EUROPEAN PARLIAMENT

Directorate-General for Research

WORKING PAPER

The Economic Situation of the European Union and the Outlook for 2001-2002

Economic Affairs Series
ECON 126 EN

This publication is available in

EN (original), FR and DE.

PUBLISHER: European Parliament
L-2929 Luxembourg

AUTHORS: The EUROFRAME group of Research Institutes.

The Institutes involved are WIFO in Austria, ETLA in Finland, OFCE in France, IfW and DIW in Germany, Prometeia in Italy, and NIESR in the UK

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Manuscript completed in January 2001

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Preface

This research in this report and the forecast material contained within it were produced by the EUROFRAME group of European Research Institutes. The results are preliminary and should not be quoted without permission The Report is the result of a co-ordinated programme of work by the Institutes. The views reflect a consensus of those of the Institutes involved, inevitably with compromises. In this and in future reports all members reserve the right to append a minority report if they disagree strongly with the majority.

The forecast numbers have been produced and co-ordinated using the NIESR global model, NiGEM, which includes models for all European Union countries. The model is an attempt to represent the economies as they currently stand, and hence account has been taken of developments in labour and product markets that will have changed the way economies can be expected to behave.

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EXECUTIVE SUMMARY

The Prospects for the European Union Economy

Prospects for the European Union and the Euro Area look sound, but there is a risk of a significant slowdown in the US. Central banks in the European Union should stand ready to offset any deflationary impacts from abroad. The appreciation of the euro and lower oil prices should help moderate prospective inflation in the Euro Area.

External environment

- The US is slowing down as equity markets adjust and consumers retrench. The slowdown is expected to be short-lived as monetary conditions are being relaxed, and the dollar has fallen, helping industry recover.
- The world economy seems robust, although we expect output and trade growth to slow from their cyclical peaks. Further monetary easing and some fiscal response in the US should ensure a recession in the world economy is avoided.
- Oil prices have declined from their peak last autumn, easing global cost and price pressures. The economic situation in Japan is still fragile, but does not pose a significant risk for Europe.

Prospects for the Euro Area

- The European economies passed their cyclical peak in the summer. Output growth in 2000 was very strong (3.3-3.4%). Strong exports were the major cause of the acceleration in the Euro Area and the UK. The slowdown in activity we are seeing is not expected to lead to a recession. Growth will be 2.8% in 2001 and 2.7% in 2002.
- Inflation in the Euro Area accelerated to almost 3% at the end 2000 from 1.5% a year earlier. The delayed effects of last year's tighter monetary policy, lower oil prices and the continuing appreciation of the euro should mean inflation drops back to average 2.2% in 2001 and 1.5% in 2002.
- Recent ECB projections for output and inflation have the centre of their projection with higher growth and similar inflation to ours for 2001. We consider this to be unlikely, and might involve monetary growth in excess of the ECB's reference value. There is a clear risk that inflation will be higher or growth will be lower.

Risks around the forecast

- The major risk facing the Euro Area is that business confidence and investment in the US will fall sharply. If the US slowdown accelerates sharply the ECB should stand ready to cut interest rates significantly.
- We expect the euro to reach 1.06 against the dollar by the end of 2002. If the euro does not appreciate over the forecast horizon then there is a significant risk that inflation will be noticeably higher than we are forecasting, pushing it above the ECB's target range.
- The ECB should act rapidly and strongly in cutting rates if the Euro-Area economy were to slow down more than we anticipate or the euro were to appreciate by more than we forecast.

Macroeconomic Policies and Convergence in the European Union

Policy has so far been successful in creating a stable economic environment in the Euro Area and in the European Union.

Current monetary policy

- Short-term interest rates are at a neutral or slightly restrictive level. Overall monetary conditions are probably still accommodating in the Euro Area given the sharp decline of the euro since early 1999.
- We do not see any reason for a further tightening of monetary policy in the Euro Area. Given our forecast for economic growth and inflation in 2001 and 2002, there may now even be some room for monetary easing.

Deficit reduction has been successful in the Euro Area

- The process of fiscal consolidation appears to be at an end. Fiscal policy initiatives in a number of European Union countries appear to be expansionary, and should help offset the slowdown we anticipate this year.
- Plans remain safely within the Stability and Growth Pact guidelines. Deficits should be eliminated by 2004. In the medium term a number of countries have space to cut taxes, or to raise public investment without breaching the fiscal guidelines.

Convergence and divergence of inflation in Europe

- Among the EU countries the convergence process is not complete. Per-capita GDP and prices are likely to grow more rapidly in smaller countries catching up with the rest and we should not worry about this.
- Inflation rates in the biggest four countries are converging. Since the start of the EMU GDP growth rates have become more similar whilst inflation rates have diverged as prices in countries such as Spain, Ireland and Italy adjust toward the Euro Area level.

Wage Policy

- In several major countries like France, Germany and Italy, wage settlements for the next year or more point to a continuation of wage moderation.
- Wage settlements help to preserve price stability if nominal wage increases are equal to the sum of targeted inflation and the trend rate of productivity growth. In this process the initial level of wages and prices should also be taken into account.

Growth and Employment in the Medium Term

Policies to enhance growth, reduce unemployment and raise the level of employment work only slowly over time, and have to be sustained to have an impact.

The reform process must adjust to new challenges such as *the New Economy*, and lessons must be learnt from recent US successes. Information technology can be used to enhance productivity and increase job creation. Institutions in the labour market must evolve to absorb developments. Increasing skills and ensuring higher active participation in the labour force should be central goals of policy.

Fiscal and monetary policy frameworks must be regularly adjusted to improve on outcomes. Fiscal policy should be guided in the interests of the Community, but should remain in national hands. Active fiscal policy to improve infrastructure, to enhance education and to promote innovation should be encouraged. The ECB should be clearer about the nature of its strategy, and wage moderation should be encouraged as part of the macroeconomic framework.

New Economy

- Enhancing technical progress and the adoption of new information based technologies is a key element in the growth prospects of European economies. European development is lagging behind the US.
- Efficient utilisation of new technologies will be easier if there is competition in new markets. More open telecommunications markets have strengthened new technology in the Nordic countries.
- The flexibility of labour markets and improving education have a key role in the structural changes needed to enhance the use of new technology and the creation of jobs in the sector.
- Tax incentives and legislation to strengthen R&D activity should be implemented, but carefully monitored. Enhancing entrepreneurship and the potential for birth of new firms are important. Scientific and academic labour markets should be flexible.

Labour Markets

- Employment strategies have been developed for all European Union countries. Because of differences in national institutions and capabilities, strategies have to remain country specific, and cannot be designed for Europe as a whole.
- Labour market reforms must protect Social Cohesion, and the Commission guidelines should reflect this strongly. The OECD Jobs Strategy and US institutions cannot be used as models without careful amendment and evaluation.
- Long term attachments to jobs, the interaction of the Social Partners and secure employment all help foster process innovations and improvements in products. These have enhanced growth and productivity in Europe for decades. They should be protected and enhanced.
- Reducing unemployment and raising participation in the workforce at the same time requires a re-assessment of all labour market policies. Training programmes for low skilled individuals are important. The activation of the unemployed and non-participant benefit recipients have been successful in the UK and Denmark, for instance, and should be considered elsewhere.

Macro policies in the medium term:

- Alternatives to the Stability and Growth Pact should be discussed. In the medium term it will be worth looking at the role of the public sector in strengthening the prospects for output growth. Borrowing in order to finance some public investment in infrastructure may be a good guideline to ensure growth is enhanced.

- The SGP should not preclude broader initiatives. Monitoring the soundness of both public and private finances is an important part of a framework for economic stability in the medium term.
- Participants at the Macroeconomic Dialogue could recommend a wage path in line with the sum of targeted inflation and the trend rate of productivity growth, and implement an annual monitoring.
- Clear signals should be given about the sustainable growth path as well as targeted inflation. Published forecasts by the ECB can be judged as increasing the transparency of monetary policy and strengthening the credibility of the central bank, as long as they prove consistent with its other analyses.

The future of pensions and taxation

- Governments should stop encouraging early retirement and build stronger institutions to safeguard continuing employment as part of their strategy for ensuring high levels of participation in the workforce.
- All policies should ensure that social cohesion objectives are safeguarded. Any reform should be fair and provide information on how the system will evolve. Any significant cut in public pensions should be accompanied by an almost compulsory system of capitalisation.
- There is widespread support for leaving taxation in national hands. Some harmonisation may nevertheless be needed to prevent more mobile factors, and in particular non-residents' capital and income and also multinational corporations, from escaping taxation.
- Harmonisation of corporate tax should be achieved by a common minimum rate with possibilities of exemptions for small companies and for regions with high unemployment. It would clearly be better if any ecological taxation addressing greenhouse effects were decided jointly.

Part I: Policy problems and the current situation

The external environment facing the European Union and the Euro Area has become less favourable over the last six months. There are significant risks, and the US slowdown could cumulate into a severe contraction if confidence collapses and policy does not respond. Avoiding a sharp downturn in the economy is the major task facing the European Union and the Euro Area monetary and fiscal authorities. However, we feel that there is little probability of a recession developing.

We recommend that the ECB and other European Union central banks remain very vigilant, and they should be prepared to respond rapidly and significantly to an emerging crisis. Knowledge that they will do so will help sustain confidence in Europe, and a belief that the Federal Reserve will act to prevent a recession in the US can be expected to stave off the crisis.

World economic activity was at its strongest for more than a decade in 2000. Growth accelerated in all the major geographical areas last year. Activity recovered strongly in many developing countries in Asia, Latin America and Eastern Europe. There was no particular resurgence of global inflation, despite developments in the oil markets, and prospects for continued low inflation remain much better than for some decades.

However there is now clear evidence that global economic growth has begun to slow. Business and consumer confidence in the United States have fallen sharply in recent months. The external environment has clearly deteriorated.

- The European Union appears to have passed its cyclical peak, and the appreciation of the euro in recent months has removed much of the inflationary pressure that may have been developing in the Euro Area in the summer. It has also helped remove some strains in the UK as Sterling has depreciated against the euro.
- We forecast that the euro will appreciate to 1.06 to the dollar by the end of 2002. If it remains significantly below this there is a risk that inflation will above the ECB's target range. If the slowdown in the US causes the euro to rise much more rapidly then deflation becomes a serious risk and the ECB should be prepared to cut rates significantly.
- The stance of fiscal policy has generally changed, and the budgetary consolidation process has temporarily come to a halt. Activity should be supported by fiscal moves over the coming year in a number of countries such as the UK. However, in the medium term vigilance needs to be maintained, and policies to keep budgets within bounds need to be reinforced.
- Monetary policy is no longer restrictive, and the ECB and other central banks may be expected to loosen somewhat in the near term. This should be encouraged as long as there are no strong signs of threats to the overriding objective of sustainable price stability.
- Wage moderation has been important in the process of ensuring convergence within the Euro Area. There are signs that inflation rates and wage growth are converging in the four major economies. Some smaller economies have higher inflation and higher growth as they continue to adjust to membership of the Euro Area and the European Union.

Part II: Structural Issues: Growth and Employment in the Medium Term

The level and growth of output in the European Union is strongly dependent on the structure of the economic institutions in place. The availability of capital and labour and the efficiency with which they are used are central to the prospects for growth in Europe. Policies have to be designed to enhance availability and efficiency without significant compromises in other social objectives. The Community Employment Guidelines and the associated National Action Plans, the Broad Economic Policy Guidelines for 2000 and the Single Market Programme all stress the need for structural reform. Our evaluation of the short term prospects for the European Union and our advice on the setting of policy are influenced by the evolving nature of the European economy. There is little evidence that the recent strong growth in Europe has been underpinned by a significant increase in productive capacity, as in the United States in the last five years.

We need to investigate the ways in which the level of capital available for production can be increased and the methods by which the workforce can be more productively utilised. There are a number of potential changes to the environment in which the economy operates, and we address the four most important for policy makers.

- *New technology* in computers and telecommunications and computer based knowledge appear to have been major factors behind strong growth in the US. The available empirical evidence suggests that they have caused productivity in the US to rise rapidly in some sectors and have helped to increase overall productivity in all sectors of the economy. In order to evaluate the short term prospects for Europe we need to assess whether new technology has changed the trend rate of growth in the European Union. This seems not to

be the case, and hence we should investigate policies that would enhance the production and use of new technologies.

- The wave of *labour* and product *market reforms* that have accompanied increasing European integration over the last 20 years or more have potentially large effects of the level and growth of output in the medium term. These reforms are designed to increase participation and skills in the labour force and increase the efficiency with which factors of production are used. Macro-economic stability and high levels of output are necessary to ensure that the effects of the reforms are fully felt, as the UK example suggests.

- Changes in *taxation* affect the use of resources and the efficiency of production *and pensions* provision by the state may influence the level of saving. Reforms to these systems are clearly important. There are different strategies for both tax and pension reforms and they clearly should be designed to meet individual country needs based on ageing populations and the importance of social cohesion.

- The nature of *macroeconomic policy* affects growth as it can facilitate new developments and also can provide an environment to enhance investment. A policy that is too restrictive may reduce the level of investment at just the stage in the cycle of innovation and product development when increasing the capital stock is central to medium term growth. In addition a more stable macroeconomic framework should reduce the degree of perceived uncertainty about the future and hence encourage investment and innovation.

Reforms to promote new technology should proceed with caution in order to ensure social cohesion is maintained. Europe has lagged behind the US in the implementation of computer based tools in workplaces which has helped to hold growth below that in the US. However, this may be inevitable, as the US market system is better designed for periods of product innovation, such as that associated with the current development of new technologies, and European institutions are better adapted to periods of process innovation and development. As we move from the first phase of the new industrial revolution to the second, more developmental, stage, the European economies should once again start to catch up with the US.

Growth in output depends on the growth of knowledge, and education and Research and Development (R&D) enhance skills in the workforce and the knowledge base for production. Only the Nordic countries, and to a lesser extent the UK and Ireland, have levels of R&D in information technologies that match those in the US, and it is these economies in Europe that have seen a comparatively strong increase in productivity growth in the last few years

- The Employment Policy Guidelines and the associated National Action Plans all stress, to differing degrees, the importance of education and re-education of the workforce. Institutional structures should be developed that ensure that we can provide effective lifetime education.

- Innovation and adaption of new technology depends on the structure of labour markets and the ability of individuals to behave entrepreneurially in the economy. Flexibility of response in setting up new firms and developing new ideas is important amongst those with relevant technical skills and amongst the scientific community.

- The adaption of new technology and the enhancement of the rate of growth depends crucially on increasing flexibility and innovativeness throughout the European Union. More competitive product markets, and especially a greater market scope for a product, appear essential to encourage innovation,

Labour market reforms under the National Action Plans emphasise the reduction of unemployment through re-skilling and effective assistance. These policies, if successful, will be important in increasing output through a greater availability of factors of production and will also increase welfare. Reductions in the sustainable level of unemployment should not be the only objective of labour market policies. There are a number of countries in the Euro Area where the participation of the population in the workforce remains low as compared to the US, and output and welfare can be improved if these potential workers can become active participants in the workforce. This may involve more effective welfare to work programmes, as in the UK and Denmark. It is also important to see a role for more active job stimulation packages, as in the Netherlands and France.

Participation amongst those over 50 is low in a number of countries. It is important to raise participation in this group because it would raise achievable output in Europe and reduce the potential burden placed, for instance, on state Pay As You Go pension systems. It is also important to raise participation in countries where individuals face more responsibilities for their own pension provision, as this raises their income in the long run.

The final plank in a programme for stability and growth in the Euro Area and in the European Union is the framework for monetary and fiscal policy. Monetary policy in the medium term should contribute to the stability of the economy and the incentive for individuals to make long term decisions. This requires that the framework ensures that the volatility of prices and output over the cycle are reduced, and that individual decision makers are aware of the policy framework that will ensure this. The current Stability and Growth Pact on fiscal policy attempts to put tax and spending in a longer term framework. A framework in which it was clear that public debt would not rise in an unsustainable way, whilst ensuring that public investment enhanced growth prospects would clearly be preferable. The objectives for fiscal policy should be discussed in the terms of an overall framework for stability and growth, and not just in terms of the generation of debt.

PART I – POLICY PROBLEMS AND THE CURRENT SITUATION

The external environment facing the European Union and the Euro Area has become less favourable over the last six months. There are significant risks, and the US slowdown could cumulate into a severe contraction if confidence collapses and policy does not respond. Avoiding a sharp downturn in the economy is the major task facing the European Union and the Euro Area monetary and fiscal authorities. However, we feel that there is little probability of a recession developing.

We recommend that the ECB and other European Union central banks remain very vigilant, and they should be prepared to respond rapidly and significantly to an emerging crisis. Knowledge that they will do so will help sustain confidence in Europe, and a belief that the Federal Reserve will act to prevent a recession in the US can be expected to stave off the crisis.

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However there is now clear evidence that global economic growth has begun to slow. Business and consumer confidence in the United States have fallen sharply in recent months. The external environment has clearly deteriorated.

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- Monetary policy is no longer restrictive, and the ECB and other central banks may be expected to loosen somewhat in the near term. This should be encouraged as long as there are no strong signs of threats to the overriding objective of sustainable price stability.
- Wage moderation has been important in the process of ensuring convergence within the Euro Area. There are signs that inflation rates and wage growth are converging in the four major economies. Some smaller economies have higher inflation and higher growth as they continue to adjust to membership of the Euro Area and the European Union.

Chapter I. The external environment has become less favourable

1. Introduction

World economic activity is expected to have risen by 4.8 per cent in 2000, the fastest rate for more than a decade. Growth accelerated in all the major geographical areas last year, with GDP rising by an estimated 4.2 per cent in the OECD economies and activity recovering strongly in many developing countries in Asia, Latin America and Eastern Europe. However there is now clear evidence that global economic growth has begun to slow.

The economic expansion in the United States began to moderate in the latter half of last year. Business and consumer confidence have fallen sharply in recent months, raising the possibility that the long anticipated cyclical downturn might prove to be deeper than expected. A clear signal of the deterioration in economic conditions was provided by the unexpected decision of the Federal Reserve to reduce interest rates by 50 basis points in early January. This should help to ensure that the downturn in the United States is relatively short-lived, with quarterly growth expected to strengthen from the latter half of this year.

The present low level of inflation and the comparative health of the public finances in most of the major industrialised economies also give policymakers in other countries considerable scope to undertake prompt action to prevent a significant, prolonged deterioration in global economic conditions. Taxes are already being lowered in many European countries this year as a result of previously announced measures and there is scope for fiscal measures in North America as well. These cannot prevent some downturn in economic growth, but they can help to ensure that it is relatively short-lived. We expect that world GDP growth will slow to 3.7 per cent this year, but recognise that there is a potential for a more pronounced slowdown if the present deterioration in confidence begins to affect economic activity more significantly than is apparent in the data available at present. Our projections for the external environment are summarised in Table 1.[1] We discuss the implications of a sharper slowdown, driven by a deterioration in confidence, in Chapter V of this report.

The acceleration in GDP growth last year was accompanied by a strong expansion in world trade. World merchandise trade volumes are forecast to have risen by nearly 13 per cent. Strong trade growth in 2000 was possible because of significant spare capacity in parts of the world economy. This has helped to relieve potential bottlenecks in economies producing at or above full capacity, temporarily reducing inflationary pressures in these countries. The slowdown in final demand is reflected in the forecast for trade growth which is expected to moderate to between 7½-7¾ per cent this year.

Global inflation pressures rose last year, mainly due to rising energy prices. Consumer price inflation in the United States rose from 2.2 per cent in 1999 to an estimated 3.4 per cent in 2000. But the rate of core inflation, excluding food and energy products, was 2.6 per cent in November of last year, just 0.5 percentage points higher than a year earlier. We expect inflation in the United States to moderate this year and next, particularly if oil prices weaken further. Consumer price inflation is expected to ease to 2.4 per cent by 2002. In the Euro Area harmonised consumer price inflation is projected to average 2.2 per cent this year and 1½ per cent in 2002. Price deflation is expected to persist in Japan, at least until the end of 2001.

[1] The forecasts contained in this Report are based on the data and information available as of 5 January 2001. Data published since then have not been taken into account, although if relevant, may be referred to in the text.

Table 1. The External Environment

(percentage changes)

	1990-97	1998	1999	2000	2001	2002
Real GDP: World	3.0	2.6	3.4	4.8	3.7	3.7
EU	2.0	2.7	2.5	3.3	2.8	2.7
Non-EU World	3.1	2.5	3.8	4.9	4.1	4.1
USA	2.7	4.4	4.2	5.1	2.6	3.1
Asia-Pacific	5.8	3.0	5.1	5.8	5.3	5.2
Japan	2.2	-1.1	0.8	1.9	1.4	2.3
EFTA	1.7	2.3	1.2	3.4	2.4	2.9
Central and Eastern Europe	-5.0	-0.8	2.4	4.2	3.7	3.1
Latin America	3.5	2.3	0.8	3.0	3.7	3.7
Other Developing	3.8	-0.6	1.5	3.3	4.2	3.4
World Trade Volumes (goods)	6.7	5.6	5.7	12.9	7.7	8.5
World Manufacturing Export Prices ($)	1.1	-1.6	-1.1	-3.3	4.0	5.6
Consumer Prices: USA	3.3	1.6	2.2	3.4	2.9	2.4
Japan	1.5	0.7	-0.3	-0.7	-0.2	0.5
GDP Deflator: USA	2.6	1.3	1.5	2.1	2.3	1.7
Japan	0.9	-0.1	-1.4	-1.7	-0.6	0.1

Note: Regional GDPs constructed using PPP weights.

TABLE 2. Key Economic Assumptions

	Interest rates (%)						*Exchange rates*		*Oil Prices*
	Short-term			Long-term			(per euro)		($ per barrel)
	USA	Euro Area	UK	USA	Euro Area	UK	USA	UK	
1998	5.5	3.9	7.3	5.3	4.7	5.5	1.11	0.67	12.4
1999	5.3	3.0	5.4	5.6	4.7	5.1	1.07	0.66	17.4
2000	6.4	4.4	6.1	6.1	5.4	5.3	0.92	0.61	27.8
2001	5.7	4.8	6.0	5.4	5.0	5.0	0.96	0.62	25.2
2002	5.7	4.6	6.0	5.6	5.0	5.0	1.03	0.63	24.0
2000Q1	6.0	3.5	6.1	6.5	5.6	5.6	0.99	0.61	25.5
2000Q2	6.6	4.2	6.2	6.2	5.5	5.3	0.93	0.61	25.7
2000Q3	6.6	4.7	6.0	5.9	5.4	4.8	0.92	0.62	30.0
2000Q4	6.6	5.0	6.2	5.6	5.3	4.9	0.87	0.60	30.0
2001Q1	5.8	4.8	6.0	5.3	5.1	5.0	0.92	0.62	26.0
2001Q2	5.7	4.8	6.0	5.4	5.0	5.0	0.95	0.62	25.5
2001Q3	5.7	4.8	6.0	5.4	5.0	5.0	0.98	0.62	25.0
2001Q4	5.7	4.8	6.0	5.5	5.0	5.0	1.00	0.63	24.5
2002Q1	5.7	4.8	6.0	5.5	5.0	5.0	1.01	0.63	24.0
2002Q2	5.7	4.5	6.0	5.6	5.0	5.0	1.03	0.63	24.0
2002Q3	5.7	4.5	6.0	5.6	5.0	5.0	1.04	0.63	24.0
2002Q4	5.7	4.5	6.0	5.7	5.0	5.0	1.05	0.63	24.0

Notes: Short-term interest rates are 3 month money market rates. Long-term rates are the yields on 10 year government bonds. Oil prices are a weighted average of Dubai and Brent spot prices.

