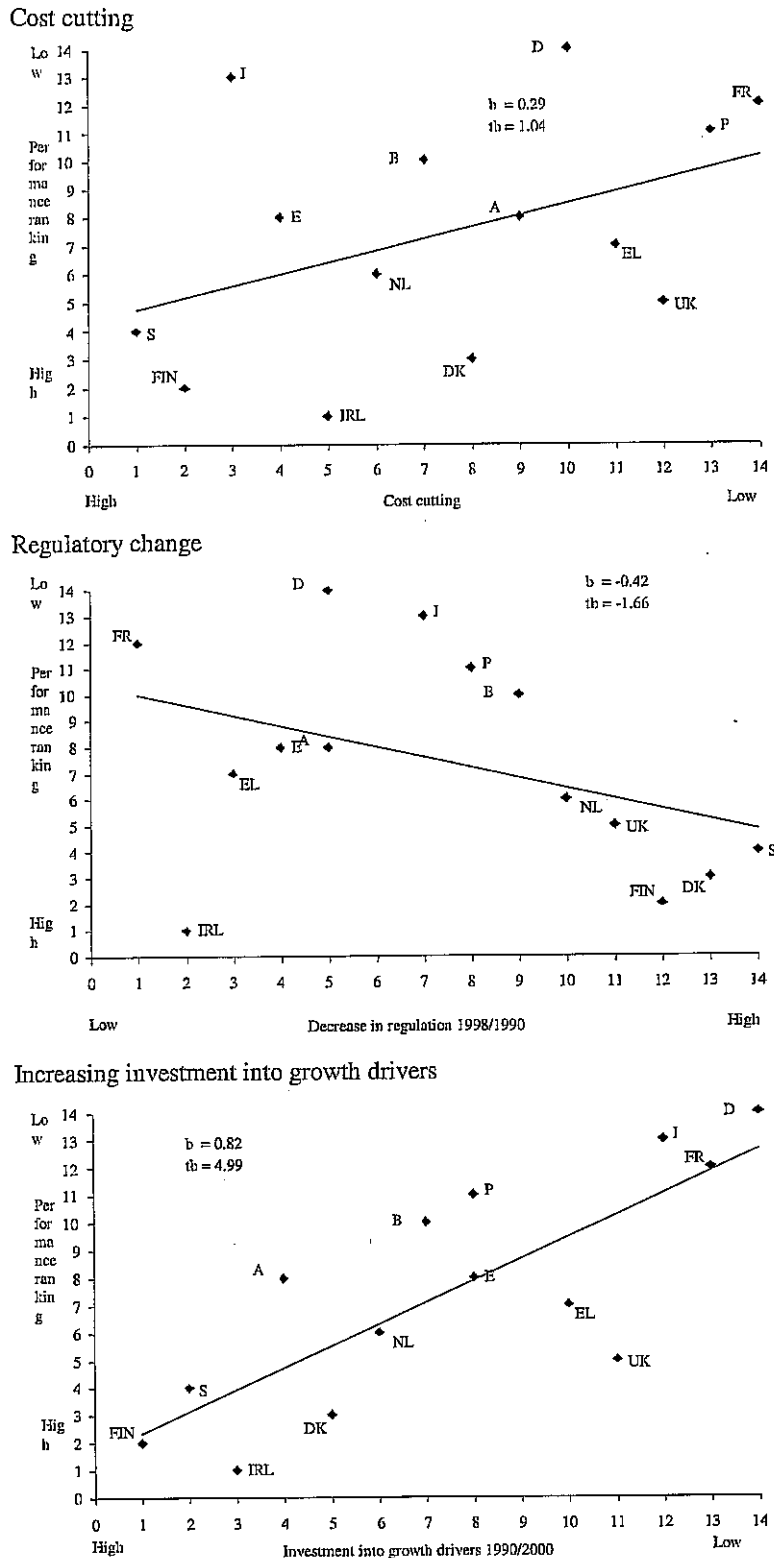


Figure 7. Performance, cost cutting, regulatory change and investment into growth drivers.

upgrading and innovative work practices, partly in public agencies and partly in competing private institutions or firms. These changes did not follow an ideologically based deregulation strategy. The reforms were targeted, made use of activation strategies, applied innovations and were understood as assistance in regaining employment. Replacement rates were reduced where they were

extremely high, benefit periods were shortened to some extent and regional mobility supported. Training schemes were decentralised, personalised and made obligatory, and also sabbaticals were introduced and partly connected with education. Improving incentives, flexicurity, activation strategies or a 'high commitment version' of welfare to work are better characterisations of this strategy element than 'deregulation' or 'hands off policy'.