Labour costs have remained surprisingly restrained so far in the industrialised economies. For instance, in the United States economy-wide unit labour costs have until recently continued to rise only modestly, with emerging wage pressures offset by strong productivity growth. Costs in the manufacturing sector have even fallen. However unit cost pressures may rise temporarily as a result of the unexpectedly sharp cyclical downturn.

Oil market developments explain most of the variation in recent inflation trends. The level of crude oil inventories fell to an exceptionally low level in the first half of last year, but has subsequently begun to recover according to estimates by the IEA. Markets did not appear to be especially unbalanced last autumn. However, uncertainties associated with factors such as the potential for conflict in the Middle East continued to push prices up until November. Since then, however, crude oil prices have started to decline in response to moderating demand in the wake of slower economic growth. In the forecast we assume that oil prices will average around $25 per barrel this year and $24 per barrel in 2002, as can be seen in Table 2. The dollar prices of some non-fuel commodities rose sharply last year, but the overall increase in non-fuel prices has been modest. We do not presently expect to see a significant acceleration in commodity price inflation this year or next.

2. Monetary stance to be eased gradually

The lagged effects of the global relaxation of monetary policy in the aftermath of the emerging market crises in 1997 and 1998 were an important factor behind the upsurge in economic activity in 1999 and into 2000. As real GDP accelerated in the course of 1999 and the early part of last year the danger of overheating became increasingly apparent. Central banks reacted to this threat by tightening policy significantly. In the United States the Federal Funds rate was raised by 1¾ percentage points between the summer of 1999 and June 2000 and in the Euro Area the European Central Bank raised interest rates by 2¼ percentage points between November 1999 and September 2000. Even the Bank of Japan raised interest rates slightly last year, ending the zero interest rate policy despite the still fragile character of the Japanese recovery and continuing price deflation. With these changes in interest rates, monetary policy became restrictive in the United States and no longer expansionary in the Euro Area.

Tighter monetary policies, in conjunction with the adverse effects of higher oil prices on real incomes, have acted to slow economic activity. Interest rates may have to remain at their current levels in some economies with comparatively little spare capacity and strong domestic demand, such as the United Kingdom, in order to ensure that inflation does not rise above target levels. But the slowdown in growth that is increasingly evident in most countries suggests that monetary policy will be generally loosened in the immediate future. A significant slowdown is already in progress in the United States, with the downward momentum of the economy having gathered pace towards the end of last year. The Federal Funds rate was lowered by 50 basis points to 6 per cent in early January. This change was surprising in its magnitude and timing as it was decided between official sessions of the Board of Governors, providing a signal of the speed at which the perception of economic conditions has deteriorated. We assume that the Federal Funds rate will be reduced by a further 25 basis points in the first quarter of this year, and stay at this level for the remainder of this year and in 2002.

Interest rates on long-term government bonds rose throughout 1999, but did not rise further during the course of 2000, despite the continued rise in short-term interest rates. It is also notable that inflationary expectations, as proxied by the difference between the yield on nominal long-term government bonds and indexed bonds in countries such as the US, the UK

and France, did not rise last year in spite of the rise in consumer price inflation. Nominal long-term government bond rates even declined in the course of 2000 in some countries, notably the US and the UK, probably due to an anticipated reduction in the future supply of bonds as a result of sustained budgetary surpluses. However the yields on corporate bonds and mortgages in these countries have hardly changed, so that there has been little positive impact on private sector financing costs. Nominal long-term government bond rates have also eased in the Euro Area in recent months, as the extent of the slowdown in global economic activity has become apparent.

The euro, which declined consistently against the US dollar over most of last year, has very recently recovered somewhat in conjunction with growing evidence of a slowdown in the United States. The bilateral exchange rate was, however, still around 20 per cent lower at the beginning of 2001 than two years earlier at the start of the monetary union. Our forecast is based on the assumption that the depreciation seen last year will be reversed over the course of 2001 and that the euro will gradually appreciate further in 2002 towards rates which would be more in line with economic fundamentals. The euro is projected to reach parity by the end of this year and $1.05 per € by the end of 2002. Our projections need to be considered in this light. In Chapter V of this report we discuss the risks associated with alternate paths of the exchange rate.

3. Soft landing in the United States

The recent expansion in the US has been exceptional in many respects. Productivity growth has been particularly strong over the last five years. This has helped to keep inflation low at a time of high and rising resource utilisation. At the same time, the long-lasting public deficit has turned into surplus, whilst the current account deficit has expanded significantly. The most recent data indicate that growth slowed significantly in the third quarter of 2000, with real GDP increasing at an annualised rate of 2.2 per cent after having risen by 5.6 per cent in the second quarter. Private consumption and exports continued to rise rapidly, but the growth of fixed investment slowed, which may be a sign that tighter financial conditions have begun to have some impact on the corporate sector. Industrial production declined in October and November compared to the previous month and job creation has also slowed. It is increasingly apparent that the quarterly growth of GDP is likely to remain subdued in the early part of this year. But the prompt monetary policy response of the Federal Reserve should help to ensure that the downturn is moderate. A weaker dollar will also support activity by decreasing the negative contribution from foreign trade.

Our projections for the United States are summarised in Table 3. We expect GDP growth to slow to 2.6 per cent this year, from 5.1 per cent last year. The recent reduction in equity prices is expected to help slow the growth of private consumption, with the sustained rise in the household wealth-income ratio over the last five years having come to an end. We also expect to see a sharp reduction in inventory levels. In spite of some emerging labour cost pressures, the impact of the moderation in demand growth on price-cost margins along with the decline in oil prices is expected to help reduce the rate of headline consumer price inflation to 2.9 per cent this year from 3.4 per cent in 2000. Broader measures of prices, such as the GDP or the private consumption deflators are expected to rise by around 2¼ per cent.

The impact of easier monetary conditions, in particular the weaker dollar, should start to become apparent during the latter half of this year. We therefore continue to expect a 'soft landing', with GDP growth strengthening to 3.1 per cent next year, even though the rate of growth of domestic demand is not expected to be very different from this year. Our forecast does not include any allowance for potential tax cuts that may be made by the incoming Bush

administration. The general government fiscal surplus is expected to average 2½ per cent of GDP over the next two years, giving scope to reduce taxation if desired. However the legislative timetable is such that we doubt whether they could be introduced until the start of the 2002 fiscal year at the earliest.

Table 3. The United States

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	4.4	4.2	5.1	2.6	3.1
Private Consumption	4.7	5.3	5.3	3.0	2.2
Public Consumption	1.5	2.1	2.1	2.3	2.1
Gross Fixed Investment	10.7	9.2	9.3	5.0	5.0
Stockbuilding (chg as % of GDP)	0.2	-0.4	0.2	-0.3	0.1
Domestic Demand	5.6	5.2	5.9	3.0	2.9
Exports (goods and services)	2.3	2.9	10.4	9.0	8.5
Imports (goods and services)	11.9	10.7	14.5	10.1	6.3
Employment	1.5	1.5	1.3	0.9	0.9
Unemployment Rate (%)	4.5	4.2	4.0	4.1	4.3
Compensation per employee hour	4.8	4.0	4.4	5.1	4.6
Unit Labour Costs	2.6	2.0	1.3	3.5	2.6
Household Real Disposable Income	4.6	3.0	2.8	2.9	3.0
GDP Deflator	1.3	1.5	2.1	2.3	1.7
Private Consumption Deflator	1.1	1.8	2.4	2.1	2.2
Real Effective Exchange Rate	6.3	-2.7	2.9	0.6	-2.6
Current Account (% of GDP)	-2.5	-3.6	-4.3	-3.9	-3.8
General Govt. Balance (% of GDP)	0.4	1.1	2.3	2.5	2.6
General Govt. Gross Debt (% of GDP)	60.9	56.3	50.7	46.3	41.8

We have simulated the NiGEM model used to produce our forecast in order to examine the short-term impact of a fiscal package in which the United States target budget balance is lowered permanently by 1¼ per cent of GDP. This reduces receipts from direct income taxes by $65 billion after 1 year, $113 billion after 2 years and by an average of $142 billion a year for the next 8 years, totalling around $1,300 billion after 10 years. The effect on our baseline scenario is to raise US GDP by 0.25 per cent by the end of next year, with the positive stimulus to real disposable incomes offset in part by a slight rise in long-term interest rates.

The strong growth in final demand in recent years has been above that of potential output and economic imbalances have widened, with rising trade and current account deficits. These have raised the net foreign debt of the United States to around 20 per cent of GDP. Imbalances are expected to fade gradually as the growth of domestic demand moderates. Nonetheless there are clear downside risks attached to our forecast and a loss of confidence by foreign investors or households might easily presage a more significant slowdown, as shown in the simulation analysis in Chapter V.

The absolute magnitude of the present trade deficit is equivalent to 6 per cent of world exports. The deficits mirror the willingness of investors to invest in the United States, with the counterpart inside the US being strong borrowing by households and firms, partially offset by higher public saving. The debt-income ratio of the private sector has risen significantly in recent years. Until recently this was more than balanced by the rise in the value of assets held, but the recent drop in equity prices raises the risk that many households,

and also companies, may now feel that they have excess debt, which could slow activity more sharply than shown in the central forecast. In this instance we would expect to see a larger monetary policy response than shown in our central forecast, as the analysis in Chapter 5 of this report makes clear.

Over the past five years the average rate of growth of total factor productivity in the United States has been around 1 percentage point higher than the average observed over the previous two decades. Part of this acceleration is undoubtedly cyclical. However there are now a number of studies, which indicate that an important role has been played by innovations in information and communication technologies (ICTs) and the diffusion of those technologies throughout the economy. It is not yet clear that the faster rates of productivity growth seen in recent years can be sustained indefinitely. In the longer-term once the present wave of innovations comes to an end and the ICT industries start to mature, the trend rate of productivity growth can be expected to be slower than that recently observed.

Recent developments in the United States have been taken into account in the structure of the NiGEM model used to produce our forecast, with the long-term rate of growth of technical progress, and hence potential output, now estimated to be some 0.5 percentage points higher than it had previously appeared. This implies that up to half of the acceleration in productivity growth observed over the past five years has been due to cyclical factors.

4. A fragile recovery in Japan

The Japanese economy appears to be recovering slowly after a prolonged period of weakness. However the economic expansion is still far from robust and indicators suggest that the recovery has recently lost momentum once again. According to newly revised data incorporating the switch to SNA(93) based national accounts, real GDP grew at an annual rate of only 1 per cent in the second and third quarters of last year, following a surge in the first quarter. Existing indicators suggest that output may even have declined a little in the final quarter of last year. For the year as a whole the growth rate is estimated to have been 1.9 per cent.

Despite the strong yen, export volumes have been significantly higher than in 1999, helped by the rebound of economic activity in the rest of Asia. But external demand has recently begun to weaken once more. Business investment has strengthened, particularly for IT goods, helped by improved corporate profitability achieved through continued cost cutting measures. However private consumption has remained relatively subdued, reflecting the limited improvement in labour market conditions and renewed declines in asset prices. Public sector expenditure continues to be extremely volatile, making it difficult to interpret the quarterly path of the economy. The effects of the fiscal stimulus package announced in autumn 1999 have now begun to fade.

The gradual improvement in business and consumer sentiment since 1999 has recently come to an end, causing some doubts on the sustainability of the recovery in the near future. In addition, uncertainties remain over the long-term health of many financial institutions. Given the apparent fragility of the current upturn, the Bank of Japan is expected to refrain from further interest rate increases for the time being, with money market rates remaining unchanged this year and rising only gradually in the course of 2002.

With the general government budget deficit around 7 per cent of GDP, and gross public debt close to 112 per cent of GDP and rising fast, there is little chance that further fiscal measures will significantly bolster the economy. There is a clear need for fiscal consolidation in the not too distant future. Any further significant deterioration in the fiscal position would probably lead to an increase in long-term interest rates, crowding out private sector activity. The

stimulus package announced last autumn including additional infrastructure investment of Y3 trillion (0.6 per cent of GDP) will prevent a substantial decline in the level of public demand in the coming fiscal year, but will not have any long-lasting beneficial effects.

Table 4. Japan

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	-1.1	0.8	1.9	1.4	2.3
Private Consumption	0.2	1.2	0.7	1.1	1.5
Public Consumption	1.9	4.0	3.2	1.7	1.7
Gross Fixed Investment	-4.2	-0.8	1.5	2.2	2.6
Stockbuilding (chg as % of GDP)	-0.6	-0.2	0.1	0.0	0.0
Domestic Demand	-1.4	0.9	1.4	1.5	1.8
Exports (goods and services)	-2.3	1.3	11.9	3.8	8.3
Imports (goods and services)	-6.8	2.9	8.9	5.5	5.4
Employment	-0.7	-0.6	-0.5	0.8	-0.3
Unemployment Rate (%)	4.1	4.7	4.7	4.7	4.5
Compensation per employee hour	0.5	-1.2	1.5	1.2	1.9
Unit Labour Costs	0.0	-2.8	-0.7	-0.2	-0.1
Household Real Disposable Income	0.3	2.4	2.6	2.4	1.3
GDP Deflator	-0.1	-1.4	-1.7	-0.6	0.1
Private Consumption Deflator	-0.2	-0.7	-1.1	-0.6	0.5
Real Effective Exchange Rate	-3.6	11.6	5.4	-4.3	1.0
Current Account (% of GDP)	3.0	2.4	2.6	2.3	2.0
General Govt. Balance (% of GDP)	-4.8	-6.7	-7.0	-7.2	-6.7
General Govt. Gross Debt (% of GDP)	94.7	103.1	111.9	116.2	119.7

Against this background we forecast that growth in Japan will remain modest. Real GDP is expected to rise by 1.4 per cent in 2001 and 2.3 per cent in 2002, as shown in Table 4. This growth will be not sufficient to lower unemployment significantly. Consumer prices are expected to begin to stabilise over the course of this year, but with excess capacity declining only gradually and the yen expected to gain strength again in the course of this year and next, any price increases will be minimal.

5. The expansion in the accession countries decelerates

Economic prospects have improved significantly in the potential accession economies in Central and Eastern Europe. Output growth is particularly strong in Hungary, Slovenia and Poland, although there are signs that the tightening of monetary policy over the past year is beginning to have some effect, particularly in the latter. The Baltic States, the Czech Republic and Bulgaria have recovered from the recessions experienced in 1998-99 and recorded substantial growth in the first half of 2000. The economic upturn in Western Europe has led to strong export growth. Business investment and household consumption have also risen sharply. Many of the accession economies continue to have high current account deficits, particularly as most are net oil importers.

Productivity continues to rise strongly and thus, despite strong growth, unemployment has fallen only slightly. Consumer price inflation accelerated considerably in the course of last year and inflation will generally be significantly above government targets. In part this reflects one-off rises in energy and food prices, but excessive demand growth is also

generating inflationary pressures. The stance of both monetary and fiscal policy is likely to be tight this year, which – in combination with a moderation of external demand – will slow growth. Continued progress in supply-side reforms suggests that the medium-term prospects for growth in the accession economies still appear favourable.

Chapter II. Moderate Slowdown in the European Union

1. Recent developments in the European Union

The European economy passed its cyclical peak in the summer of 2000. After having expanded at annualised growth rates of between 3½ and 4 per cent for four consecutive quarters, the rate of growth of economic activity has begun to ease. For the year as a whole, output is expected to have risen by 3.3 per cent in the European Union and 3.4 per cent in the Euro Area, the highest rate of growth for more than a decade. The increase in exports was particularly strong, with EU countries benefiting from strong growth in the rest of the world and the Euro Area additionally favoured by the weakness of its currency. The acceleration in GDP growth in the UK and the Euro Area last year can be accounted for entirely by an improvement in net exports, with domestic demand expected to have risen at a similar pace to that seen in 1999. In contrast domestic demand has strengthened considerably in both Greece and Sweden, and has helped to raise the rate of GDP growth. The Danish economy has been comparatively subdued, mainly due to a restrictive fiscal policy stance.[2]

In the second half of last year, the upward momentum of the European economy began to slow. Higher oil prices and tighter monetary conditions had an adverse impact on real disposable incomes and corporate sentiment in the Euro Area. However, the slowdown in economic activity will not lead to recession. Real GDP rose by 0.7 per cent in the third quarter of 2000 and our leading indicator of Euro Area growth (the EUROFRAME indicator) and our model-based forecast both suggest that output rose at a similar rate in the fourth quarter. In the year as a whole GDP rose by 3.4 per cent, a growth rate above that of potential output. The output gap, which had been negative for a number of years, has shrunk and was closed by the end of last year on some estimates, such as those of the OECD. In the manufacturing sector, capacity utilisation is now substantially above its long-term average according to European Commission surveys. However, fixed investment has been strong until recently, which should help to ease any capacity constraints this year.

The recovery in the Euro Area since the early part of 1999 has been led by an improvement in exports. Domestic demand was also strong, with business and consumer sentiment both remaining buoyant. An improvement in labour market conditions along with some reductions in direct taxes helped to support private consumption despite the negative impact of rising energy prices on real incomes. Fixed investment in machinery and equipment rose sharply in the first half of 2000, reflecting a high rate of capacity utilisation and favourable financing conditions. In contrast, construction investment and government expenditures both remained subdued. The number of employed has been increasing rapidly since the beginning of last year, and employment growth is expected to have exceeded 2 per cent for 2000 as a whole. The unemployment rate has continued to decline and in November fell to 8.8 per cent, the lowest rate since the spring of 1992.

Inflation rates throughout the EU are currently higher than they were a year ago, with the exception of the UK. In the Euro Area, the annual rate of increase in the Harmonised Index of Consumer Prices (HICP) was 2.9 per cent in November, compared to 1.5 per cent a year ago. The current rate substantially exceeds the upper limit of the medium-term target of below 2 per cent set by the ECB. The upsurge in inflation is primarily due to the pronounced rise in import prices resulting from high oil prices and the past depreciation of the euro versus the dollar. There are signs that the higher cost of imports may have begun to feed into the general price level, with core price inflation (the HICP excluding energy, food, alcohol and tobacco)

[2] Full details on developments in individual countries are provided in Chapter IV below.

having crept up to 1.5 per cent in November from 1 per cent a year ago. For the year as a whole, the HICP is expected to have increased by around 2.4 per cent.

2. Short-term projections for the European Union

Although indicators strongly suggest that a cyclical peak was reached in the summer of 2000 and that the European economy is now growing at a slower pace, the slowdown in economic activity is not dramatic. Consumer confidence recovered in December in light of the substantial decline in oil prices and favourable labour market developments. As with industrial confidence, it has fallen only slightly from the high level recorded last summer. The assessment that growth will continue, albeit at a slower pace, is further supported by the EUROFRAME indicator. In line with our model-based forecast, the quarterly growth in Euro Area GDP is projected to remain at 0.7 per cent in the first quarter of this year.

Whilst our forecast suggests that the slowdown in the European economies is likely to be modest, it nonetheless suggests that output growth will be weaker by around 0.3 percentage points in 2001 and 2002 than suggested in the recent forecasts issued by the European Commission and the ECB, even after allowing for the reduction in short-term interest rates that we assume takes place next year. Our forecast for the European Union is summarised in Table 5 and that for the Euro Area in Table 6. Euro Area GDP is expected to rise by between 0.6-0.7 per cent per quarter for most of this year, with the quarterly rate of growth slowing down towards the end of the year. On average, we expect GDP to be 2.8 per cent higher than in 2000. The quarterly paths for GDP growth and inflation are shown in Charts 10 and 11.

A significant temporary stimulus at the start of this year from direct tax cuts in a number of countries will not be sufficient to outweigh a gradual moderation in external demand and the lagged effects of the rise in interest rates in 2000. The stimulus stemming from the depreciation of the euro will also start to fade given the assumption of a gradual reversion towards parity with the dollar by the end of the coming year.[3] The increase in extra-Euro Area exports will thus be substantially lower than in 2000. Domestic demand will also be dampened by the lagged effects of higher oil prices on real incomes as well as by a reduction in inventory levels in the aftermath of weaker final demand. However the propensity to invest is expected to remain high, given the combination of high and still rising capacity utilisation and a reduction in the corporate tax burden. Among the countries in the Euro Area, the only country experiencing faster growth in 2001 will be Greece, where short-term interest rates had to be cut sharply by the end of last year prior to entry into the Euro Area. Growth is expected to remain strong in the UK this year, helped by an expansionary fiscal policy and a weaker effective exchange rate. We expect to see GDP growth of 2.8 per cent in the EU as well as in the Euro Area.

In 2002, GDP growth in both the European Union and the Euro Area will average 2.7 per cent. Domestic demand will continue to be supported by robust growth in disposable incomes and the impact of the recent decline in long-term interest rates will begin to be felt. We also expect short-term interest rates to decline to 4½ per cent in the Euro Area. A moderation of consumer price inflation will also help to support real incomes in the Euro Area.

With output growth remaining comparatively strong and wage moderation expected to persist, employment levels should continue to rise, although at a slower rate than seen last year. Unemployment will continue to decline, although the scope for significant further reductions seems to be increasingly limited in a number of countries such as the Netherlands, Ireland, and the UK. On a standardised basis, the unemployment rate is expected to fall to 7½

[3] The question of what might happen if the euro did not appreciate so much is discussed in Chapter V.

per cent by the end of 2002. In the Euro Area the unemployment rate is expected to have declined to 8 per cent by that time. This would be the lowest rate for more than a decade.

Under our assumptions of an average oil price of $25 and $24 per barrel in 2001 and 2002, and a gradual appreciation of the euro, offset in part by a modest depreciation of sterling and the Swedish krona, inflation in the EU is expected to slow in the forecast horizon. Consumer price inflation as measured by the HICP will average 2.1 per cent this year and 1.6 per cent in 2002. In the Euro Area, inflation is expected to be 2.2 per cent in 2001 and 1.5 per cent in 2002, with headline inflation gradually coming into line with the underlying growth of unit labour costs.

Table 5 The European Union

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	2.7	2.5	3.3	2.8	2.7
Private Consumption	3.1	3.0	2.9	2.8	2.5
Public Consumption	1.2	1.7	1.3	1.8	1.6
Gross Fixed Investment	5.7	5.4	4.4	4.0	4.3
Stockbuilding (chg. as % of GDP)	0.4	-0.2	0.2	-0.1	0.1
Domestic Demand	3.6	3.0	3.1	2.8	2.8
Exports (goods and services)	6.4	4.4	10.7	7.4	6.8
Imports (goods and services)	9.4	6.2	10.1	7.2	7.1
Employment	1.7	1.7	1.8	1.2	1.0
Unemployment Rate (%)	10.0	9.2	8.4	7.9	7.7
Unit Labour Costs	1.2	2.0	1.2	1.5	1.5
Household Real Disposable Income	1.9	2.5	2.2	2.8	2.5
Private Consumption Deflator	1.7	1.3	1.9	2.0	1.6
Harmonised Consumer Price Index	1.3	1.2	2.1	2.1	1.6
Current Account (% of GDP)	0.9	0.3	-0.2	0.0	-0.1
General Govt. Balance (% of GDP)	-1.5	-0.7	0.0	-0.2	0.1
General Govt. Gross Debt (% of GDP)	69.0	67.5	63.9	61.0	58.3

Note: The general government balance numbers do not include the receipts from the sale of 3GMP licences.

Table 6 The Euro Area

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	2.7	2.5	3.4	2.8	2.7
Private Consumption	3.0	2.7	2.6	2.8	2.6
Public Consumption	1.1	1.5	1.4	1.2	1.2
Gross Fixed Investment	4.8	5.2	4.7	3.9	4.3
Stockbuilding (chg. as % of GDP)	0.4	0.0	0.2	-0.1	0.1
Domestic Demand	3.4	3.0	2.9	2.6	2.8
Exports (goods and services)	7.0	4.7	11.2	7.5	7.1
Imports (goods and services)	9.5	6.4	10.3	7.3	7.4
Employment	1.7	2.0	2.1	1.4	1.2
Unemployment Rate (%)	10.9	10.0	9.1	8.6	8.3
Unit Labour Costs	0.4	1.6	1.0	1.5	1.3
Household Real Disposable Income	2.3	2.2	2.1	2.7	2.4
Private Consumption Deflator	1.5	1.2	2.1	2.1	1.6
Harmonised Consumer Price Index	1.1	1.1	2.4	2.2	1.5
Real Effective Exchange Rate	0.6	-4.2	-8.4	3.9	3.0
Current Account (% of GDP)	1.1	0.5	0.0	0.2	0.2
General Govt. Balance (% of GDP)	-2.0	-1.3	-0.8	-0.8	-0.3
General Govt. Gross Debt (% of GDP)	73.0	72.1	69.3	66.5	64.4

Notes: The numbers for the Euro Area are for the original 11 members only and do not include Greece. The general government balance numbers do not include the receipts from the sale of 3GMP licences.

Chart 1. Harmonised Consumer Price Inflation

(year-on-year, percentage change)

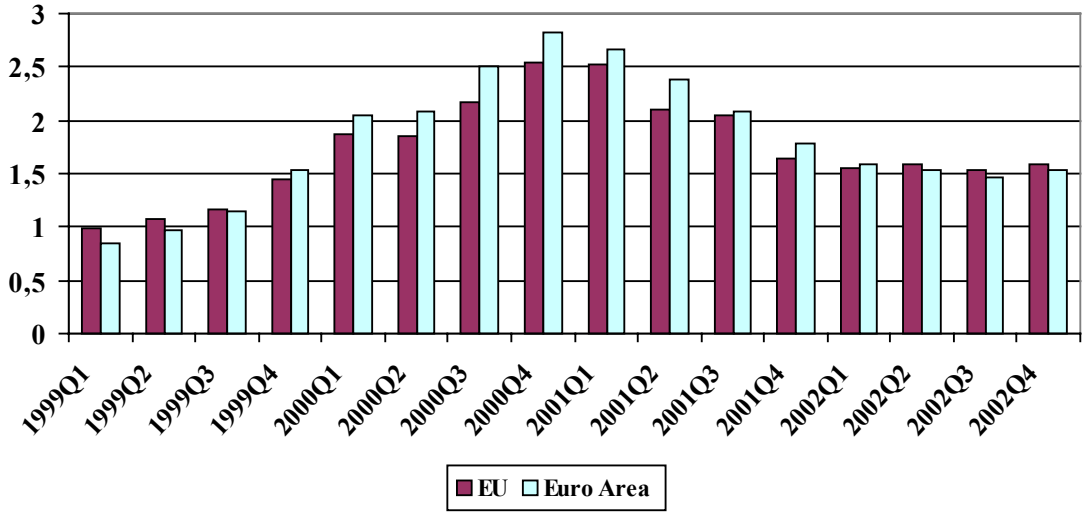
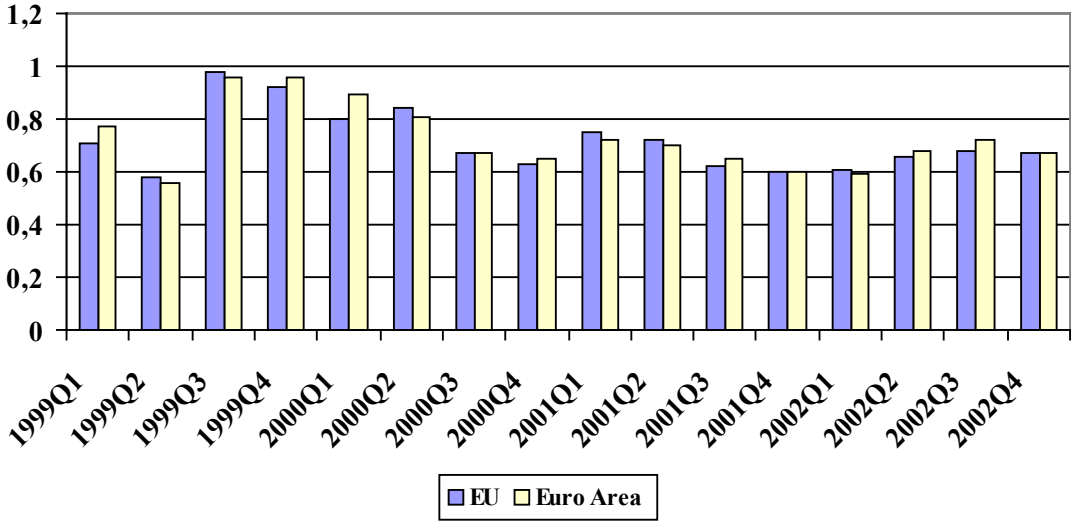


Chart 2. Real GDP Growth

(quarter-on-quarter, percentage change)



Chapter III. Macroeconomic Policies and Convergence in Europe

1. Introduction and Summary

In this chapter we discuss recent and prospective developments in the fiscal and monetary policies of the EU economies. We focus also on recent movements in labour costs and prices and ask whether they provide evidence of greater convergence within Europe.

On fiscal policy we judge that the process of fiscal consolidation appears to have now come to an end. However, prospective budgetary developments do not presently appear out of line with the requirements imposed by the Stability and Growth Pact. Governments now face a number of choices since past efforts to reduce budget deficits have been more successful than expected. Public expenditure can be raised, the tax burden can be lowered or more government debt can be paid off. Most governments, with the notable exception of the UK, appear to be giving priority to lowering the tax burden, even though there are some areas, such as public infrastructure, where more expenditure may be needed.

We judge that short-term real interest rates in the Euro Area are currently at a neutral or slightly restrictive level. But overall monetary conditions may still be accommodating because the euro remains well below its level at the start of monetary union. Given our forecasts for the Euro Area we do not see any need for a further rise in interest rates. There may even be some scope for the ECB to lower interest rates, particularly if external demand weakens considerably or if the euro were to appreciate by more than we assume. In the UK we think that the Bank of England should hold interest rates at their present level unless clearer evidence emerges of a slowdown in domestic demand. A modest, but temporary, rise in interest rates may be merited in Sweden.

We expect wage moderation to continue in the Euro Area. Analysis of the growth of unit labour costs since 1995 suggests that the Euro Area countries have made a lot of progress in controlling wage pressures and domestic inflation since that time. Costs have risen more rapidly in Spain, Italy and the Netherlands than elsewhere, whilst those in Germany have risen more slowly than elsewhere. This should not be taken as a signal of divergence, since it can in part be explained by the need for adjustments in relative costs in the aftermath of movements in the level of nominal exchange rates in the first half of the 1990s. Nonetheless comparatively high national inflation rates cannot persist for ever in a monetary union and structural reforms or fiscal policy may have to be used to help keep inflationary pressures in check.

The convergence process in Europe is not yet complete and differences remain in the levels of output per capita and consumer prices. Hence some divergence in inflation and output growth is desirable and compatible with convergence in levels.

2. Deficit reduction in the EU has been successful

Consolidation of the public budgets has become the most important fiscal policy goal pursued by the EU member states in recent years. This commitment is embedded in the criteria in the Maastricht Treaty and the Stability and Growth Pact. The first of these agreements embedded regulations formulated as the goal of a budget deficit of less than 3 percent of GDP. The target now is a budget ‘close to balance or in surplus’ over the business cycle.

All the member states of the EU have reduced their budget deficits in recent years. This has been achieved through fiscal consolidation helped by favourable economic circumstances such as strong external demand and low interest rates. We estimate that for the EU as a whole the general government achieved a balanced budget last year, compared to a deficit of close

to 5 per cent of GDP in 1995. In the Euro Area we estimate that the general government budget deficit was 0.8 per cent of GDP last year. The general government budget figures in Tables 5 and 6 above and in the country specific discussions in Chapter IV exclude the impact of the sale of UMTS licences. The one-off character of these revenues should not be allowed to distort the picture of the public finances in the EU countries in 2000 and 2001. If they were included the EU countries would have a budget surplus of 1.3 per cent of GDP in 2000 and the Euro Area countries would have a surplus of 0.3 per cent of GDP. Full details on the value of national UMTS receipts are given in Table 7. The improvement in the EU public sector balance in 2000 compared to 1999, excluding mobile phone licence receipts, was primarily due to buoyant economic growth. Fiscal consolidation came to a halt last year in most countries.

Table 7. The Value of UMTS Receipts (per cent of GDP)

	2000	2001
EU	1.3	0.2
Euro Area	1.1	0.2
Austria	0.4	0.0
Belgium	0.0	0.2
Denmark	0.0	0.5
Finland	0.0	0.0
France	0.0	1.1
Germany	2.5	0.0
Greece	0.0	0.0
Ireland	0.0	0.0
Italy	1.2	0.0
Netherlands	0.7	0.0
Portugal	0.4	0.0
Spain	0.1	0.0
Sweden	0.0	0.0
UK	2.4	0.0

Source: European Commission

In the Euro Area total government receipts increased by about two percentage points between 1995 and 1999 to nearly 48 per cent of GDP, helped by discretionary policy measures and the effects of the 'automatic stabilisers' on tax receipts in a growing economy. The share of general government expenditure in GDP declined by about two percentage points to 49 per cent. Declining interest expenditures accounted for almost half of this fall. This prolonged process of fiscal consolidation in the Euro Area and the rest of the EU did not appear to have a marked effect on economic activity, in part because private consumption rose more than might have been anticipated and saving ratios declined considerably. However, the overall stance has to be regarded as essentially restrictive during this period.

All of the EU countries currently have large primary budget surpluses ranging from 1 to 6 per cent of GDP. The primary surplus in the EU as a whole was 3 per cent of GDP on average in 1999. Primary surpluses will clearly result in a continuing decline in the ratio of debt to GDP. This is particularly important for medium term prospects because on average in the European Union the public sector spends nearly 4 per cent of GDP on interest payments, and lower public debt will help reduce the interest burden. In 2000 seven member states are forecast to

have a surplus of more than 1 per cent of GDP[4], three countries to reach balance or be only slightly in deficit[5] and five countries to have a deficit between 1-1½ per cent of GDP[6]. All of the countries are therefore probably in a position where even a marked slowdown of economic growth will not lead to an increase of public deficits beyond the 3 per cent of GDP floor in the Stability and Growth Pact.

In the EU the ratio of general government expenditure to GDP is expected to decline from 47.3 per cent of GDP in 2000 to 45.5 per cent of GDP next year. This reflects the effects of automatic stabilisers on spending, further discretionary cuts in expenditure and declining interest payments. The tax burden is expected to ease, with general government revenues forecast to fall from 47.3 per cent of GDP to 45.6 per cent over the same period. Several countries have begun to implement previously announced tax cuts, including France, Germany, Italy and the Netherlands.

In some smaller countries such as the Netherlands and Ireland with above-average inflation rates and tightening labour markets, further direct income tax cuts may be inappropriate at present unless accompanied by offsetting fiscal measures. In these countries it might be appropriate to have a restrictive fiscal policy to help stabilise the economy. It is our judgement that in the EU as a whole the fiscal policy stance after years of restriction appears to be becoming looser in 2001, with the forecast in Table 5 showing a move back into a small budgetary deficit of 0.2 per cent of GDP this year. However prospective budgetary developments do not appear to be out of line with the requirements imposed by the Stability and Growth Pact. They also imply further reductions in the ratio of general government debt to GDP, which will reach 58 per cent of GDP on average for the EU and 64 per cent for the Euro Area by the end of 2002.

3 Stability and Convergence Programmes: further improvements in public finances

Every year each EU country is required to produce a stability or convergence programme, presenting the main fiscal decisions and budgetary choices on the path to medium term (2001-2004 for the latest programmes) objectives for budgetary positions close to balance or in surplus. The Commission considers whether the budget-policy strategy and the economic targets continue to meet the requirements of the Stability Pact and the Broad Economic Policy Guidelines.

At the time of writing, eleven updated stability or convergence programmes were available[7]. The budgetary targets presented in last year's programmes were easily met, with economic conditions proving more favourable than expected. According to the new programmes, all of the member countries plan to eliminate their fiscal deficits by 2004. Whether these plans can be realised depends to a large extent on cyclical developments in Europe. The programmes assume relatively robust economic growth well into the year 2004, with the programmes of Greece, France and Italy assuming average rates of GDP growth well above those of the past few years. Past experience also suggests that it may be optimistic to assume a sustained period without a major cyclical downturn. The aggregate picture for the European Union and

[4] The UK, Sweden, Finland, Luxembourg, Denmark, Ireland, The Netherlands. Details may be found in Chapter IV.

[5] Belgium, Spain and Greece. Details may be found in Chapter IV and the Annex tables.

[6] France, Italy, Austria, Germany and Portugal. Details may be found in Chapter IV and the Annex tables.

[7] Austria, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Sweden and the United Kingdom have produced an updated 2000 stability or convergence programme (published during the last quarter of 2000 or in January 2001).

the Euro Area is summarised in Table 8. Our forecast indicates that the combined targets of the member states can be achieved, at least until 2002.

Table 8. The General Government Fiscal Position According to Forecasts and the Stability and Convergence Programmes

(per cent of GDP)

	1999	2000	2001	2002	2003	2004
European Union						
EUROFRAME Forecast						
GDP Growth	2.5	3.3	2.8	2.7		
Financial Balance	-0.7	0.0	-0.2	0.1		
Debt	67.5	63.9	61.0	58.3		
Revenue	47.3	47.3	46.1	45.6		
Expenditure	48.0	47.3	46.3	45.5		
SCP Plans 2000						
GDP Growth	2.4	3.2	3.0	2.7	2.7	2.7
Financial Balance	– 1.2	– 0.6	– 0.5	– 0.1	0.2	0.5
SCP Plans 1999						
GDP Growth	2.2	2.7	2.4	2.4	2.4	
Financial Balance	– 1.0	– 0.8	– 0.6	– 0.3	0.0	
Euro Area						
EUROFRAME Forecast						
GDP Growth	2.5	3.4	2.8	2.7		
Financial Balance	-1.3	-0.8	-0.8	-0.3		
Debt	72.1	69.3	66.5	64.4		
Revenue	47.8	47.9	46.7	46.2		
Expenditure	49.1	48.7	47.5	46.5		
SCP Plans 2000						
GDP Growth	2.4	3.2	3.1	2.8	2.8	2.8
Financial Balance	– 1.3	– 0.8	– 0.7	– 0.3	0.0	0.4
SCP Plans 1999						
GDP Growth	2.2	2.8	2.5	2.5	2.5	
Financial Balance	– 1.4	– 1.1	– 0.8	– 0.6	– 0.2	

Note: Excluding proceeds from the auction of third-generation mobile phone licences

Sources: The aggregate figures for the European Union and the Euro Area under the 1999 and 2000 Stability and Convergence Programmes are calculated by OFCE. Austria, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Sweden and the United Kingdom have produced an updated 2000 stability or convergence programme (published during the last term of 2000 or in January 2001). The numbers for Spain, Belgium, Portugal and Luxembourg are from the 1999 stability programmes.

If there were a marked slowdown several countries might again start to run fiscal deficits, although all of them have now reached a position which should suffice to ensure that their deficits do not rise above 3 per cent of GDP. It would be reasonable to allow some

deterioration of the deficit during any downturn as this should help to prevent undue cyclical volatility.

Governments can choose to use unexpectedly strong receipts to increase public expenditure, reduce the tax burden or pay off government debt. The main priorities presented in the 2000 updates of the Stability and Convergence Programmes do not diverge much from those of 1999. Securing the sustainability of the public finances by maintaining or obtaining fiscal surpluses is the first priority presented in every programme. Slower growth of public consumption and a decline in the tax burden are also priorities that appear in nearly every country programme. Measures to reduce unemployment and reform of the social security systems are emphasised as important medium-term issues, along with the structural improvements to tax, education/training, pensions and labour market policies discussed in Chapter VII of this report.

The need for a lower tax burden has become a more important priority in the 2000 stability programmes, with emphasis continuing to shift from the need for a further rapid reduction of budget deficit to the need for a reduction in the size of the overall public sector, implying a reduction in the share of both expenditures and revenues in GDP. Reductions in taxation in 2001 have been announced or introduced in every European country apart from Austria, where additional measures are judged to be necessary to consolidate the public finances.

In all EU countries apart from the UK, public expenditures are also planned to fall as a percentage of GDP (see Annex Tables), largely due to continued declines in unemployment and interest payments. There is at present little desire to expand public expenditure significantly, even though there may be some areas such as infrastructure where greater expenditure is necessary.

4 No further tightening of monetary policy: Monetary policy in the Euro Area

The European Central Bank successively tightened its monetary policy stance from November 1999. The main refinancing rate is presently 4.75 per cent, and thus 2¼ percentage points above the rate in October 1999. Three-month money market rates, which reached 5 per cent in the autumn of last year, have dropped back to around 4¾ per cent, indicating that expectations of a further tightening of monetary policy have dissipated. The yields on 10-year government bonds had started to rise at the beginning of 1999. They have risen by nearly 1½ percentage points since that time, but have also declined somewhat since autumn of 1999. The yield spread between government bonds and short-term interest rates has narrowed substantially in recent months and is currently around 25 basis points.

Given the successive and pronounced monetary tightening, monetary policy is certainly less expansionary then it was at the end of 1999. It is, however, less clear whether monetary policy has now adopted a neutral or even restrictive stance. One way of determining the stance of monetary policy is to compare the level of real interest rates with the average level over a longer period. We employ German long-term averages as benchmarks for indicating the neutrality of monetary policy. We feel this is necessary given the short time span in which the Euro Area has been in existence and differences in exchange rate depreciation expectations across member states in the past. The existence of different risk premia on the government bonds of Euro Area member states, especially before the formation of the Euro Area, strengthens our case.

Chart 3: Interest rates and yield spread in the Euro Area Jan. 1997 – Dec. 2000

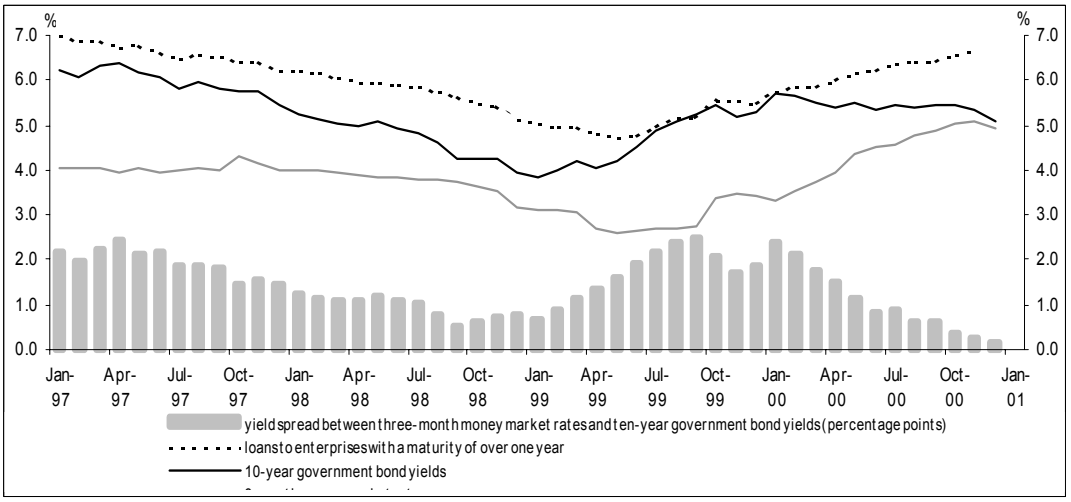


Chart 4: M3 growth and the ECB's reference value *(annual percent changes)*

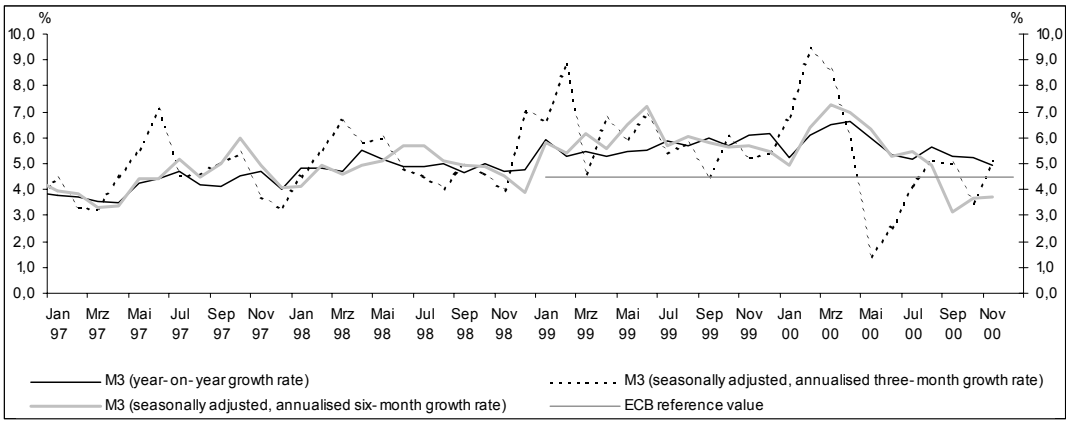
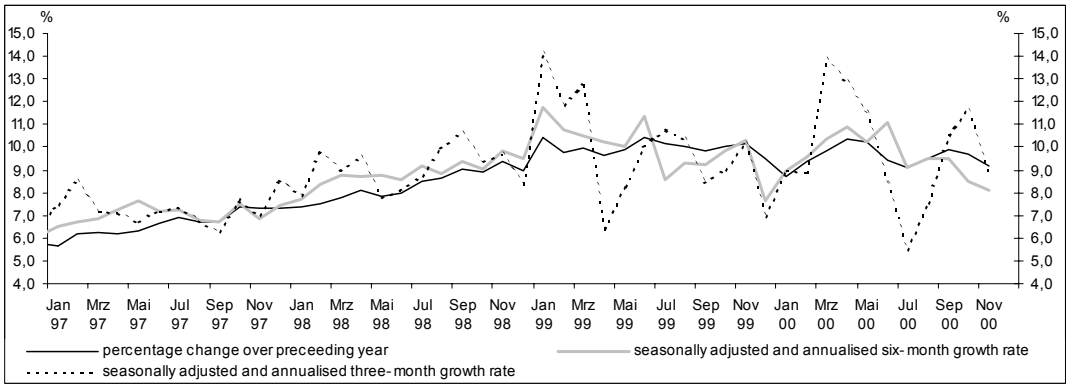


Chart 5: Increase in loans to the private sector *(annual percent changes)*



Sources: ECB, own calculations

Depending on the time period used, our calculations suggest that short-term real interest rates in the Euro Area are now at a neutral or slightly restrictive level.[8] Long term government bond yields are currently near their neutral level.[9] The yield spread is very small and is less than half the long-term average.[10] One interpretation of the low yield spread is that market participants expect lower short-term interest rates in the future, implying an expected slowdown in economic activity and hence that the current monetary policy stance is restrictive.

Another indicator of the monetary policy stance is monetary growth. The annual increase in M3 has slowed in recent months. After the surge to an annualised, seasonally-adjusted, monthly growth rate of 11 per cent in February and March 2000, monthly rates of growth have decreased markedly. Seasonally adjusted and annualised, the rate of change from May until November amounted to 3.7 per cent and the annual percentage change in November was down to 4.9 per cent. Despite this slowdown, the annual percentage change of M3 has continuously exceeded the ECB's reference value for money growth since the introduction of the euro (see Chart 4). The question therefore arises as to whether the past two years have seen a build up of excess liquidity that may pose a risk to future price stability.