- The third and most important strategy element was the enhancement of long term growth in output and productivity by increasing research, education and the diffusion of technologies. This has been illustrated by a system of input and output indicators for research, education and technology diffusion. The top countries are leading the big countries in nearly all indicators and have increased their investments faster than other countries. R&D expenditures doubled from 1.6% in 1982 to 3% in 2000, already reaching the Lisbon target for 2010 and surpassing the USA. Sweden is leading in ICT, Finland has upgraded its educational programmes, and Denmark has promoted the diffusion of technology and industrial clusters in ICT and biotechnology. New growth theory stresses the impact of innovation, human capital and incentives for the creation and diffusion of new technologies. The top countries followed this recommendation even during a period of deep crisis and government restructuring. The innovation strategy was partly shaped by an active government and partly by firms, experts and social partners.

(7) The fact that welfare countries performed rather well in the 1990s does not indicate that costs and incentives are irrelevant to performance. In the aftermath of a severe crisis, these countries realised that costs should be in line with productivity and fiscal balances should be restored. Second, it was clear that incentives had to be corrected and institutions had to be reformed. Most importantly, they realised that (i) cost containment is a short term strategy, (ii) improving incentives does not mean indiscriminate deregulation, but may focus on training, mobility and re-qualification, including targeting, activation and decentralisation, and (iii) both strategies need to be complemented by an active policy to promote research, education and the diffusion of new technologies. Cutting costs and changing incentives is the necessary part of the strategy; investment in research, education and the diffusion of new technologies is the sufficient condition for long-term growth.

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Notes

1. See Aiginger (2004), Aiginger and Landesman (2002), Gordon (2002), OECD (2003), Pichelmann and Roeger (2004) and Schulmeister (2000). We speak about Europe, but in fact concentrate on the EU countries. The Euro finally came in 2002, the enlargement in 2004, but the second half of the 1990s were already dominated by process to meet the criteria for a common currency as well as for enlargement.