Depending on the starting point used, the level of M3 currently exceeds the level implied by the ECB's reference value by 1.1 (starting point: mid-1999) to 2.4 (starting point: December 1998) per cent. However, a number of factors mitigate the potential effect of this higher M3 stock on future price developments.

- There was a jump in the level of M3 in January 1999 of 1.5 per cent (19.6 per cent at an annualised rate) that may have partly reflected a one-time adjustment to the new institutional arrangements.
- The ECB is experiencing statistical problems in distinguishing between resident and non-resident holders of money market funds. Since balance of payments statistics suggest that non-Euro Area residents have increased their holdings of money market funds substantially, this statistical inadequacy probably leads to an overstatement of growth in the level of M3.
- Given the existence of a negative output gap prior to Stage Three of European Monetary Union, money growth should exceed the ECB's reference value as the gap closes unless there is a corresponding undershooting of the implicit inflation target.
- Over the last decade the velocity of money has decreased more rapidly than is assumed in the ECB's calculations of the reference value for monetary growth. In the 1990s the velocity of money declined by between 1 and 1½ per cent annually, whereas the ECB assumes a reduction in velocity of between ½ and 1 per cent per annum, based on trends observed since 1980 and on money demand functions.

In contrast to money growth and interest rates, the exchange rate is still helping to support economic activity. Between January 1999 and December 2000 the euro declined by 23 per

[8] Using the HICP excluding energy, food, tobacco and alcohol to deflate 3-month money market rates, the real rate stood at 3.43 per cent in December 2000. The German average, calculated on the basis of CPI and Frankfurt money market rates was 3.03 per cent between 1975 and 1999, 3.53 per cent between 1985 and 1999 and 3.39 per cent between 1990 and 1999.

[9] The real yield on 10-year government bonds was 3.6 per cent in December, when using longer-term inflation expectations of 1.5 per cent that reflect the ECB's implicit inflation target. The German time period average, using a 25-month centred average of CPI growth as an indicator of expected inflation, was 4.28 per cent between 1975 and 1999, 4.63 per cent between 1985 and 1999 and 4.28 per cent between 1990 and 1999.

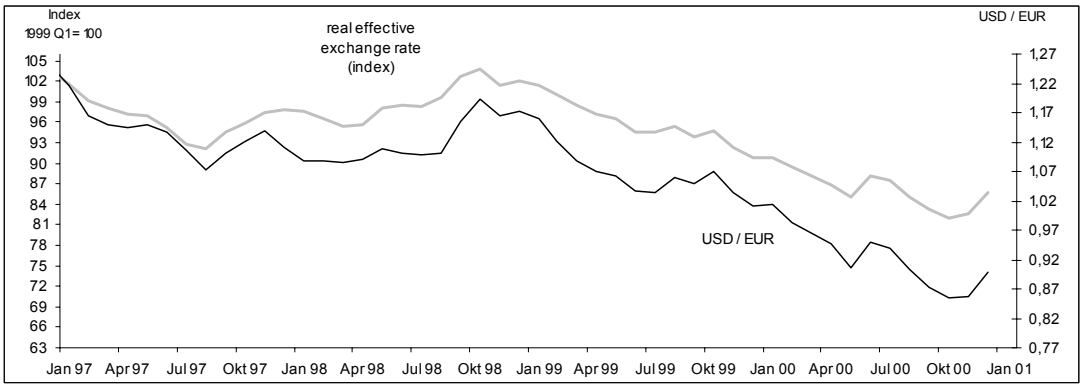
[10] It is around ¼ percentage points at present whilst the corresponding yield spread in Germany was 0.98 per cent between 1975 and 1999, 1.11 per cent between 1985 and 1999 and 0.92 per cent between 1990 and 1999.

cent against the US dollar and its real effective exchange rate fell by 15 per cent. During the year 2000 the depreciation against the US dollar amounted to 11 per cent, with the real effective exchange rate declining by 6 per cent.[11] Although the euro has recently appreciated against the dollar – by 11 per cent between the end of October 2000 and the end of December 2000 – we would judge that overall monetary conditions are in all likelihood still accommodating.

In 2000 the ECB increased interest rates in response to higher than expected GDP growth, rising oil prices and the depreciation of the euro. Growth rates in excess of trend growth, stimulated by the lower real effective exchange rate of the euro, were seen as a risk to future price stability. The combination of high demand and high capacity utilisation allows enterprises to raise prices more rapidly than they otherwise could, and tighter labour markets may increase wage pressure. In accordance with its two-pillar strategy, in raising interest rates in 2000 the ECB was therefore responding to expected inflationary pressures. These result from high levels of capacity utilisation and growth rates in excess of that which might be considered sustainable, as well as from the effects of tight labour markets in some countries on potential inflationary pressures. In the medium term such pressures will be mirrored in monetary growth.

Given strong economic growth, higher import prices resulting from both higher oil prices and a lower external value of the euro can exacerbate these risks. However, adverse external supply shocks, such as the rise in oil prices up to last autumn, do not warrant a policy response as long as there is no discernible danger that the one-time price level increase is transformed into higher inflation fuelled by a price-wage spiral. Wage developments are currently moderate in the Euro Area and there are as yet few signs of higher wage rates in response to the oil price shock. Wage moderation is the key difference between the current situation and those following the two oil price shocks in the 1970s.

Chart 6. Real Effective and USD/EUR Exchange Rates (monthly averages)



Source: ECB, Deutsche Bundesbank, own calculations

Given our forecast for economic growth and inflation in 2001 and 2002, we do not see any need for a further tightening of monetary policy in the Euro Area. There may even be some room for monetary easing, particularly if external demand weakens considerably. The recent slowdown in growth and the appreciation of the euro, along with the current fall in oil prices

[11] Calculated using ECB data in the ECB *Monthly Bulletin*; the real effective exchange is based on a broad group of countries and the consumer price index. Weighting systems differ between this rate and that shown in our tables, but differences in the magnitude of the fall are not noticeable.

can all be expected to reduce the risk of failing to ensure future price stability. Nonetheless, we expect the ECB to keep interest rates unchanged until early 2002 and then to lower the minimum bid rate on the main refinancing operations by 25 basis points. Clearly the ECB should act more rapidly and strongly in cutting rates if the Euro Area economy were to slow down more than we anticipate or the euro were to appreciate by more than we forecast.

5 Monetary policy in the European Union countries outside the Euro Area

Monetary developments outside the Euro Area mirror those inside, although the effects of exchange rate changes may differ. Policy settings outside the Euro Area countries can on the whole be seen as designed to keep inflation low in those countries, and there appear to be no excess pressures present. UK interest rates rose from 5 per cent in the summer of 1999 to 6 per cent by the spring of last year. Since that time they have remained unchanged. Although output growth has been at or above trend levels, inflationary pressures have yet to develop. The high level of the Sterling exchange rate has helped to hold down import costs and labour market reforms have helped to ease capacity constraints. Whilst domestic demand remains robust, helped by strong growth of public expenditure, we expect that it would be wise to continue to hold interest rates at their current level. If productivity growth accelerates as we anticipate, inflation should be kept in check.

Interest rates in Denmark rose after the 'no' vote on Euro Area membership, and this will have tightened monetary conditions, but the differential with rates in the Euro Area has since declined. We expect it to decline to around 25 basis points by the latter half of this year. With domestic demand having strengthened last year and signs that the labour market may have begun to tighten we expect the Swedish Riksbank to raise interest rates to around 5 per cent over the course of 2001.

6 Low wage pressure in the EU

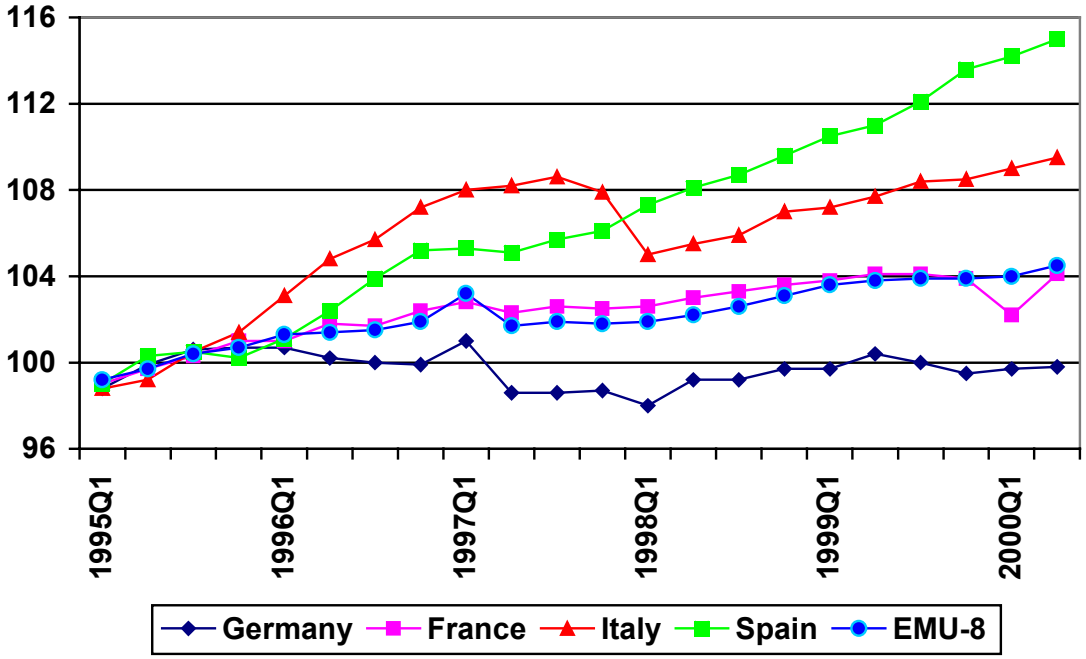
There are several reasons why it is important to monitor wage developments in the European Union. Firstly, they provide a signal of potential inflationary dangers. The ECB and other central banks all want up to date and comprehensive information about aggregate wage developments in the Euro Area and the rest of the EU. Secondly, movements in relative wages caused by differences in wage settlements across economies may have adverse effects on the competitiveness of producers in different countries.

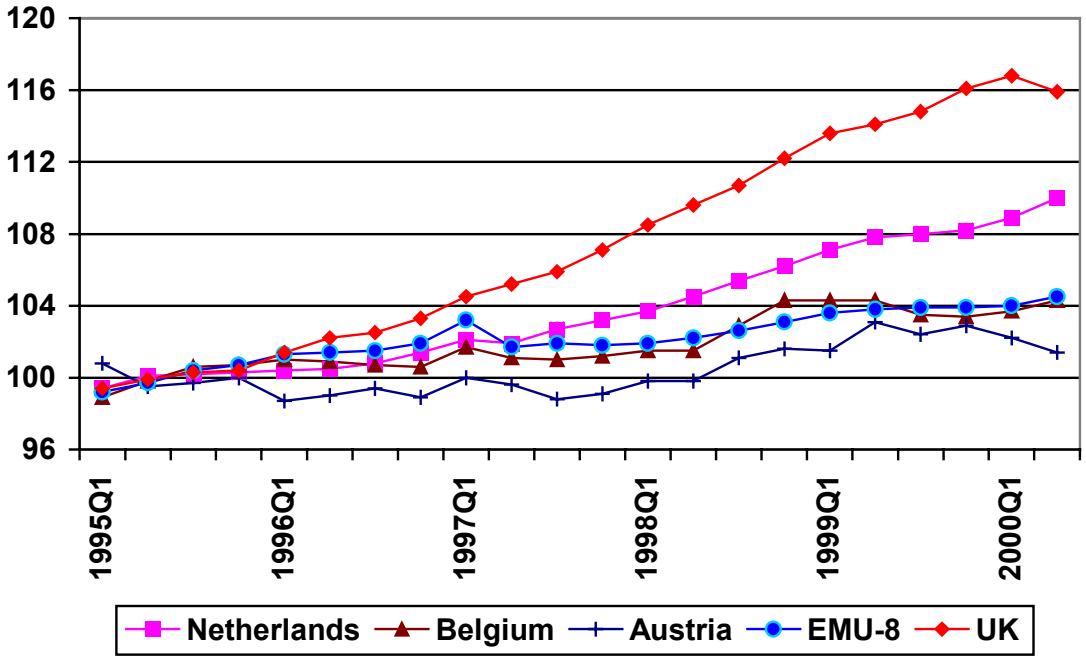
In order to obtain comparable information about wage developments across countries it is best to focus on unit labour costs. The method of calculation is similar for all countries, as it uses data for the total compensation of employees and the total volume of output derived from the respective national accounts. Nominal wage developments are not very meaningful by themselves. What matters is the impact on costs induced by wage movements, and this can be assessed only after movements in productivity are taken into account. One problem is that some EU countries do not have readily available national accounts data on a quarterly basis. Thus we concentrate on eight Euro Area countries, which comprise more than 90 per cent of the total Euro Area economy, plus the UK.

We focus on the growth, rather than the level, of unit labour costs measured in national currencies, and thus consider only domestic wage pressures. Exchange rate movements do, of course, matter when judging competitiveness and it may even be the case that present wage movements are determined by past exchange rate movements. It is possible for wages in one country to grow faster than in another whilst the economy adjusts to a new equilibrium if this just reflects a past undervaluation of the currency. In case of a country with an overvalued

currency the contrary may happen and wages should be expected to grow less rapidly than elsewhere.

Chart 7. Whole Economy Unit Labour Costs (National Currencies, 1995=100.0)





Source: OECD, Federal Statistical Office and DIW calculations.

These factors have to be kept in mind when interpreting differences in the rate of growth of unit labour costs across European countries. They may be part of an adjustment process and

thus sustainable. However, in the Euro Area, with fixed nominal exchange rates, movements in national unit labour costs should converge in the long run. A country with high wage settlements relative to productivity growth either faces a deterioration of its external trade balance and rising unemployment or it adjusts to bring wage settlements back into in line with the other Euro Area countries. If it does so promptly, the adverse effects of a temporary appreciation in relative costs could even be avoided.

Weighted unit labour costs in the eight Euro Area countries were rising at about 2 per cent per annum in the mid-1990s, much lower than in the US at that time. In subsequent years growth moderated further, and there was even a temporary decline in 1997. Thus in recent years there have not been strong wage pressures which could endanger price stability within the Euro Area. On the contrary, moderate wage movements have helped to restrain price inflation by compensating for other inflationary factors such as the temporary depreciation of the euro and higher energy costs. In our forecast this moderation is expected to continue, with unit labour costs forecast to rise by 1½ per cent in the Euro Area this year and 1.3 per cent in 2002. In contrast to the experience from earlier oil price shocks, we do not expect to see higher wage demands to compensate for higher energy prices. In the UK unit labour costs have until last year risen much more rapidly than in any of the Euro Area countries, with the exception of Spain. This reflects strong wage growth and weak growth in labour productivity.

It is important to look at individual Euro Area countries to assess whether national wage settlements are similar or not. We use national unit labour costs relative to the Euro Area average. Chart 7 shows the movements in national costs over time, along with the weighted Euro Area data. Costs in Germany, and to a lesser extent Austria, have risen much more slowly than those in the Euro Area as a whole. Unit costs in the Euro Area excluding Germany have risen by about 8 per cent more than in Germany since 1995. This may reflect currency misalignments in the mid-1990s. However German export performance has been strong throughout the period, and if German cost restraint continues we would expect that Germany will experience a further improvement in export performance.

There are three countries in which unit costs have risen much more rapidly than in the overall Euro Area - Spain, Italy, and to a lesser extent, the Netherlands. Unit costs have risen by between 10-15 per cent since 1995. The fact that Spanish export performance has been strong suggests that the faster growth of labour costs in Spain can be seen in part as a reflection of currency undervaluation in the second half of the 1990s. Whilst it cannot continue indefinitely, faster growth of costs in Spain may be sustainable for some time. Similar consideration may apply to the Netherlands given the long period of wage restraint since the early 1980s. In Italy the continuation of a relative increase in unit labour costs may constitute a problem in the medium term.

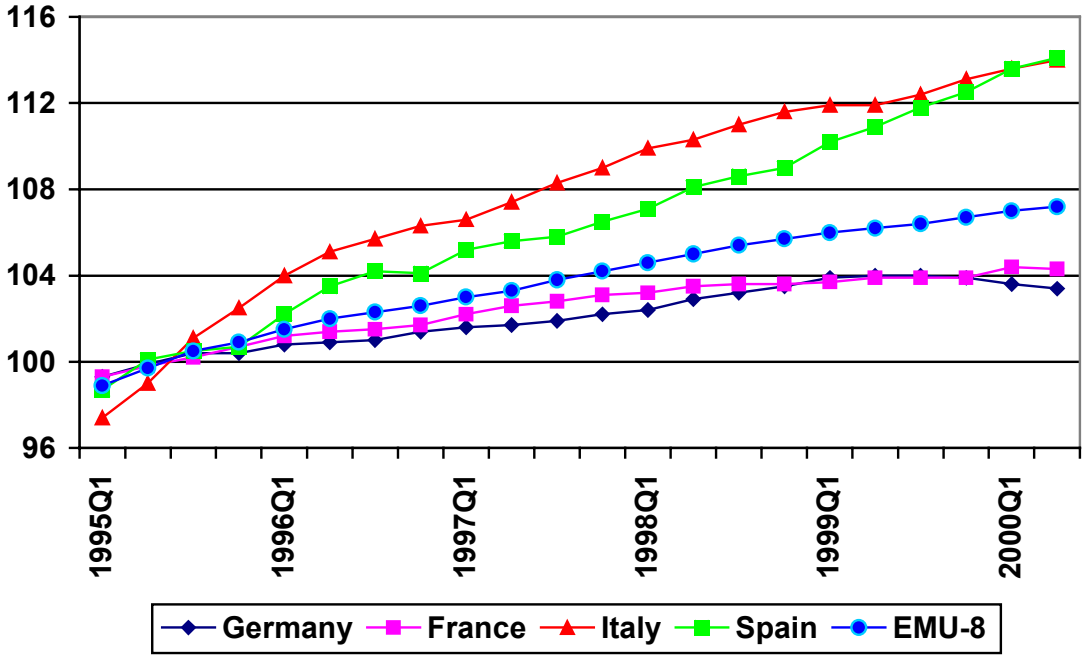
The impact of labour costs on domestic price levels can be evaluated using the GDP deflator. Movements in consumer prices will also reflect variations in the price of imported goods and services and fluctuations in nominal exchange rates.[12] Data limitations are basically the same as those for unit labour costs and so we focus on the same group of countries as before.

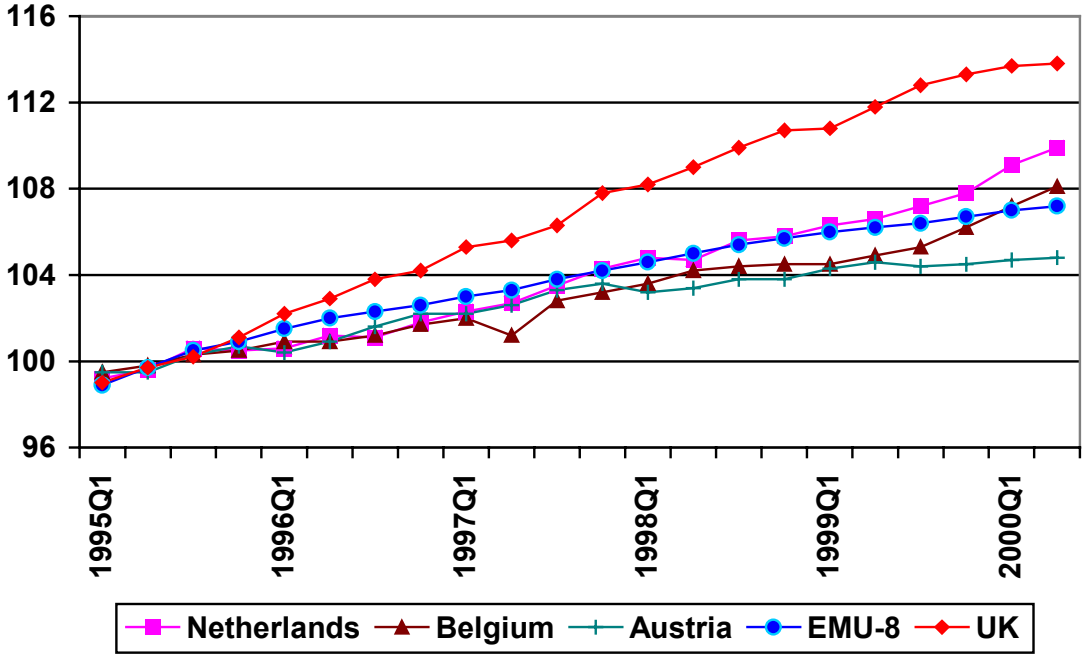
In the Euro Area the GDP deflator rose by around 3½ per cent in 1996. In following year inflation declined rapidly and prices fell in the second half of 1997 in the aftermath of a decline in unit labour costs. Since 1998 inflation has been low, and in the early part of last year was around 1 per cent. The GDP deflator for the individual countries and the constructed measure for the Euro Area are shown in Chart 8. The pattern is similar to that for unit labour

[12] Movements in export and import prices may also affect the measured GDP deflator since it is typically constructed from expenditure-based estimates of GDP.

costs, with Spain, Italy and the UK experiencing the most rapid increases over time. If the upward pressure on costs from wages is low, then domestic inflation rates should also be low as long as there is no "profit inflation". The increase in the GDP deflator has been lower in Germany than elsewhere.

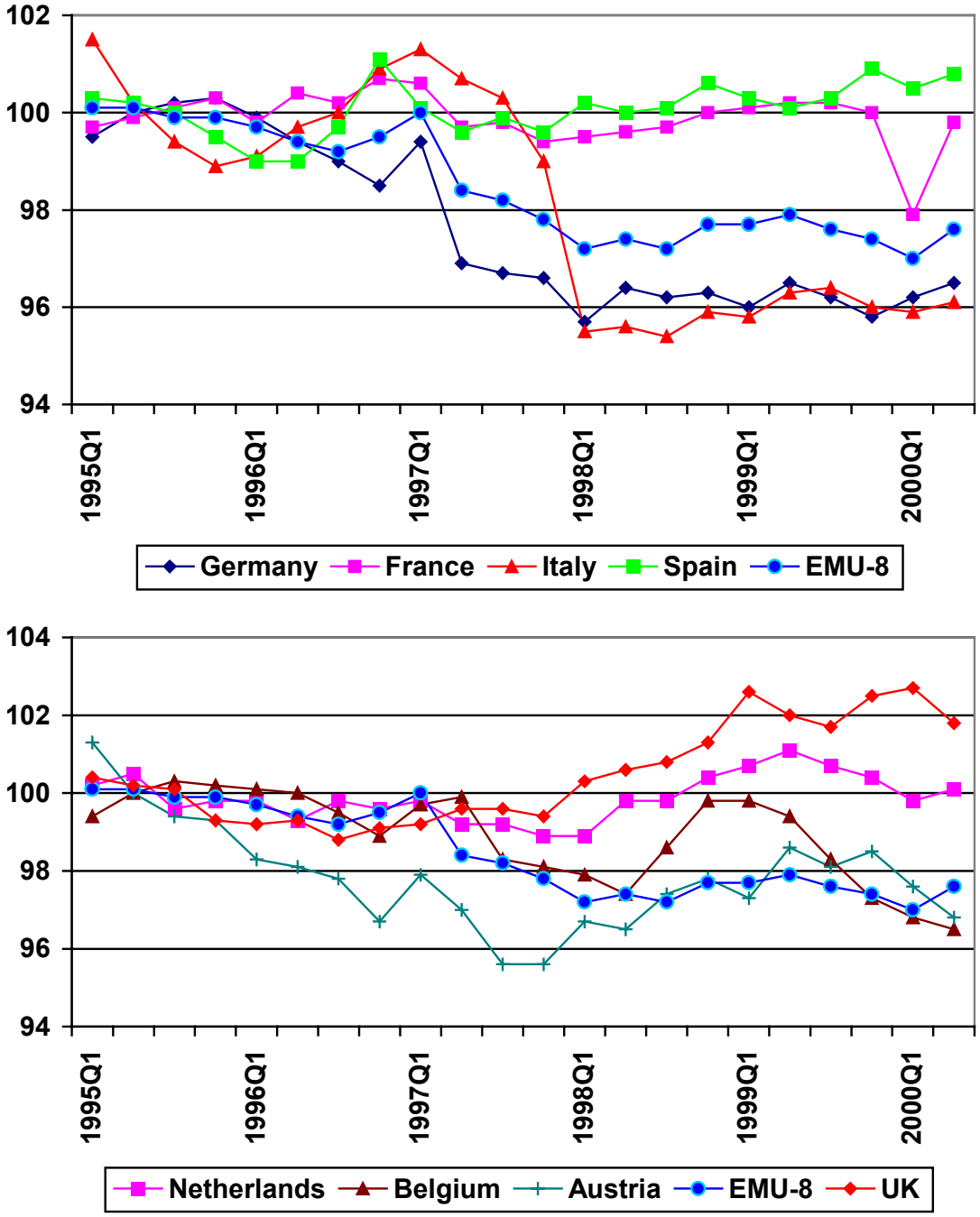
Chart 8. GDP Deflators (National Currencies, 1995=100.0)





Source: OECD, Federal Statistical Office and DIW calculations.

Chart 9. Real Unit Labour Costs (National Currencies, 1995=100.0)



Source: OECD, Federal Statistical Office and DIW calculations.

The data on unit labour costs and the GDP deflator can be combined to reveal information about movements in the profit share in national economies. Dividing unit labour costs by the GDP deflator (real unit labour costs) gives the share of labour in national income. If all wage cost pressures are reflected in prices then real costs will not change. If real costs decline over time, then the share of profits in national income has risen. For a given capital-output ratio, profit margins and profitability must thus have risen. Our data suggest that on average the

profit share has risen slightly in the Euro Area since 1995, whilst in the UK it is a bit lower than five years ago.

Looking at the individual countries, Finland has experienced the largest improvement in profitability. There has also been an increase in Italy, Austria, Belgium and Germany, as shown in Chart 9.

In the Finnish economy unit labour costs rose less than the Euro Area average whereas the GDP deflator was only slightly above other EMU countries. Hence the improvement in relative profitability can be seen to result from moderate wage settlements. A similar picture is apparent for Germany and Austria. Wage restraint was stronger in these countries, but domestic inflation rates were significantly lower than in Finland. But in Italy, and to some extent Belgium, it is relatively high inflation rather than relative wage restraint that has raised relative profitability. In Spain and the Netherlands profitability remained almost unchanged compared to 1995.

Taking these results together, it appears that the Euro Area countries have made a lot of progress in controlling wage pressures and domestic inflation during the past five years. Some countries in the Euro Area with relatively high rates of growth in unit labour costs have also enjoyed strong growth and good export performance. Spain and the Netherlands are notable examples. Thus this must be seen as part of the adjustment process that would be expected to result from an undervalued currency, and does not imply a significant lack of competitiveness. In Italy the relatively high rates of growth of unit labour costs could lead to some deterioration in competitiveness in the medium term.

7 Convergence and divergence of inflation in Europe

Factors underlying inflation differentials within a monetary union

At the end of last year the Euro Area economies had inflation rates that varied between 1 and 5 per cent. This might be seen as worrying for the ECB, as countries may be diverging in a way that cannot be contained because of the lack of national monetary policy instruments in the economies with high inflation rates. These problems might induce the ECB to lose its focus on its primary objective, medium term price stability in the Euro Area. We do not expect this to be the case, as current divergences are not such as to cause excessive concerns.

As discussed in the preceding section there are situations in which inflation differentials may not be only sustainable but, to a given extent, even desirable and so may not be a concern for the policy makers. Differences of prices, both in levels and in growth rates, are not necessarily a problem even within an integrated area if, for instance, higher inflation rates are experienced by countries with lower price levels. Indeed, inflation differentials may reflect not only different cyclical positions but also structural differences among countries that could take longer to be reduced. Nevertheless, within a monetary union, persistent inflation differentials could easily undermine the competitiveness of high inflation countries, weaken growth and push up their unemployment. Hence in some circumstances the single monetary policy may be too tight for some countries and too loose for others. Policy-makers in high inflation countries may have to face this problem with a tighter fiscal policy and/or structural reforms designed to increase labour market flexibility and improve productivity.

- Inflation differentials may arise for short periods of time because of ‘noise’ in price indices, and thus in inflation rates. For instance, patterns of consumption are not the same in all countries, implying that the weights used to obtain the national HICP differ. Hence, even if the inflation rate were the same at product level, headline inflation could differ across countries for some time. In addition, differences in the timing of indirect taxes and changes

in the prices administered by the government may affect inflation differentials over the very short run, as may different seasonal factors influencing the prices of unprocessed food.

- A common currency will make price comparisons more transparent, and this may lead to a reduction of inflation differentials. However this process may be slow, as euro notes will not circulate until 2002. The effect of the common currency on the level of prices will depend on the degree of competition in each market and barriers to increased competition embedded in national tax and regulatory structures.
- Conjunctural and structural factors may also influence inflation differentials in the short to medium term. Cyclical influences in inflation may vary across countries, with for instance the EMU entry level for the real effective exchange rate affecting differentials. In addition an asymmetric reaction to external shocks across the Euro Area could lead to inflation divergence until the shocks are absorbed.

Medium term structural factors can also influence relative inflation levels. Price levels and output per person hour are related, with lower productivity countries having lower wages and hence lower costs in service provision and a lower overall price level. We would expect that productivity levels tend to converge in Europe and hence we would expect that price levels tend also to converge. We would expect to observe this in particular for Greece, Spain and Portugal, whose per capita GDP is well below the EU average. Higher productivity growth will mean higher wage growth. As productivity tends to be low in non-tradable sectors (typically services), any spillover of these wage increases from tradable to non-tradable sectors results in a relatively high average rate of consumer price inflation in the low income countries.

Some empirical evidence

In terms of per-capita GDP and price levels, there are still differences between the European countries, as can be seen in Table 9, which reports the indexes of per-capita GDP in the fifteen countries[13], population and prices at the start of EMU. In 1999 the highest per capita income at constant prices (Denmark) was three times the lowest (Portugal), well above the dispersion of the per capita income in the main regions of the United States. Nevertheless, nine out of fifteen countries are within 25 percentage points either side of the average, which is similar to the differences observed amongst the main US regions. The differences in national consumer price levels measured using current market exchange rates at the start of the EMU are lower; the highest level (in Denmark) was less than twice the lowest (in Portugal). Not surprisingly, the ranking of the countries is almost the same, supporting the usual finding of a positive correlation between the level of prices and the level of the development of a country.

Charts 10 and 11 show the standard deviation, as a measure of dispersion, of GDP annual growth rates and inflation for the fifteen EU countries. The variability of the standard deviation is large, as it assigns equal weight to countries independently of their relative size. However despite these factors, there is a discernible downward trend in the dispersion of GDP growth rates. This is expected to continue over the next two years. The dispersion of consumer price inflation rates has, on the contrary, risen since the second half of 1999.

[13] Per-capita GDP is not measured using PPPs in this table because productivity differences are of particular interest in examining real convergence. Some care is required in drawing comparisons across countries as the picture can vary considerably according to whether data at PPPs or market exchange rates are used. This applies particularly to the data on per capita GDP in this table.

Table 9. GDP and the Price Level in the European Union

	Per-capita GDP[(1)]	Population[(2)]	Price levels[(3)]
Austria	109.16	8079	97
Belgium	118.25	10203	92
Denmark	148.76	5301	117
Finland	120.98	5153	105
France	115.69	58847	101
Germany	125.99	82024	100
Greece	50.42	10522	75
Ireland	95.31	3719	88
Italy	80.29	57588	83
Luxembourg	146.04	426	90
Netherlands	120.27	15706	94
Portugal	49.36	9968	68
Spain	68.20	39371	75
Sweden	118.86	8851	107
United Kingdom	83.93	59128	99
EMU	103.60	291086	-
EU-15	100.00	374888	-

Notes: (1) 1999 estimates using Eurostat data for real GDP at 1995 prices and 1995 exchange rates. (EU=100).

(2) Thousands of persons in 1998; source Eurostat.

(3) January 1999 in D-Marks, Germany=100; source: OECD Main Economic Indicators

Chart 10. Dispersion of GDP Growth Rates in the EU

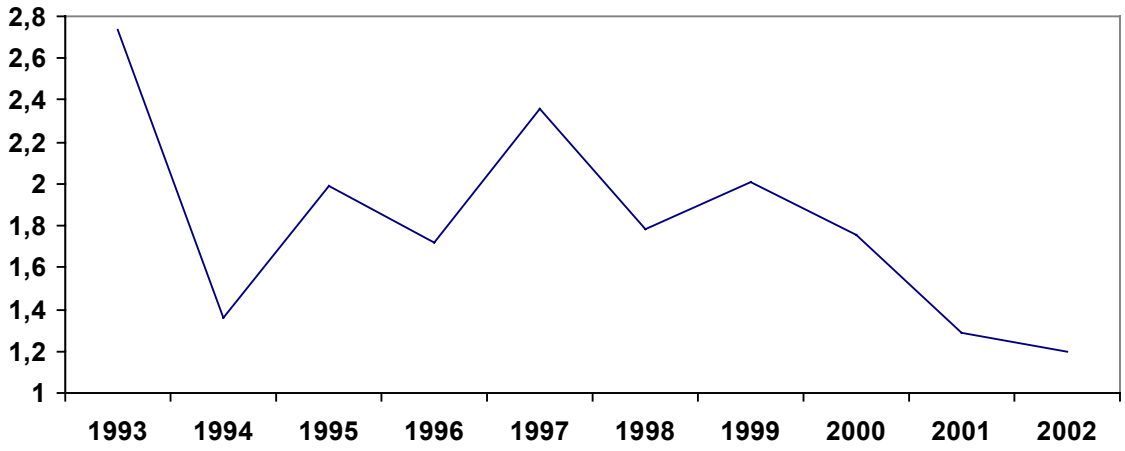
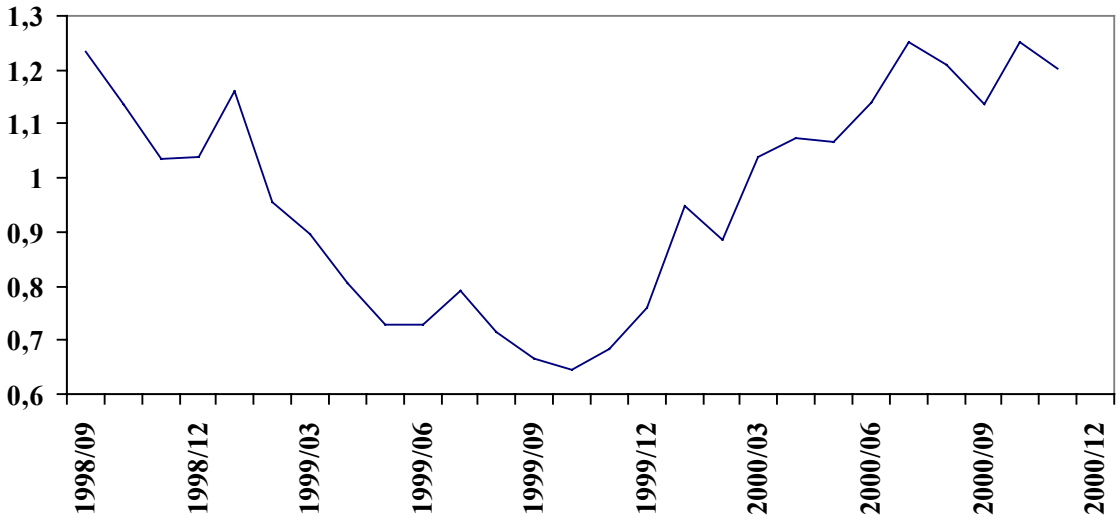


Chart 11. Dispersion of HICP Inflation in the EU



The standard deviation of annual GDP growth and HICP inflation in the EU.
Source: EUROFRAME database; GDP numbers for 2000-2002 use our forecasts.

Within EMU there is evidence that the increasing inflation seen in recent months is associated with an increased dispersion. The small countries[14] have been the primary source of changes in dispersion. Charts 12a-b show that since the second half of 1999 inflation divergence has increased between the small countries but not the big ones. The convergence of the GDP growth rate appears stronger for the big four countries and more than compensates for the higher dispersion among the small countries.

[14] As the convergence of inflation could be a particular problem for the Euro Area, the following analysis concentrates on the member countries. Austria, Belgium, Finland, Ireland, Luxembourg, The Netherlands, and Portugal are included in the small countries group whereas Germany, France, Italy and Spain are the big countries.

The pattern of inflation convergence must be judged in the light of the potential structural inflation differential in countries with low incomes and rapid productivity growth. In the short run it is not possible to disentangle whether this structural differential is the cause of the observed differences. However, it is probable that higher inflation in Belgium, Finland, the Netherlands, and possibly Italy, is due to other factors.

Chart 12a: GDP Dispersion in the Euro Area

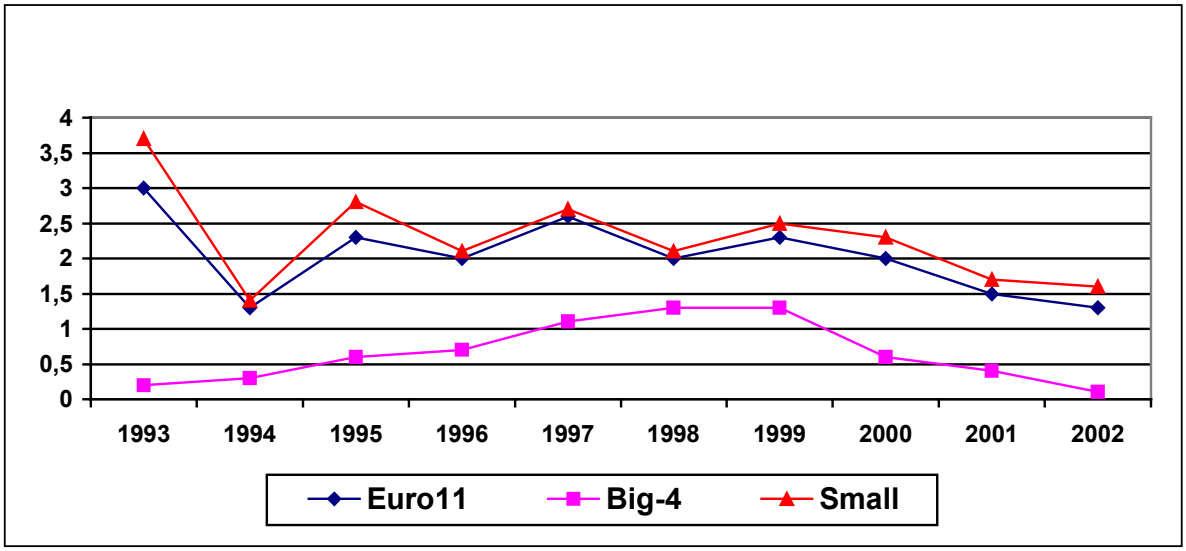
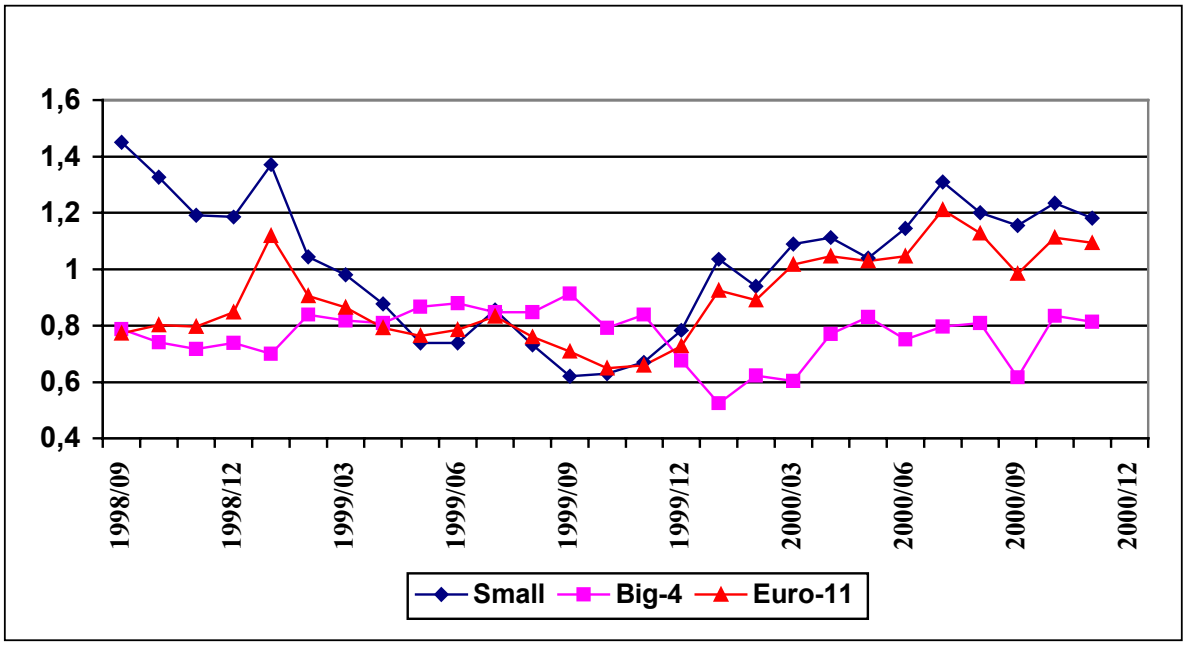


Chart 12b: Dispersion of HICP inflation in EMU



The Standard Deviation of Annual GDP Growth and HICP Inflation in the Euro Area
Source: EUROFRAME database; GDP numbers for 2000 and 2001 use our forecasts.

Analysis of prices for individual products indicates that the recent observed aggregate inflation divergence is not due to the oil price shock. The divergence of inflation rates for traded goods has fallen since the start of EMU, whereas those for services show a widespread divergence from the beginning of last year, supporting the hypothesis of structural differentials. Thus we need to understand the reasons of the higher inflation in Finland, Belgium, the Netherlands and Ireland.

Italian inflation has recently been stable, helped by the beneficial effects from the liberalisation of telecommunication services. Inflation differentials with respect to the other main countries have been declining, due to the acceleration of French and German inflation. For the smaller countries with high per capita GDP, higher inflation is associated with higher growth and is hence potentially a short-term risk. Nevertheless, specific national features have to be taken into account. For instance, we do not consider the inflation in Finland worrying as growth is driven by net exports. The industrial transformation towards high technology products, especially in the telecommunications sector, together with the liberalisation of the sector itself, have contributed to the significant progress achieved. For Ireland and the Netherlands some doubts remain on the sustainability of growth without the risk of inflation acceleration, given the tight condition of their labour markets.

In October 1999 the ECB acknowledged: "The current size of the inflation differentials within the euro area does not appear particularly large or unusual"[15]. Since that time the dispersion of the inflation among the big four EMU countries has not increased, despite the oil shock. However, divergence has occurred between the small countries.

[15] See ECB *Monthly Bulletin*, October 1999, page 36.

Chapter IV. Developments in Individual Countries

The individual country forecasts reported in this Chapter were produced by the EUROFRAME group of Institutes using the National Institute Global Econometric Model, NiGEM. The report is the result of a co-ordinated programme of work by the Institutes. The views reflect a consensus of those of the Institutes, inevitably with compromises. The assumptions on which the country forecasts are based are discussed in Chapters I and II above. They are based on common interest rate and exchange rate assumptions and a common external (to the EU environment) and developments in each country affect the outcomes in other countries. Hence the forecasts can be described as coherent and internally consistent.

1 Austria

The strong upturn in the Austrian business cycle is being held back after only one year by the effects of weaker international activity and a moderation in domestic demand. Economic growth is projected to slow to 2.4 per cent this year from 3.4 per cent last year. Growth could pick up again in 2002, when the slowdown in the international business cycle is expected to be coming to an end and the fiscal stance in Austria is likely to be a little less restrictive.

The government plans to achieve a balanced budget by 2002 through increases in indirect taxes, personal income tax and corporate taxes, as well as cuts in social transfers, such as pensions and unemployment benefits. These measures are likely to bring down general government net borrowing from 1½ percent of GDP in 2000 to close to balance by 2002. They will, however, restrict the growth of household disposable incomes and private consumption. We expect the growth of household expenditure to ease from 2.7 per cent in 2000 to about 2 per cent in 2001 and 2002, with a small decline in the savings ratio.

Harmonised consumer price inflation is expected to have peaked in 2000 at a rate of 2.0 per cent. With the inflationary impact of energy prices set to fade and growth of unit labour costs likely to remain moderate, the annual average rate of inflation is set to ease to 1.4 per cent by next year. The slower pace of output growth will moderate the rate of employment growth this year, but the standardised unemployment rate may still fall a little further and average 3.2 per cent this year and next.

2 Belgium

Output growth accelerated during 1999 and the early part of 2000. However recent indicators of industrial activity suggest that the growth rate has now begun to ease. We expect that GDP growth will have peaked at 3.9 per cent in 2000 and moderate to just under 3 per cent this year and next.

Domestic demand strengthened markedly last year. Fixed investment remained strong, while the growth of private consumption rose to an estimated 2.9 per cent from 1.8 per cent in 1999. Employment growth has also been buoyant, with the standardised unemployment rate having declined from 9.6 per cent at the beginning of 1998 to an average 8.5 per cent last year. Reductions in social security costs in 2000 and 2001, along with measures to boost youth employment introduced in April 2000 (the Rosetta plan) are continuing to help stimulate job creation. The unemployment rate is projected to decline further to under 8 per cent in 2002. This should help the government to achieve the first budgetary surplus for fifty years in 2001.

Developments in the Belgian economy continue to be closely linked to the pattern of global trade. The growth of export volumes accelerated from 5 per cent in 1999 to an estimated 12

per cent in 2000, giving a strong impulse to the Belgian economy. It is expected to ease to 7¾ per cent this year and next. Intermediate goods are a significant proportion of Belgian merchandise exports, and thus the prospects for exports are closely linked to the state of the economic cycle elsewhere in Europe.

The openness of the Belgian economy also means that movements in import prices can have a significant impact on consumer prices. In November the harmonised index of consumer prices was 3.7 per cent higher than a year earlier, even though there has been little change in unit labour costs over the same period. We expect inflation to moderate quickly and average 1.7 per cent in 2001 and 1.3 per cent in 2002, helped by the recovery in the euro and the lower level of oil prices.