2. According to the rankings of the Structural Indicators of the EC in 2003 (88 indicators of growth, employment, social cohesion, economic reforms and the environment), Denmark, Sweden, The Netherlands and Finland are the Leaders. According to the rankings of the Global Competitiveness Report of 2002–2003 (World Economic Forum), the top EU member countries are Finland, Sweden and Denmark.
3. The gap between GDP (a measure of all economic activity in Ireland) and GNP (a measure of activity by Irish nationals) widened from 4% in 1980 to 20% in 2002 (OECD Country Report, Ireland, 2003, p. 23). The low profit taxes for multinationals induces them to report as much profits as possible in Ireland inter alia by increasing prices for intra-firm sales (OECD Country Report, Ireland, 2003, p. 128).
4. The fact that these are three large continental economies could suggest the formation of a group of 'large countries' in contrast to the top three, which are all small economies. The fourth big economy, namely the UK, ranked 5th in the 1990s. From a longer perspective, the UK lost its significant lead in per capita GDP over the past decades. A 'productivity gap' has developed and in addition, the UK is now confronted with a fragile infrastructure; large tax increases are considered necessary compensation for past underinvestment.
5. Wage indexation had already been restricted to some degree in 1975 (Plougman and Madsen, 2002, p. 16).
6. Annual negotiations for expenditures, local taxes and bloc grants – from the central government to local authorities – constitute up to 15% of their revenues (OECD, Denmark, 1994, p. 47). On the active side, the government stimulated growth in 1993/94 ('kick start'). The non-cyclical stimulus was assessed at between 1% and 2% of GDP in 1993 and 1994, with the largest share of the increase going to labour market initiatives and education and to growth stimulatory measures (OECD, 1994, p. 39).
7. Paid leave schemes are assessed to have reduced measured unemployment by 60,000–70,000. Subtracting the former unemployed who were on leave would provide a net effect of only 15,000–20,000 (Madsen, 1999). The main effect of the paid leave schemes therefore might be more flexibility in time worked over the individual life cycle (Madsen, 1999, p. 64).
8. The rule that permitted unemployment benefits to be resumed in the case that a person again became unemployed following a training period was introduced, but later cancelled.
9. OECD Regulatory Database. Countries are ranked for a set of indicators between 0 and 6 according to the degree of regulation of the product and labour markets (see Nicoletti *et al.*, 2001). Formal job protection is low in Denmark, but people are rather optimistic that they will find a new job, if the current one is lost (Madsen, 2002).
10. The replacement ratio is defined as relation of the unemployment benefit relative to the wages rate during employment.
11. A measure of increasing regulation was that the notice period for collective dismissals in firms with more than 100 employees which plan to lay off more than 50% of the employees was increased from 30 days to 11 weeks, following an EU directive (OECD, Sweden, 1994, p. 46).
12. Ministry of Business and Industry, Denmark's Strategy for Growth, December 1998. Denmark provides growth centres for IT and favours stock options. It created public spearhead programmes and enforced e-government. A virtual IT bridge to Sweden encourages the transfer of techniques and capabilities, and has fostered cooperation. Broadband and a real bridge over the Oresund now connects Denmark more closely with the leading country in telecommunications.
13. See Lindbeck *et al.* (1994) for the responsibility of the welfare state from cradle to grave as the cause of Swedish problems.
14. Wage moderation was first tried unsuccessfully as a centralised bargaining outcome for two years (Rehmsberg moderation), that subsequently looked moderate as it was negotiated in 1991, but proved to be excessive in the second year. The next two-year contract for 1993–1995 also proved to be moderate, leading to the first fall in unit labour costs in post World War II history (OECD, Sweden, 1994, p. 39).
15. Over three years, GDP declined cumulatively by almost 15%, and unemployment approached 20% (OECD, Finland, 1995).
16. In October 1993, the government decided to disengage itself from the wage formation process in an effort to encourage labour unions and employers' organisations to seek a greater differentiation of wages across industries (OECD, Finland, 1996, p. 25).
17. The lapse in time to the start of notice, as well as the notice period itself, were shortened.
18. 'The focus was not completely on high tech industries, but also on the use of ICT in traditional sectors such as wood and paper' (Saarnivara, 2003, p. 2).
19. The role played by Nokia in creating a new image for the information society also should be acknowledged. However, this role is certainly related to the environment in which it evolved, as

- well as to economic policy. Fifteen years ago, Nokia was a diversified company producing textiles, boots and paper. As a market leader in a high tech segment, it relies on qualified personnel, complementary research facilities and an innovative climate, supported if not created by policy. Growth in output and productivity is similar in strength and structure to that of Sweden, with high growth in manufacturing and high tech sectors, and productivity acceleration in the second half of the nineties. Unemployment is higher than in Sweden and in the EU, since development issued forth from larger, unused reserves, and a bigger agricultural sector. However, the change in industrial structure from capital-intensive sectors to technology driven industries is even more impressive.
20. We have to keep in mind however, that government expenditures are still higher in the top countries, and that to a certain extent government expenditures follow a cyclical pattern.
 21. Such a dichotomy was used in Michie and Sheehan (2003), who report that 'functional flexibility' such as flexible work practices, human resource management and industrial relation systems are positively related to innovation while 'external flexibility' (temporary contracts, for example) is negatively related to growth. There are additional aspects of labour market institutions not investigated in this paper. For the importance of temporary contracts see OECD (1999). A higher share of temporary worker seems not to be a characteristic of the top countries. The share is higher than on EU average in Denmark in 1998, but lower in Sweden and Finland. This may also be the result of the better labor market performance since the share of temporary workers has declined in Denmark and Sweden between 1990 and 1998. For the degree of centralisation of wage bargaining the top countries are countries ranking high in centralisation, but Denmark and Sweden have reduced in centralisation as well as in coordination. See the ranking of countries in OECD (2003c), p. 71.
 22. If we compare the top three European countries with the US, we see they have improved their positions relative to the USA for 13 of the 16 indicators (Aiginger, 2002). The leading European countries surpassed the USA in publications per inhabitant and Internet users (in addition to mobile phones and telecom expenditures, for which Europe as a total entity is ahead). The only areas where the top three European countries are not improving their relative positions are patents, the share of IT expenditures, and the share of ICT industries in production. In contrast, the big three economies are lagging behind the USA in 14 of 16 indicators and have improved their positions in only four.

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