3 Denmark

After five years of robust growth, economic activity in Denmark slowed in 1999 due to fiscal tightening from the 'Whitsun package'. Private consumption was particularly subdued, with little growth in real disposable incomes. A similar picture was apparent last year, with private consumption estimated to have risen by just 0.3 per cent. However corporate expenditure appears to have strengthened considerably, in part due to strong external demand. Exports continued to rise at a healthy pace last year, helped by the strength of demand in Germany and Sweden, which are Denmark's two most important trading partners. Gross fixed capital formation rose sharply in the first half of 2000, helped by construction repairs following winter storms. For the year as a whole we expect to see growth of around 9 per cent in fixed investment, helping to boost real GDP growth to just under 3 percent.

Real GDP growth is forecast to moderate this year, mainly due to a slowdown in gross fixed investment growth from last year's exceptional pace. Recently published leading indicators point to a slight acceleration in private consumption growth this year. Consumer confidence rose in October and November 2000, after falling in September in response to uncertainties about the referendum over membership of the Euro Area. A further decline in the savings ratio along with a gradual pick-up in the rate of growth of real household disposable incomes during the course of this year is expected to boost private consumption. However the slower rate of growth in Denmark's export markets embedded in this forecast will be reflected in a moderation in export growth this year. Overall, we expect to see GDP growth of close to 2¼ per cent in 2001.

A further moderation in external demand, as output growth slows in many Euro Area economies and slower fixed investment growth is expected to offset a further acceleration in private consumption growth in 2002. However, the gradual easing of monetary policy should act to support growth in 2002 and beyond.

Despite the Danish rejection of membership of monetary union we expect that the krone will continue to track movements in the euro, with the short-term interest rate differential between Denmark and the Euro Area expected to close gradually over the course of this year. Fiscal policy is expected to become slightly expansionary this year, particularly at the local government level, in line with the Fiscal Act for 2001. The general government budget will nevertheless remain well in surplus during the forecast period, bringing further sizeable reductions in the gross debt stock.

4 Finland

Finland's GDP grew by 4.2 per cent in 1999. It is forecast to have risen by 5.7 per cent last year and to rise by 4.5 per cent in 2001. The volume of exported goods and services is projected to have risen significantly in 2000. Exports from the electronics industry have

continued to grow rapidly and exports from other sectors started to recover following the cyclical upturn in the other EU countries, Asia and Russia. Finland is relatively specialised in the production of electronics equipment, which accounts for 28 per cent of merchandise exports and 23 per cent of industrial output. Export growth may slow in 2001, with some industries experiencing capacity constraints and others facing a moderation in external demand.

Private consumption is expected to rise by 3.9 per cent in 2001, in line with the estimated growth in 2000. Income tax cuts and faster growth in real wages will provide a significant boost to real disposable incomes this year. Total gross fixed investment is forecast to rise by 6 per cent in 2001 after growth of 8 per cent in 2000. Residential construction has been growing rapidly since 1997 after having declined significantly in the early 1990s. We expect the growth rate to decelerate gradually during the next few years, as the stock of buildings has now been replenished. Higher interest rates may also subdue housing investment. But equipment investment is likely to remain strong, with the manufacturing sector experiencing capacity shortages.

High oil prices and the weak euro caused inflation to accelerate last year. As the contribution of these factors weakens in 2001, the inflation rate can be brought back down to about 2 per cent. A further improvement is expected in labour market conditions, with the unemployment rate projected to average 9 per cent in 2001, the lowest rate since 1991.

In 2002 GDP growth is expected to moderate to around 4 per cent. The gradual slowing of global economic growth will act to further slow the growth of export volumes, both directly and indirectly, via weaker export demand in Europe and Asia. In particular, the electronics sector will find it difficult to sustain current rapid production growth, and capacity shortages may also persist in paper manufacturing. The inflation rate will remain under 2 per cent as the euro continues to appreciate and oil prices remain stable, and the unemployment rate is expected to decline to under 8 per cent by the end of next year.

5 France

GDP growth in France was above the average for the EU in 1998 and 1999. We estimate that output rose by 3.1 per cent last year, just below the rate achieved in the EU as a whole. Activity is expected to continue to expand rapidly this year, with GDP forecast to rise by a further 2.9 per cent. Industrial production is buoyant, consumer confidence is high and unemployment is declining rapidly. Growth may however slow to 2.6 per cent in 2002 as the temporary stimulus from income tax reductions starts to fade and external demand moderates.

There are some signs that inflationary pressures may have begun to build up. Capacity utilisation is historically high, inventories are at a low level, delivery lags have begun to lengthen and some industries are reporting labour shortages. However we do not expect to see a significant acceleration in inflation over the coming year, with harmonised consumer price inflation expected to average 2 per cent this year after averaging 1.8 per cent last year. Continued strong growth in corporate fixed investment should help to stabilise capacity utilisation, and labour shortages are present only in a small number of sectors, such as construction. In the industrial sector the proportion of firms with labour shortages is lower than at the end of the 1980s. The fall in unemployment has also been concentrated amongst the low-skilled where there was previously considerable excess supply. In 2002, inflation should drop back to 1.3 per cent.

The recent reductions in working time have actually helped to keep labour costs in check because of public subsidies. Some firms have negotiated reforms to working time in which the effective working time has been reduced by less than 4 hours a week. Productivity gains

have been made and wage increases have been modest. The shortening of the working week is assumed to raise employment by 200-250,000 within three years. The number of employees in employment has risen substantially since 1998, with payrolls expected to have risen further by between 500-550,000 both last year and this. Low wage increases, past cuts in social contributions and incentives to undertake part time employment have all contributed to this rapid growth. Total employment has also been raised by the public sector scheme to stimulate youth employment. In all, total employment is projected to rise by 1.9 per cent this year after growing to 2.4 per cent in 2000.

Strong employment growth helped to boost disposable incomes last year. These were also be raised by the reductions in both direct and indirect taxes. This will still be the case this year, although the reforms are partially offset by slower growth in social security expenditure. The rate of growth of private consumption is forecast to accelerate from 2.4 per cent in 2000 to 2.9 per cent in 2001.

The pressure on consumer prices induced by higher oil prices has been eased temporarily by the recent reduction in mineral oil taxes introduced by the government. Additional tax reductions worth 56 billion francs are also planned this year. The pace of fiscal consolidation will thus moderate, as the government has chosen to distribute the unexpectedly strong revenues it has recently received rather than to pay off debt. The general government budget deficit is projected to remain roughly unchanged this year and to fall from 1.3 per cent of GDP to 1 per cent of GDP in 2002.

6 Germany

GDP is projected to have risen by 3 per cent last year, which is the fastest rate of growth seen since the unification boom of 1991. Growth has been led by the external sector which has benefited from strong external demand and the depreciation of the euro. The volume of exported goods and services is projected to have risen by 11.3 per cent, after growth of just 4.6 per cent in 1999.

For the year as a whole, domestic demand has continued to grow at the same pace as in 1999, although the quarterly rate of growth slowed in the course of the year. The growth of private consumption eased in 2000, partly as a result of slower growth in real disposable incomes, whereas public consumption recovered after declining in 1999. Business investment remained comparatively buoyant, reflecting improvements in sales and profits expectations as well as the high rate of capacity utilisation, which in the manufacturing sector rose to its highest level since 1990. But housing investment continues to be subdued, reflecting higher interest rates and a weak housing market, particularly in East Germany. The upturn in production has raised the rate of employment growth and allowed the unemployment rate to decline further[16]. However, the improvement in the labour market has continued to be confined largely to West Germany. In East Germany structural adjustment is still going on, with a need to reduce excess capacity in the construction sector.

In the second half of 2000 the deterioration of the economic environment in the wake of rising oil prices and tighter monetary policy led to a pronounced decline in consumer and

[16] The overall employment picture changed considerably last year following a major revision to the labour market statistics to take better account of the large and increasing number of marginal part-time employees. On a national accounts basis, the number of employed was revised upwards by almost 2¼ million in the first quarter of 2000, with the increase in employment from the cyclical nadir in spring 1997 revised to 1.2 million compared to only 390,000 according to the old figures. Hours worked were also revised upwards substantially, but to a lesser degree than the number of employed, and labour productivity was thus been revised downwards. The new data are incorporated in our forecast numbers.

business sentiment and a slowdown in economic activity which is likely to continue into this year. Gross fixed investment will continue to be adversely affected by the downturn in construction activity in East Germany, which is not expected to come to an end until the latter part of 2001. However fiscal policy will be expansionary this year, with tax cuts due to be implemented that amount to 1.1 per cent of GDP and are only partly offset by slower growth in expenditure and lower depreciation allowances. In total the net fiscal stimulus is likely to be 0.4 per cent of GDP. In addition, export growth is expected to remain reasonably strong, at 7.2 per cent, despite some moderation in external demand.

Against this background, it is expected that in the first half of this year growth in real GDP will continue to be substantial before slowing down to an annualised rate of growth of around 2 per cent in the second half. For the year as a whole, GDP is expected to rise by 2.4 per cent. In 2002, economic activity will gradually gain momentum again reflecting the improved world economic environment, lower oil prices and increased German competitiveness within the Euro Area. Employment growth is expected to moderate over the forecasting horizon.

With the effects of higher oil prices and the weakness of the euro beginning to fade, harmonised consumer price inflation is forecast to slow to 1.6 per cent and 1.4 per cent in 2001 and 2002, respectively, after averaging 2.1 per cent last year. The rate of growth of unit labour costs is forecast to remain low at 0.4 per cent in 2001 and 0.8 per cent in 2002

7 Greece

In January 2001 Greece joined the Euro Area. Recent years have seen a marked improvement in economic performance, with GDP estimated to have risen by 4.1 per cent in 2000. Inflation differentials with the rest of Europe have continued to narrow, and the general government budget deficit has been reduced to less than 1 per cent of GDP.

However it is going to be very difficult to hold inflation down in the short-term. Interest rates were reduced by over 4 percentage points last year in the run-up to entry into monetary union. We expect that on average short term interest rates will be 2½ percentage points lower this year than in 2000. Fiscal policy is not expected to be tightened significantly, and there is a possibility of some easing if electoral pledges are to be met. But greater exchange rate stability and the moderation in oil prices should help to restrain inflation, and significant wage pressures are unlikely with the unemployment rate forecast to be still above 10 per cent this year and 9¾ per cent next year. The opening up of the telecommunications and energy markets, which previously benefited from a derogation granted by the European Commission, could also help to reduce inflationary pressures. Harmonised consumer price inflation is expected to average 3.2 per cent in 2001, some 0.3 percentage points higher than in 2000.

Growth is forecast to remain strong, led by business and public sector fixed investment. Entry into the Euro Area has helped to boost business confidence and the moderate collective wage agreement for this year should help to sustain profitability. The improving economic climate has also been reflected in consumer confidence; private consumption is expected to grow by more than 3 per cent a year both in 2001 and 2002. GDP growth is expected to accelerate this year to 4.2 per cent and remain robust at 3.7 per cent in 2002, when continued acceleration in domestic demand may be more than offset next year by rising import volumes.

8 Ireland

In 1999 GDP grew by 9.8 percent. We expect that growth will have remained close to this rate this year, but may slow to 7½ per cent in 2001 and 7 per cent in 2002. The surge in Irish output has been underpinned by improvements in the supply capacity of the economy, and pulled along by strong external demand growth helped by the sustained weakness of the euro.

Strong growth of fixed investment has increased productive capacity, especially in foreign-owned manufacturing firms. The supply of labour has been growing by almost 4 per cent a year over the last three years, and has been significantly augmented by net inward migration. With the unemployment rate having now fallen under 4 per cent, some 7 percentage points lower than in 1995-6, there are clear signs of tightness in the labour market.

The Irish real exchange rate was probably undervalued on the formation of the Euro Area. This has underpinned growth, but also contributed to the rising inflationary pressures that have been seen recently, as has the overall openness of the economy to non-Euro Area trade. Harmonised consumer price inflation is forecast to average 4.1 per cent this year after rising by 5.4 per cent in 2000. Capacity constraints are likely to place further upward pressure on wages and prices. The original National Pay Agreement for 2001-2 has had to be restructured in the face of higher than expected price inflation. Whilst falling import prices may help to keep consumer price inflation in check, unit labour costs are forecast to rise by 5 per cent this year and next.

The only tool available to the Irish government to reduce these inflationary pressures is fiscal policy, but it is too early to be confident that this will prove successful. The government has been running a budget surplus, even adjusted for cyclically strong receipts, and announced a package of tax cuts in the December Budget. These may be unwise in the current situation.

9 Italy

The cyclical upturn in Italy gained considerable momentum in the first half of last year, helped by strong domestic and external demand. GDP is expected to have risen by 2.7 per cent in 2000, which would be the fastest rate of growth since 1995. Net exports are expected to have contributed 0.3 percentage points to GDP growth last year, after reducing growth by 1¼ and 1 percentage points in 1998 and 1999 respectively.

There are now signs that economic conditions in Italy have moved closer to those in the wider Euro Area. In November the harmonised consumer price inflation rate of 2.9 per cent in Italy was the same as the rate in the aggregate Euro Area. In recent months consumer price inflation has been higher than expected, and this could have some effect on wage bargains over the course of 2001. But recently negotiated wage contracts suggest that any rise in earnings and unit labour costs should be modest, and harmonised consumer price inflation is forecast to average 2.3 per cent this year. Employment is also expected to continue to rise strongly this year.

Fiscal policy is to be relaxed this year, which will partly offset the lagged effects of the oil shock on incomes and the gradual downturn in export market growth. The tax reductions should help to support disposable incomes, allowing private consumption growth to rise to 2.3 per cent this year. The income and corporation tax cuts proposed by the government in the 2001 Budget Bill may mean that the general government budget deficit will fall only to 1.2 per cent of GDP this year, compared to a deficit of 1 per cent planned in the Stability programme.

In 2002 GDP growth is expected to rebound to 2.7 per cent. Domestic demand will benefit from a sharp reduction in inflation to 1.6 per cent, a rising propensity to invest and the return towards a less restrictive policy stance. This will allow the unemployment rate to fall further to an average 9.4 per cent, some 2 percentage points lower than in 1999.

A period of improved economic conditions offers an opportunity for Italy to undertake further structural reforms. These are needed to help deal with issues such as high youth unemployment, low female participation in the labour force, regional economic imbalances

and a lack of competition in many product markets. Although steps to promote market forces have been taken in public utilities and some sheltered services, many sectors have yet to be subject to reforms. The persistent differential in core inflation between Italy and the Euro Area can be reduced temporarily by the promotion of greater product market competition as this is likely to reduce price-cost mark-ups and hence the price level.

10 The Netherlands

GDP growth is expected to slow to 3.3 per cent this year and 3 per cent in 2002 after having risen by an estimated 4.2 per cent last year. Strong production gains in recent years were largely based on increasing consumption, fuelled by rapidly rising employment and wealth effects from surging share and property prices. This year household real disposable incomes are expected to rise 4½ per cent, mainly due to the introduction of the new tax system. The tax shock will temporarily raise the savings ratio of households, postponing extra spending partly into 2002, whereas wealth effects on consumption are bound to weaken. Private consumption is expected to rise by 4 per cent this year and by 3.6 per cent next year. Strong output growth and tightening labour markets also induced an investment spree over the last four years, with problems in recruiting labour encouraging firms to raise the capital intensity of production. However slower growth of profits may help to ease investment growth to between 3.5-4 per cent. The moderation of external demand and the forecasted real appreciation of the euro is bound to slow down export growth as well.

Employment rose by an average 3 per cent per annum in the latter half of the 1990s. Growth slowed to 2 per cent in 2000, with tight labour markets forcing employers to raise productivity. Employment growth is forecast to decelerate further to 1.2 per cent by 2002, which could imply a small rise in the unemployment rate next year, albeit from a very low level. The long-planned tax reform took effect at the beginning of this year. Direct taxes have been lowered, offset in part by a rise in VAT-rates from 17.5 per cent to 19 per cent. The rise in indirect taxes is likely to lead to a significant, but temporary, acceleration of consumer price inflation in the current year.

11 Portugal

Over the past seven years, Portuguese output growth has been faster than in the rest of the EU. The first signs of a slow down in domestic demand appeared last year. GDP growth rose by just 0.2 per cent in the second quarter to a level 2.6 per cent higher than a year earlier, with a marked slowdown in the rate of growth of private consumption. Business survey indicators for the manufacturing sector have become slightly more optimistic since last summer and the rate of output growth now appears to be close to estimates of the long-term potential rate. GDP growth is forecast to stabilise at just under 3 per cent this year and next.

In 2001 and 2002 we expect investment to remain the main engine of growth, rising by 5¼ and 3½ per cent respectively. With the growth of domestic demand remaining strong at around 3½ per cent this year and 4 per cent in 2002, consumer price inflation is expected to accelerate slightly this year to average 3 per cent. Harmonised consumer price inflation is expected to be around 1 percentage point above that in the Euro Area both this year and next. Export growth is expected to moderate as world demand slows, whilst import growth is anticipated to remain strong in line with domestic demand.

Employment grew by 1.8 per cent over the year to the third quarter of 2000, pushing the unemployment rate down to an average of 4.1 per cent over the first three-quarters of the year. As the Portuguese economy approaches full capacity, employment growth is expected to slow down, with the unemployment rate averaging 4 per cent this year and next. The fiscal

position has improved steadily over the past four years, although by less than might have been expected given the sustained growth in output. Rapid growth in tax revenues from improved tax collection was partially offset by faster than planned growth in public expenditures last year. Overall, we estimate that the general government budget deficit declined to 1.3 per cent of GDP in 2000 and will drop to under 1 per cent of GDP this year, broadly in line with the targets outlined in the Stability and Growth Programme.

12 Spain

Spanish GDP is expected to have grown by around 4 per cent in 2000 for the fourth year in succession. The gradual easing in the rate of growth of domestic demand has been more than compensated for by the acceleration of growth in exports, linked to the weakness of the euro. The volume of exported goods and services is projected to have risen by 10.7 per cent last year, after growth of 6.6 per cent in 1999. In contrast, the growth rate of import volumes has moderated a little as private consumption growth has eased. Growth in investment spending began to gradually abate in the second half of last year in the face of higher financing costs. Fixed investment growth is likely to have fallen to 6 per cent in 2000, considerably lower than in the previous two years.

Economic growth is expected to slow in 2001. Export growth is expected to moderate to 9 per cent in 2001 given the appreciation of the euro and a moderation in external demand. Slower export growth, tighter monetary conditions and somewhat weaker consumer spending will also dampen investment during the course of this year[17]. As a result GDP is forecast to grow by 3.1 per cent in 2001 and 2.5 per cent in 2002

The main concern for the Spanish economy continues to be price inflation, which remains high, although energy price inflation appears to have peaked for the time being. The underlying rate of consumer price inflation continues to accelerate and the inflation differential between Spain and the rest of the Euro Area rose to 1.2 per cent last November. It remains possible that the high level of wage indexation in Spain could lead to a modest wage-price spiral, pushing up the rate of inflation even further.

We expect the unemployment rate to have remained slightly above 14 per cent in 2000. Although this is still high relative to the European average, the remarkable success of successive labour market reforms has meant that unemployment has now fallen for six full years from a peak of 24.4 per cent in the second quarter of 1994. Employment growth is likely to fall from around 4½ per cent this year to an average of around 2 per cent in the next two years, with the unemployment rate averaging 14 per cent over the next two years.

We expect the final general government deficit to have been 0.3 per cent of GDP in 2000, which is in line with the latest official target from the Spanish government. For 2001, the government aims to achieve a balanced budget. We believe this objective can be achieved given surging tax revenues linked to the current period of strong growth, but the structural budget deficit has still not been fully eradicated and this budget target may not be sustainable if growth moderates as we expect in 2002.

13 Sweden

In recent years the Swedish economy has grown more rapidly than the long-term trend rate of growth of productive potential, helping to close the negative output gap that opened up in the

[17] The profile of private sector investment with a slowdown in the first half of 2000 and an expected acceleration in the second means that a substantial slowdown of investment activity during the course of 2001 is not reflected in the year-on-year growth rate.

early 1990s. GDP growth has accelerated to almost 4 per cent in recent years, an annual rate achieved only twice during the past two decades. Economic policy has not been unduly restrictive. Interest rates have remained low and taxes have been reduced. There was a decline in public consumption in 2000, but this has not had any overall effect on domestic demand as it reflects statistical revisions, whereby the Swedish church has been moved to the household sector.

Output growth is expected to slow from an estimated 3.7 per cent last year to 3.2 per cent in 2001 and 2.8 per cent next year. Although this will moderate the growth of employment, further falls in the unemployment rate appear likely, with the standardised rate projected to average 5.7 per cent both this year and next. There are already some signs that the pace of fixed investment has begun to slow. Profits in the important ICT sector have weakened. A gradual moderation of wealth effects is also expected to help moderate private consumption despite further direct tax reductions. Export growth is also likely to slow, with signs of capacity constraints in some sectors.

Sweden's situation outside EMU has so far been rather easy and without major strains. The repo rate of the Riksbank has been lower than that of the ECB and the inflation rate is around 1 percentage point lower than in the Euro Area. This was helped by the appreciation of the krona against the Euro in the first half of 2000, which has since been reversed. We expect that monetary policy will be tightened over the coming year, with short-term rates rising to 5 per cent by the latter half of 2001. This will help to offset signs of emerging cost pressures in the labour market, with wage inflation expected to rise in response to a fairly tight labour market, as well as the impact of the recent depreciation of the krona against the euro. Consumer price inflation is expected to average 1.8 per cent this year, which is roughly in the midpoint of the Riksbank's target range. The public sector will continue to have a fiscal surplus, and it may well be larger than the government's target of 2.5 per cent of GDP in 2001 and 2.0 per cent of GDP in 2002.

14 The United Kingdom

The UK has enjoyed a good macroeconomic performance over the past few years, with inflation remaining at or below target levels even though unemployment has declined to its lowest level for over 20 years. GDP growth accelerated from 2.3 per cent in 1999 to an estimated 3.1 per cent in 2000. Although the pace of the expansion appears to have slowed in the final quarter of last year, partly as a result of disruptions caused by unusually severe weather conditions and emergency repairs to the rail network, we expect the slowdown to be only temporary, with GDP growth forecast to remain around 3 per cent this year, before moderating to 2.6 per cent in 2002. With limited scope for unemployment to fall much further, monetary and fiscal caution would be wise. Short-term interest rates are assumed to remain at 6 per cent throughout the forecast period.

The rise in interest rates during 1999 appears to have had only a modest effect on domestic demand. Business investment weakened considerably in 2000, primarily in the energy supply and construction sectors. But household consumption continues to be robust, supported by high levels of borrowing, strong growth in real incomes and a decline in the savings ratio. The recent correction in equity prices along with a moderation of house price inflation should eventually led to a greater propensity to save out of current income, but private consumption is still expected to rise by 2.9 per cent in 2001. We assume that the government successfully implements the present plans for public expenditure, with the volume of public consumption set to rise by 8 per cent during 2001-02 and the volume of public investment set to rise by 50

per cent. Together these fiscal measures add more than 1 per cent to the level of domestic demand both this year and next.

The recent fall in unemployment primarily reflects reforms to benefits and the improved functioning of the labour market, but has also been helped along by the strength of demand. We anticipate that the standardised rate will settle at 5.3 per cent in 2001-02. Strong employment growth in recent years has brought a number of people with comparatively low productivity levels into work and hence overall productivity growth has been subdued. Greater work experience is expected to help improve the human capital of those brought back into the workforce, and this should help to stimulate productivity growth. There are already signs that labour productivity has begun to pick-up, with unit labour costs estimated to have risen by only 2 per cent in 2000, compared to 4 per cent in 1998 and 1999. If economy-wide productivity does not continue to pick up, inflationary pressures are likely to rise more sharply if demand remains buoyant. But if unit costs are kept in check, inflationary pressures are expected to remain modest, with the rate of growth of harmonised consumer prices edging up to 1.6 per cent by 2002, from an estimated 0.8 per cent in 2000.

The high level of the effective exchange rate since 1996 has been associated with slow growth of export volumes. There has been a significant decline in the UK export market share since that time, but there are signs that this has come to an end recently, particularly in the manufacturing sector. The rate of growth of domestic demand and GDP have come more closely into line, so that the external sector is no longer making a large negative contribution to output growth. However we do not expect to see a further improvement unless the real exchange rate weakens further. Recent movements in the euro have taken pressure of manufacturing in the UK by improving its competitiveness.

The general government fiscal surplus is forecast to moderate to 1.8 per cent of GDP this year and 1 per cent of GDP in 2002 from 2.6 per cent of GDP in 2000. Tax revenues have continued to be unexpectedly strong in recent months and nominal expenditure has generally been weaker than planned. This has created further space for reductions in taxes or increases in spending without endangering medium term fiscal targets. However the timing of new measures this year and next is not ideal, given the underlying strength of demand. The Pre-Budget Report in November contained announcements about future pension increases and lower petrol duties worth £4 billion in 2002-03. These changes come on top of plans for strong growth in public expenditure and previously announced tax reductions in 2001. Despite this, both fiscal and monetary policy in the UK can be seen as having been set on sensible and sustainable paths for the medium term. Eventual entry into the Euro Area remains a possibility, but the Chancellor's five tests have to be met, and they remain unclear. However, it can be broadly stated that the cyclical position in the UK has converged with the Euro Area, and we do not anticipate that interest rates will diverge markedly in future

Chapter V. Risks in the Prospects for the European Union

There are a number of risks facing the European Union at present. The two most significant involve the external environment. Our forecast involves a quite rapid slowdown in output growth in the United States. However, it is possible that this slowdown could be even more rapid if business confidence declined, and we analyse the consequences of this scenario below. It would involve a rapid slowdown in American economy and a sharp appreciation of the euro, and even if the ECB reacted strongly, Europe would be only partly insulated.

Our main forecast also assumes that there is a continued appreciation of the euro, which is one of the factors that helps to moderate inflation in the Euro Area. However if the euro does not rise by a further 10 per cent or more over the next year then inflation risks might remain. A weaker euro in the relatively strong world environment we have in our baseline projections could easily see Euro Area inflation being pushed outside its target guidelines for a third year in a row next year. Hence we think the ECB should not yet be complacent about the effects of the fall in the euro since early 1999.

1 A collapse in confidence in the US

Evidence is building of a slowdown in the US economy. One of the main risks to the rest of the world in our forecast is a sharp collapse in business confidence that could precipitate a further sharp reduction in US growth. This might reflect a perception of an increase in the volatility of expected returns which, in turn, would affect business investment and equity markets. We examine a scenario in which a rise in the equity premium induces a 20 per cent fall in US equity prices and a reduction in business investment sufficient to produce a fall in US output growth of 1 per cent below our baseline projections in the first year. The European economies can be partly protected from this by a large and rapid monetary response by the ECB[18].

There are clear signs that perceptions of risks have begun to increase as the US economy has slowed. The spread between interest rates on investment grade corporate bonds (Baa rated) and those on Triple-A rated bonds can be taken as one measure of the increase in default risk.[19] The spread widened by roughly 10 basis points over the period from August to December 2000, and the Standard and Poor 500 composite index fell by around 13 per cent. We analyse a situation where these changes continue, and further increases in risk premia raise the spread between the two corporate bonds by 50 basis points and induce a significant fall in investment and the stock market.

We presume uncertainty rises everywhere and that equity prices in Europe stay approximately stable[20]. We use the standard policy rules employed in the NiGEM model, with the ECB and the Federal Reserve both setting monetary policy by following a 'two pillar' strategy where interest rates react to deviations of inflation and a nominal magnitude from their target levels. Our results, as compared to the baseline projections, are given below in Table 10.

[18] The equity premium we analyse comprises a default risk, which is a direct mark up on costs, and investors' perceptions of increased uncertainty which will raise the discount rate used in investment.

[19] The spread between Triple A rated bonds and risk free Government bonds is larger and has risen more, but this is as much to do with decreased supply of government bonds pushing up the price and thus reducing the interest rate as it is to do with increased risk.

[20] If the increase in uncertainty and the discount factor was isolated to the US, equity prices would rise in Europe because world real interest rates would be lower. We presume that the equity premium in Europe is increased by 0.7 percentage points.

Table 10: The effects of a collapse in confidence in the US.

(Differences from baseline scenario, annual averages)

		2001	2002
United States	Output	-0.9	-1.5
	Consumption	-1.9	-3.5
	Business Investment	-1.8	-3.6
	Imports of goods and services	-3.8	-7.0
	Effective exchange rate	-6.7	-7.2
Euro Area	Output	-0.6	0.2
	Consumer Price level (Q4 figures)	-0.9	-1.6
	*Euro-dollar exchange rate**	-10.0	-10.8

Note:* A negative value indicates an appreciation of the euro.

The weaker US economy would mean a weaker dollar. In this instance the US trade-weighted effective exchange rate would fall by around 7 per cent compared to our baseline projections. The Euro Area would see a fall in output coming, in part, from a reduced demand for exports. The euro also appreciates against the dollar by over 10 per cent, which generates a further reduction in exports due to the weaker world economy. The appreciation of the euro also reduces the euro value of the income earned on investments in the United States. Euro Area GDP would fall by just over half a percentage point in 2001 compared to our baseline scenario. The fall is moderated by our presumption that the ECB would respond immediately to this sharp slowdown in the United States. Given their stated objectives we think they should cut interest rates by around 1.4 percentage points as compared to our baseline in 2001. This is a large and sharp response that would have to be made immediately.

The impact of shocks of this kind will depend upon the policies pursued by the monetary and fiscal authorities. A more responsive monetary stance by the Federal Reserve may help to reduce the fall in output in the US. It is also possible that the ECB would not respond to the rise in the euro and the fall in inflation and keep short term nominal interest rates at their levels in the baseline scenario for the first year. A delay of one year in the monetary policy response by the ECB would worsen the fall in Euro Area GDP by as much as 0.3 percentage points in that first year after the shock, generating an initial slowdown as sharp as that in the United States.

2 The effects of a weak euro

The euro has fallen significantly against the US dollar since its inception in January 1999. Some of this fall might represent a genuine weakness of the currency which, if not reversed, would have inflationary consequences. We assume in our main forecast that the euro will rise gradually from its current level and achieve parity against the dollar by the end of this year and appreciate further over the course of next year. If the exchange rate stayed where it was, or even weakened further, it is highly likely that Euro Area inflation would be higher than we currently expect in both 2001 and 2002.

Table 11 sets out a simple analysis of the effects of a euro exchange rate 10 per cent lower than in our baseline forecast. Such uncertainty about the baseline stems, we believe, from a perception that the ECB might possibly loosen monetary policy rather more than is needed in the future[21]. The Table reports the differences from our baseline in the level of GDP in 2001

[21] In order to obtain these results we undertook a simulation in which the nominal target of the ECB was raised by 10 per cent and interest rates were fixed for an initial period. Hence the first year of the shock largely reflects

and 2002 along with the differences in the level of the harmonised index of consumer prices in the fourth quarter of each year.

Table 11. The implications of a weaker euro (10% below baseline forecast).

	GDP (%,annual averages)		HICP level (%, Q4)	
	2001	**2002**	**2001**	**2002**
EU	0.95	1.52	0.58	1.20
Euro Area	1.25	1.92	0.77	1.60
Austria	2.10	2.06	0.76	1.87
Belgium	1.97	2.14	1.01	1.68
Denmark	1.61	2.35	1.20	2.40
Finland	1.40	2.54	0.54	1.02
France	0.85	1.52	0.78	1.48
Germany	1.45	2.06	0.69	1.55
Greece	0.91	2.04	0.49	1.49
Ireland	1.95	3.07	1.71	2.97
Italy	0.80	1.64	0.96	1.91
Netherlands	1.66	2.16	0.83	1.62
Portugal	1.32	1.55	0.63	1.69
Spain	1.26	2.23	0.55	1.36
Sweden	-0.43	-0.45	-0.38	-0.90
UK	-0.69	-0.56	-0.39	-0.85

Note: The UK and Sweden are assumed to follow independent monetary policies whilst Denmark follows that of the ECB.

Such analyses are fraught with difficulties, and comparisons made over the first two to three years after the depreciation may be more robust, but as we would expect the smaller open economies, such as Ireland, see a large difference in their inflation rates quite quickly. By the end of 2001 the Euro Area price level (and hence the year-on-year inflation rate) is 0.77 per cent above that in our main forecast. However output growth in the Euro Area in 2001 would be higher than otherwise and would be almost a percentage point higher for the year as a whole. Again the smaller, more open economies would be more affected than the larger EU economies.

It is clear from this analysis that the level of the euro has an important bearing on the short-term outlook for the Euro Area. Our results also provide an explanation for the recent attention given to the level of the euro both by the ECB and the other major banks who participated in the concerted intervention to support the euro last September. A weak euro could potentially lead to a rise in inflation, and the ECB has to bear this in mind when setting interest rates.

the effects of a depreciation in the euro. After 2 years we presume that interest rates would be 1 percentage point less than they would have been.

Part II – STRUCTURAL ISSUES: GROWTH AND EMPLOYMENT IN THE MEDIUM TERM

The level and growth of output in the European Union is strongly dependent on the structure of the economic institutions in place. The availability of capital and labour and the efficiency with which they are used are central to the prospects for growth in Europe. Policies have to be designed to enhance availability and efficiency without significant compromises in other social objectives. The Community Employment Guidelines and the associated National Action Plans, the Broad Economic Policy Guidelines for 2000 and the Single Market Programme all stress the need for structural reform. Our evaluation of the short-term prospects for the European Union and our advice on the setting of policy are influenced by the evolving nature of the European economy. There is little evidence that the recent strong growth in Europe has been underpinned by a significant increase in productive capacity, as in the United States in the last five years.

We need to investigate the ways in which the level of capital available for production can be increased and the methods by which the workforce can be more productively utilised. There are a number of potential changes to the environment in which the economy operates, and we address the four most important for policy makers.

- *New technology* in computers and telecommunications and computer-based knowledge appear to have been major factors behind strong growth in the US. The available empirical evidence suggests that they have caused productivity there to rise rapidly in some sectors and have helped to increase overall productivity in all sectors. In order to evaluate the short-term prospects for Europe we need to assess whether new technology has changed the trend rate of growth in the European Union. This seems not to be the case, and hence we should investigate policies that would enhance the production and use of new technologies.

- The wave of *labour* and product *market reforms* that have accompanied increasing European integration over the last 20 years or more have potentially large effects of the level and growth of output in the medium term. These reforms are designed to increase participation and skills in the labour force and increase the efficiency with which factors of production are used. Macro-economic stability and high levels of output are necessary to ensure that the effects of the reforms are fully felt, as the UK example suggests.

- Changes in *taxation* affect the use of resources and the efficiency of production *and pensions* provision by the state may influence the level of saving. Reforms to these systems are clearly important. There are different strategies for both tax and pension reforms and they clearly should be designed to meet individual country needs based on ageing populations and the importance of social cohesion.

- The nature of *macroeconomic policy* affects growth as it can facilitate new developments and also can provide an environment to enhance investment. A policy that is too restrictive may reduce the level of investment at just the stage in the cycle of innovation and product development when increasing the capital stock is central to medium term growth. In addition a more stable macroeconomic framework should reduce the degree of perceived uncertainty about the future and hence encourage investment and innovation.

Reforms to promote new technology should proceed with caution to ensure that social cohesion is maintained. Europe has lagged behind the US in introducing computer-based tools in the workplaces, which has helped to hold growth below that in the US. However, this may be inevitable, as the US market system is better designed for periods of product innovation, such as that associated with the current development of new technologies, and

European institutions are better adapted to periods of process innovation and development. As we move from the first phase of the new industrial revolution to the second, more developmental, stage, the European economies should once again start to catch up.

Growth in output depends on the growth of knowledge, and education and Research and Development (R&D) enhance skills in the workforce and the knowledge base for production. Only the Nordic countries, and to a lesser extent the UK and Ireland, have levels of R&D in information technologies that match those in the US, and it is these economies in Europe that have seen a comparatively strong increase in productivity growth in the last few years

- The Employment Policy Guidelines and the associated National Action Plans all stress, to differing degrees, the importance of education and re-education of the workforce. Institutional structures should be developed that ensure that we can provide effective lifetime education.
- Innovation and adaption of new technology depends on the structure of labour markets and the ability of individuals to behave entrepreneurially in the economy. Flexibility of response in setting up new firms and developing new ideas is important amongst those with relevant technical skills and amongst the scientific community.
- The adaption of new technology and the enhancement of the rate of growth depends crucially on increasing flexibility and innovativeness throughout the European Union. More competitive product markets, and especially a greater market scope for a product, appear essential to encourage innovation,

Labour market reforms under the National Action Plans emphasise the reduction of unemployment through re-skilling and effective assistance. These policies, if successful, will be important in increasing output through a greater availability of factors of production and will also increase welfare. Reductions in the sustainable level of unemployment should not be the only objective of labour market policies. There are a number of countries in the Euro Area where the participation of the population in the workforce remains low as compared to the US, and output and welfare can be improved if these potential workers can become active participants in the workforce. This may involve more effective welfare to work programmes, as in the UK and Denmark. It is also important to see a role for more active job stimulation packages, as in the Netherlands and France.

Participation amongst those over 50 is low in a number of countries. It is important to raise participation in this group because it would raise achievable output in Europe and reduce the potential burden placed, for instance, on state Pay As You Go pension systems. It is also important to raise participation in countries where individuals face more responsibilities for their own pension provision, as this raises their income in the long run.

The final plank in a programme for stability and growth in the Euro Area and in the European Union is the framework for monetary and fiscal policy. Monetary policy in the medium term should contribute to the stability of the economy and the incentive for individuals to make long term decisions. This requires that the framework ensures that the volatility of prices and output over the cycle are reduced, and that individual decision makers are aware of the policy framework that will ensure this. The current Stability and Growth Pact on fiscal policy attempts to put tax and spending in a longer term framework. A framework in which it was clear that public debt would not rise in an unsustainable way, whilst ensuring that public investment enhanced growth prospects would clearly be preferable. The objectives for fiscal policy should be discussed in the terms of an overall framework for stability and growth, and not just in terms of the generation of debt.

Chapter VI: The Challenge of the "New Economy" for Europe

1 Introduction

The discussions about the "new economy" have emerged against the background of the sustained economic expansion in the United States since 1991. This period of uninterrupted growth was exceptional, both in terms of its duration and because the growth rate strengthened over time until the autumn of last year. This is quite different from past experience. Recent years have seen a historically low unemployment rate, low inflation, and above all, strong growth in labour productivity. Low inflation can be at least partly explained by the substantial decline in the prices of information and communication technology (ICT) products. However, other factors have also played an important role. Wage moderation, the decline in the price of health insurance and low import prices because of the strong dollar have all helped to restrain consumer price inflation.

Indeed, it seems possible that the United States is ahead of Europe in the development of the new economy because its environment is conducive to innovation and receptive to new technologies. The characteristics of the economy and society that help to support innovation, diffusion and creativity in the US are strong competition – developed earlier than in much of Europe, particularly in the telecommunications sector – and traditionally privately owned companies. In addition, close links between researchers and firms, easy access to human capital and venture capital, low administrative barriers in terms of the creation and management of firms, the strong appeal of entrepreneurship and the acceptance of risk may all provide fruitful soil for the development of a new economy based on ICT.

Box: A Third Industrial Revolution

The term 'industrial revolution' is typically used to mean the innovation and diffusion of a general-purpose technology (GPT), i.e. a technology that benefits all sectors of the economy. Can ICT be regarded as a general-purpose technology? In other words, are we currently witnessing a third industrial revolution similar to those associated with steam engines and the introduction of electricity? This seems to be the case, at least according to the definition of GPT proposed by Lipsey et al. (1998). They propose four characteristics exhibited by GPT: scope for improvement, a large variety of applications, a wide range (i.e. they are applicable in various areas and sectors of the economy), and complementarity with existing or potential new technologies. Although some economic observers remain sceptical (Gordon, 1999) on balance it seems clear that ICT meet all the requirements of a GPT.[22] The implications of ICT are numerous and well known, and they apply widely throughout economies. For instance, ICT provides quick access to timely information, helping to improve the adjustment of demand and supply. They facilitate the production, storage, and transmission of information, thereby affecting both internal and external business processes. Internally, fully integrated IT-solutions make it possible for firms to connect all divisions to a streamlined information system. Externally, companies are progressively embracing electronic commerce, which allows for easier, more reliable and cheaper management of supply chains and customer relations.

[22] As noted by Gelauff and de Bijl (2000), "*they have already undergone a significant evolution, but there are many more opportunities. The large variety is reflected in applications such as aircraft navigation, medical scanners, CD players, communications, word processing, etc. The wide range is evident. There are few spheres of activity in which ICT are not present in some form or other. Complementary technological innovations have occurred in the above-mentioned applications. Moreover, ICT are also changing the production processes, marketing, financing and organisation of businesses.*"

The recent strong performance of the US economy has often been interpreted as evidence of a third industrial revolution (see Box). This hypothesis is supported by theoretical arguments such as those put forth in models of General Purpose Technologies. Such models suggest that a major innovation has a positive impact on economic growth at the aggregate level, but only after some years in which to adopt and learn to use new technologies. Technological advances are often initially accompanied by slow productivity growth. There is likely to be a rapid acceleration in growth of productivity at some stage, followed by slower growth at some later stage. This process is usually called S-shaped growth. In this view the strong US economic performance is the result of the US economy having entered the second stage of this cycle.

2 The microeconomic nature of the new economy

Information revolutions take place at the micro level. The economy is renewed by the birth and exit of firms (Schumpeterian "creative destruction") and by the transformation of existing firms. If we look at plant level data, the effects of new ICT firms and plants emerge only slowly, as their share in the economy is initially small. Higher growth rates may first be seen in specialised sectors such as computer manufacturing. The learning and possibly overlapping production processes in long-established, large firms initially curtail the potential acceleration in productivity growth. When the share of new, innovative, firms has grown to a significant level, their contribution to GDP growth will also become significant. Clearly, this process takes some time and there may be long lags between the 'revolution' and its visible effects in the statistics. This can clearly be seen in the case of the United States in recent years.

Aggregate productivity may mirror various developments on the micro level. First, there is the change in productivity in each firm. Second, reallocation between firms affects aggregate productivity. For instance, aggregate productivity rises when employment is reallocated into firms with higher productivity. Third, the average level of productivity is affected by the net entry of firms if labour productivity in the firms leaving the market differs from that in the firms entering the market.

Aggregate productivity growth coincides with that at the micro level only when similar changes occur in each plant on the same level. Aggregate productivity may rise substantially without significant changes at the plant level, if, for example, poorly performing firms exit the market or become smaller. This happened in Finland in the early 1990s (Maliranta, 2000). Productivity may also rise substantially when the share of innovative firms grows rapidly, which has been the case in the US recently.

One example of rapid growth at the micro level in Europe is the case of Nokia in Finland. Nokia was close to bankruptcy in the beginning of 1990s, but is now the biggest European company if measured by market capitalisation. Nokia accounts for nearly half of the cluster of ICT production in Finland and 40 per cent of its sales. The development of Nokia is not easy to explain. However, it seems to be the case that institutional settings have had an important role in this miracle. One important factor was the early liberalisation of the Finnish telecommunication market. There was intense competition amongst numerous Finnish telephone companies, which pushed firms to enhance interconnection and automatisation. The recent development of Nokia and other such firms depended crucially on the introduction of the Nordic Mobile Telephone standard in the early 1970s. This development produced a more favourable background for Nordic producers compared to those in other countries. Public policies have also played an important role in development, especially since early 1990s. The role of innovation policies has been strongly emphasised and the effective allocation of scarce R&D resources was seen as an important objective of policy.

3 The size and development of the ICT sector in the US and the EU[23]

Sectors producing information and communication technology, or IT and CT products and services, have commonly been classified into a combined information and communication technology (ICT) sector since the time when communication and computing technologies began to converge (see the Annex for a definition of the ICT sector). ICT production (value added), innovation, and diffusion account for a larger proportion of economic activity in the US than in the EU, even though their importance has increased over time in Europe and both areas have similar proportions of ICT employment.[24] In 1999, the ICT market represented about 7.3 per cent of GDP in the US, but less than 6 per cent in the EU (EITO, 2000). The difference between the US and European ICT shares is even more apparent in terms of the dollar values of the two markets. In 1997, value added in the US ICT sector was higher than that of the EU (8.7 per cent and 6.4 per cent of the business value added, respectively). The penetration rates of personal computers and use of the Internet are also clearly higher in the US than within the EU. Mobile phone diffusion is, however, higher in the EU. Furthermore, in contrast to the US, mobile phone diffusion exceeds Internet penetration in all EU countries. This is especially so in the Nordic countries, all of whom stand out as leaders in the diffusion of mobile phones.

The imbalance between the US and European ICT sectors increases further if ICT innovation is considered. The US ICT sector invests about three times more in R&D than its EU counterpart (OECD 2000a, 2000b). It accounts for almost 40 per cent of total business R&D in the US (almost $60 billion), whereas the corresponding proportion among the EU countries is, on average, less than 25 per cent (or about $20 billion). Patent statistics also suggest that the US ICT sector is more innovative; ICT-related patents account for more than 18 per cent of total patents granted by the United States Patent Office, but are less than 11 per cent of those granted to residents of EU countries. Some countries do however outperform the United States. In Finland and Sweden the ratio of R&D to value added in the ICT sector was about 15 per cent and 12 per cent, respectively, exceeding that of the United States, where it is about 10 per cent.

These structural differences are also reflected in trade patterns. Both the EU and the United States are net importers of ICT. In fact only three EU countries, Finland, Ireland, and Sweden had a positive ICT trade balance in 1998 (see Figure 1). The same countries stand out from the rest of the EU in other respects as well. The ICT sector accounts for a larger share of business sector employment in Sweden, Finland and Denmark than in other EU countries. It accounts for the largest share of business sector value added in Sweden, followed by the United Kingdom and Finland, and the largest share of business sector R&D in Finland, followed by Ireland and Sweden.

Figure 1 illustrates the pattern of specialisation in ICT across the EU countries and the United States. Only Finland, Ireland, Sweden and the United States are specialised (above the EU mean) in terms of ICT employment, production, and R&D. Interestingly, these are exactly the same countries in which total factor productivity growth has substantially accelerated during the 1990s (EC, 2000). Furthermore, the United States has been ahead of the EU in ICT production and innovation specialisation, and it has simultaneously witnessed a faster acceleration in the growth of labour and total factor productivity than the EU. These

[23] This section is largely based on Koski et. Al. (2000), forthconing in *The New Economy in a Global Perspective (ed. Pohjola, M.)*.

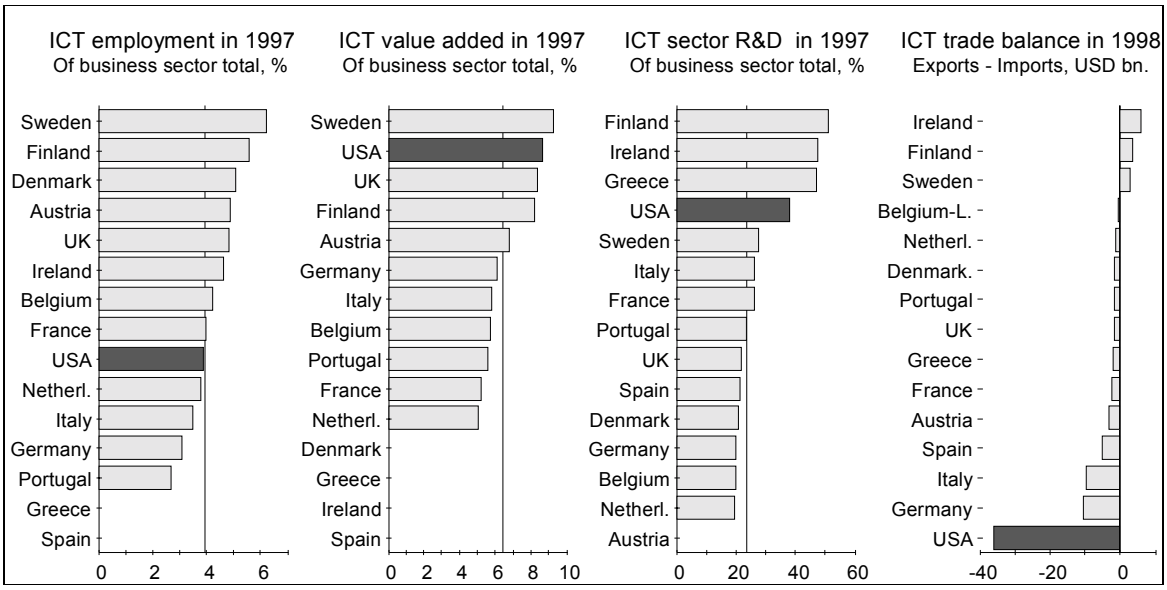
[24] In 1997, ICT employment accounted for nearly four per cent of the total employment in both areas.

correlations suggest that there may be a positive relationship between ICT specialisation and economic growth.

The highly intensive ICT countries in the EU, namely Finland, Ireland, Sweden, and (possibly) the United Kingdom, have chosen somewhat different strategies for developing their ICT sectors. The composition of ICT is different across the four countries: Ireland and the United Kingdom are most active in information technology whereas Finland and Sweden are active in communication technology. The former countries are to an extent dependent on links with the US whilst the latter two have more indigenously based ICT sectors.

In addition to the cross-section specialisation patterns of countries, inter-temporal changes in specialisation are of great interest.[25] Koski *et al*. (2000) explore changes in the distributions of ICT specialisation in production, R&D and exports. The importance of the ICT sector relative to the other industrial sectors has increased during the 1990s. The ratio of value added in the ICT sector to that of manufacturing as a whole has grown from 7.25 per cent to 8.5 per cent during the period of 1991–97. The United States has been among the most ICT specialised industrial countries, but some European countries have reached, and even leapfrogged it during the 1990s. Ireland has been among the top three ICT producer countries since 1994, and Sweden appeared to be the most ICT specialised country in 1997. The country that has most prominently risen within the rank ordering is Finland.[26]

Figure 1: ICT sector in the EU countries and the United States: employment, production (value added), R&D, and trade balance (exports–imports).



[25] The dynamic movements in the distributions of given parameters can be empirically investigated by the convergence measures. See Koski et. al. (2000) for a discussion and definitions of the convergence measures (see also, Koski and Majumdar, 2000).

[26] In 1991, Finland was the least specialized country in ICT production among the sampled 14 countries, whereas in 1997 it had risen to the fourth position.

The growth in the relative importance of ICT production does not seem to have been accompanied by an increase in the proportion of manufacturing R&D undertaken in the ICT sector. In 1991 it was 5 per cent, in 1997 the corresponding share was about 4 per cent.

The growth in ICT production has also changed the export specialisation of countries. In 1989, the average share of the ICT sector within total manufacturing exports was less than 11 per cent. By 1998 it had reached almost 15 per cent. Again, excluding Ireland – which has been the most ICT export specialised country since 1995 – the non-European countries would dominate the picture. The United States has been among the three most ICT export specialised countries from 1989 to 1998, even though – as Figure 1 illustrates – it had the most negative trade balance among the sampled countries.

In summary, it seems that there is notable heterogeneity in ICT specialisation both between the US and the EU and among the European Union countries. Our data suggest that industrial countries have increasingly diverged from one another in ICT production and R&D, but converged in regards to their ICT export specialisation. This means that even though the production and innovation of the ICT sector have become more strongly concentrated in certain countries (such as the US, Finland, Sweden and Ireland), the relative orders of magnitudes of the ICT net export flows have converged among the industrial countries. It seems credible that this has happened due to the substantial production and distribution networking of the ICT sector, with ICT firms buying a relatively large share of their intermediate inputs from abroad and then exporting finished products. Trade liberalisation and the associated decline in transport costs may also have changed the patterns of export specialisation over time.

Since it seems credible, given our empirical observations, that ICT specialisation is positively related to economic growth, it would appear wise to adopt policies that are designed to promote ICT innovation, production and diffusion.

4 The impact of ICT on productivity in Europe and the US

The presumption of a significant effect of ICT on productivity is supported by developments in the United States. Here, the long-term downward trend in the growth of labour productivity that prevailed in the 1970s and 1980s has recently been broken. During 1995-2000 productivity per hour worked rose at an average annual rate of more than 2.7 per cent, more than twice the rate achieved over the previous two decades. This development is especially notable as productivity accelerated towards the end of the cycle, in contrast to the behaviour observed in previous cycles when productivity tended to rise most rapidly in the early phase of the cycle and decelerate afterwards. However, it should be noted that there are other factors that have facilitated US growth including a succession of positive supply shocks and an appropriate policy mix. At the present time it is difficult to estimate precisely the contributions of each of these separate factors.

While economists more or less agree that trend productivity growth in the US has been shifted upwards as a result of the increased importance of ICT, the forces behind it are not entirely clear. Part of the productivity gains in the latter half of the 1990s can be traced to the extremely rapid rise in the production of ICT goods itself. The ICT sector is estimated to have accounted for 0.3 percentage points of the 1 percentage point rise in trend productivity growth in the US. Evidence of increased total factor productivity outside the ICT industries is less well established. An increase in productivity could be expected, for instance, as a result of changes in production or organisation related to the new technologies, or the realisation of network effects. But much of the stronger growth in labour productivity outside the computer industries has been found to take place as a result of capital deepening, triggered by the sharp

fall in relative prices of ICT goods. Hence the underlying growth in total factor productivity may be less than implied by the more easily measured growth in labour productivity. This capital deepening effect is estimated to have contributed for 0.3 - 0.5 percentage points of the 1 percentage point rise in trend productivity growth in the US.

Chart 13. Whole Economy Labour Productivity Growth (%, annual average)

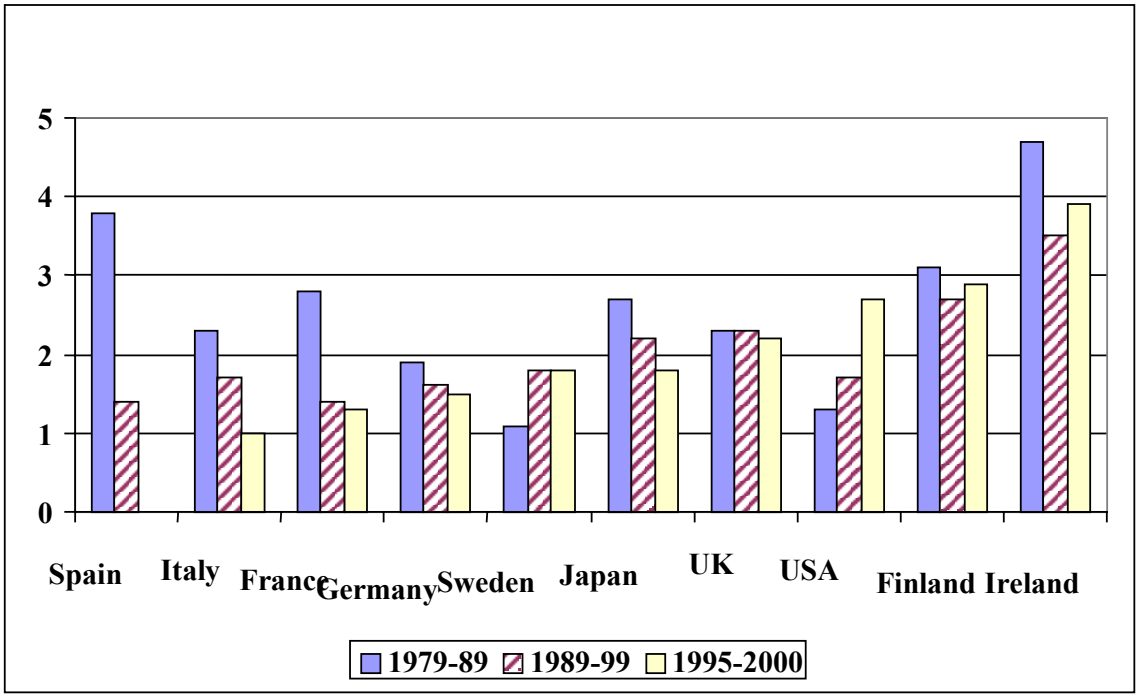
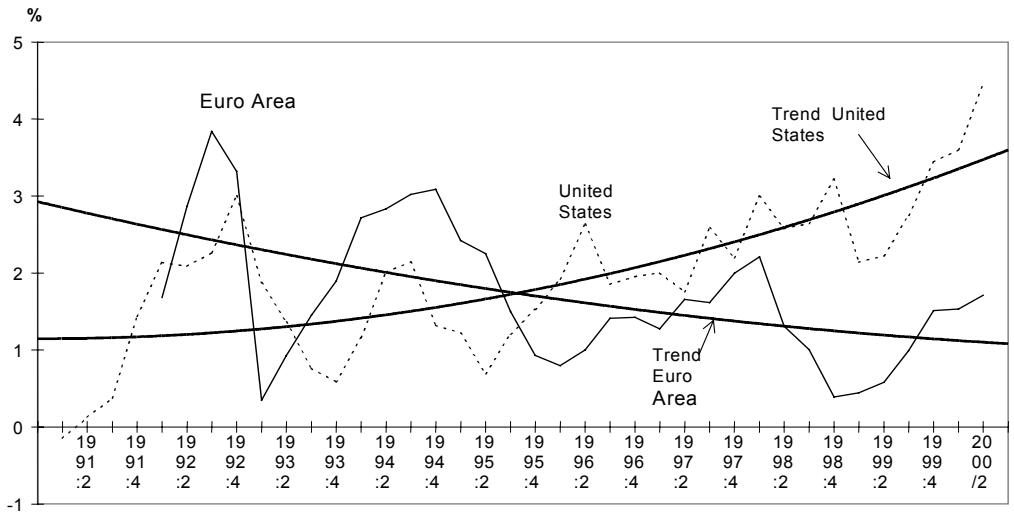


Chart 14. Productivity (GDP per worker) in the Euro Area and in the United States (%, annual average)



[a] Measured as GDP per worker.

In contrast to the US, there is generally no upsurge in productivity growth visible in European countries, as can be seen from Chart 13. Productivity growth has remained on its long-term downward trend particularly in the large continental countries, including France, Germany, Italy and Spain. In the UK, labour productivity growth in the last five years has hardly changed from the rate observed in the prior 15-year period. While productivity gains accelerated somewhat in the latter half of the 1990s in Finland and Ireland, output per hour grew at a slower pace than in the 1980s. Only in Sweden, and to a lesser extent Denmark, has economy-wide productivity growth clearly picked up in the 1990s compared to the 1980s. A comparison of growth rates in productivity per worker between the US and the Euro Area in Chart 14 gives a clear picture of the divergent underlying trends.

Why does ICT fail to show up in the European productivity figures? One explanation is that it is difficult to identify the impact of new technologies on productivity in the European context because the gradual exploitation of such technologies is taking place at a time when European labour markets are being widely deregulated. In conjunction with wage moderation, reductions in social benefits and, in many countries, active labour market policies, this has generated relatively strong employment growth and helped to lower structural unemployment. The increasing use of less productive workers can be expected to have, at least initially, a moderating effect on productivity growth. Consequently, it is possible that productivity gains from ICT are present, but obscured by offsetting effects from the move towards more labour intensive production due to policies aimed at reducing the high level of unemployment in Europe. Differences in the cyclical positions of the economies also complicate the cross-country comparison of productivity developments.

5 Different measurement practices explain differences between the USA and Europe

One explanation for the missing evidence of an upsurge in productivity may also lie in the different methodologies used to separate nominal changes in the value of ICT production and investment into volume and price components. As a result of the different methodologies, the prices for ICT goods recorded in the national accounts have fallen at a much faster rate in the US than in most European countries (only France and Sweden apply the same method of hedonic price adjustment that is used in the US). Correspondingly, productivity growth in the ICT sector is likely to be underestimated in Europe compared to the US. This does not automatically imply that total GDP is underestimated, since the volume of imported ICT products will also be underestimated. But it would certainly be helpful to harmonise statistical procedures, at least within the European Union, if there is to be a proper assessment of the impact of the impact of ICT. There is also little timely data on the capital stock consistent with the new ESA(95) national accounts, making it difficult to estimate accurately trends in total factor productivity, and this should be borne in mind when looking at recent trends across countries produced by the OECD and other international organisations.

Another reason for the smaller impact of ICT on total economy productivity is that the share of ICT industries in total output is lower in Europe than in the US. Thus the rapid productivity growth taking place in this sector has a smaller impact on total economy productivity on average in Europe than in the US. However, there is considerable variation across European countries as seen in Figure 1.

Another factor of importance is that the US has a substantial lead in the implementation of ICT technologies. The number of PCs per worker or number of internet hosts per household is still much higher in the US than in Europe, although ICT penetration in Europe is rising fast. Generally it can be expected that as time goes by European firms and households will catch up.

6 Implications of higher productivity for monetary policy

An acceleration of productivity growth due to new technologies would have consequences for monetary policy. Other things being equal, it would lead to higher growth of potential output, which would reduce inflationary pressures for any given rate of growth. According to the first pillar of the strategy followed by the ECB, this would imply an upward adjustment in the reference value for money growth. Otherwise inflation would undershoot the target in the medium run. However it should be remembered that the reference value also requires an estimate for the trend of money velocity.

New technologies can be expected to reduce transaction costs, leading economic agents to reduce their cash balances. This would tend to reduce money demand and increase the velocity of money, and the reference value would have to be adjusted downwards accordingly. The size of this effect can, however, only be determined retrospectively by empirical evidence. An upward adjustment of money growth that is considered to be compatible with price stability would of course be wise, and other indicators of the path for prices in the medium term would also have to be monitored in such a period. However, the US example makes it clear that an approach to monetary policy that accommodates the New Economy does not automatically mean that interest rates would have to be lowered. It is possible that the real equilibrium interest rate would increase with a rise in productivity growth, and this may, in part or in full, offset the cut that an accommodating stance might otherwise suggest was appropriate.

While the reaction of monetary policy to the new economy is clear in principle, practical policy decisions face the problem of uncertainty about the true nature of macroeconomic shocks. The correct reaction of the central bank to an observed increase in growth rates will depend on whether developments are being driven by a demand or supply shock. In the latter case it has to be considered whether there is a jump in the level of potential output or a change in the trend rate of growth, and whether the shock is transitory or permanent.

The central bank therefore faces a problem that it cannot solve, namely that changes in the rate of growth of potential output can be identified with sufficient certainty only after a number of years. In this situation of uncertainty about the "true" trend, the central bank can make two errors: either it reacts only with a lag to an actual acceleration in potential output, or it loosens monetary policy when in reality there is no such acceleration. The consequences of the first error would be less growth than possible whilst maintaining price stability in the short term. However, as productivity shocks usually lead to an immediate reaction in production the positive impacts of the new economy would still be felt, even if they were to be held back a little initially. Inflation would be less than anticipated, and after some time, when the evidence of a change in potential output growth became sufficiently strong, the central bank would adjust its policy accordingly. The consequences of an error of the second kind would also be serious, but it could also be reversed if the reaction were subsequently felt to be inappropriate. Expansionary monetary policies in order to raise output to levels that are perceived as in line with a new potential level, but actually beyond what is the 'real' production potential of the economy, would trigger inflation and ultimately lead to a monetary tightening.

In the Euro Area, the increasing importance of new technologies has increased the uncertainty around the growth rate of potential output. Although there is no evidence of a pronounced upturn in EU-wide productivity due to new technologies, with the exception of scattered evidence in some countries, we would advise the ECB to be cautious in using the output gap as an indicator for upcoming inflationary pressure.

7 Policy recommendations

The interpretation of developments in the ICT sector and its effects on the wider economy is particularly difficult. This kind of new phenomenon is normally difficult to catch by old statistics. Measurement problems are severe and the need for unified statistics is urgent to get a more precise picture of economic developments related to ICT sector.

The trend growth of labour productivity has declined in Europe in contrast to the productivity rise witnessed in the USA. This is worrying because it can be explained only in part by factors such as European employment policies, which are to be welcomed as they serve to increase the productive potential of the European economy, or differences in cyclical positions or measurement practices. Europe is lagging the USA in the employment of new technologies by several years with the exception of communication technologies, where the EU has a lead with the aid of the Nordic countries. There are, anyway, some advantages to being a technology follower rather than a leader, for instance rapid price declines in this sector encourage delay and first-movers errors can be avoided.

To benefit fully from this new revolution, applications of these new technologies should diffuse to all sectors in the economy. Sustained strong reductions in the prices of new products combined with increasing efficiency will help to accelerate this trend. But it is not self-evident that this kind of development will take place. Rigid constraints in the economy may make it difficult to utilise these new opportunities. It is therefore essential to implement institutional settings that support both the features of the economy that help diffuse the new technology and mechanisms that help the economy adjust to the effects of this diffusion. There is an obvious need to improve education and to support the development and adaptation of new technologies.

On the other hand, it must be remembered that the ICT revolution also produces adverse effects, at least in its early phase. In the case of a rapid rise in productivity, the demand for labour shifts in a more skill-intensive direction. This may cause difficult temporary unemployment problems and lead to various social problems. Society may have to choose between institutions that maximise the pace and the extent of changes and lead to high gains in terms of aggregate productivity and those that do not. Growth maximising institutions may induce substantial increases in uncertainty in society. There are choices to be made. European institutions have in the past been designed to reduce uncertainty and have as a consequence been better at adapting technologies than at producing them. Institutions that put limits on individual hardship and ensure adequate gains at least in the short term are hard to design. However there are a few areas, such as the scientific community, where increases in entrepreneurial behaviour and risk taking could be fruitful and should be encouraged, especially as they have few implications for the majority of the population.

It is clear that structural policies should aim to improve the European infrastructure to encourage the production of new technologies as well as to promote their use in other production areas. This could be done in all the policy fields. The following points emerge:

- The need to ensure that competition in new markets exists, which would help in the utilisation of new technologies to improve the productivity. For example, the regeneration of Nokia has can be partly explained by the competitive environment.
- The flexibility of labour markets has a key role in the structural change towards new technology using jobs. This is particularly important amongst the scientific community and the skilled workforce.

- Improving education would ease the adjustment process at the microeconomic level and help diffuse new technologies. In addition, it would also diminish the initial, possibly difficult employment effects.
- Enhancing entrepreneurship and the birth of new firms by decreasing bureaucracy and the administrative costs of business start-ups, reducing the penalties associated with bankruptcy whilst ensuring equity holders face the appropriate risks, Improving the access to risk capital.
- Tax incentives may help to encourage R&D activity and carefully designed patent laws to enable firms to reap the rewards from innovations.
- Allowing the exit of firms in declining industries.

Chapter VII. Reforming Labour Markets

1 Introduction

The level and growth of output is dependent on the nature of economic institutions, and the Commission has recognised their importance in its desire to transform labour markets and encourage the integration of product markets. Institutions change and evolve, and their evolution depends in part on the role taken by the state and in Europe, by the Commission. The political process in Europe has recognised the need to involve continually the Commission and the individual states in the evolution of institutions in labour and product markets. The nature of the economy and of the technology used also change over time, and institutions in labour and product markets that are suitable for one era may be inappropriate for another. The nascence of new institutional forms can be guided by the state, and in Europe the Commission and the member states all play an active role in institution building.

Policy makers have to assess existing institutions and involve themselves in their reform. The assessment of institutions can be based on comparisons of output and productivity across countries, as discussed below. It is common to look at output and incomes in the US and compare them to Europe. It is clear that some US institutions work better than those in Europe. But we would not advise a wholesale adoption of the patterns of labour market and product market regulation and supervision that underpin US success. Such a strategy would ignore significant social differences between Europe and the US. We can also learn from elsewhere, from countries such as Canada, where performance is similar to the US but institutions are more similar to those in Europe. European policy makers should be considering ways it is possible to improve on both European and US labour and product market institutions, not just copy them.

The Europeans have adopted employment strategies, and these are embedded in the Broad Economic Policy Guidelines. These have to be evaluated in the light of the directions in which it is necessary to move. It is important to look at the successes and failures of pre-existing employment strategies in Europe. Not all problems for employment and growth can be isolated in the labour market. One major difference between the US and Europe is the scope and nature of product market integration especially in areas such as financial markets. These issues are being addressed, and policy makers need to be able to evaluate how much progress has been made toward ensuring that markets work as well as they could do.

We discuss the National Action Plans and developments within the Euro Area that have come from recent Commission initiatives. However, the process of labour market reform has been under way in Europe for many years, with some successes. In recent years the French and the Dutch, for instance, have attempted different ways to introduce a more flexible labour market, with some success. The UK, which we discuss at the end of this chapter, attempted different reform strategies in the 1980s and the 1990s. The 1980s saw a wave of free market reforms that changed social institutions. The effects seem to have taken some time to come through, and they have been limited. In the 1990s the strategy has been more similar to those proposed by the Commission and the OECD Jobs Strategy (although these differ) than in any other European Union country, and the strategy has been implemented for longer, except perhaps than in Denmark. There have been some successes, and there are lessons for other countries to be gleaned from UK experience.

2 Comparisons with the US

Output per person in the population is higher in the US than in the European Union as a whole, as can be seen from the Table. Output per person hour is also probably higher in the

US, as is calculated for instance in the Commission Recommendations on the Broad Economic Policy Guidelines for 2000. However, as we can see, workers in the US put in significantly more hours per year, and employment rates amongst the workforce are higher. Productivity per hour may be relatively high in Europe in part because only the more productive workers are employed, or perhaps because the potential workforce is more skilled. Output per person in the population might be higher in the US because participation is higher or because those who participate are more effectively utilised. We need to understand these differences and evaluate them.

Table 12 Output employment and hours indicators for 1998

Country	Output per capita[a]	Employment ratio[b]	Hours worked[c]
Austria	73	67.4	n.a
Belgium	74	57.3	n.a
Denmark	80	75.3	n.a
Finland	69	64.0	1727
France	74	59.4	1604
Germany	77	64.4	1554
Greece	40	55.6	n.a
Ireland	74	59.8	n.a
Italy	68	51.8	1648
Netherlands	73	69.4	(1365)[d]
Portugal	45	66.4	n.a
Spain	53	51.2	1833
Sweden	69	71.5	1628
United Kingdom	70	71.2	1731
European Union	67	61.5	1671[e]
United States	100	73.8	1955

a) Real GDP per capita, USA =100, source United Nations Economic Commission for Europe *Economic Survey of Europe 2000, no. 1*
b) Person aged 15 to 64 who are in employment divided by the working age population. Source OECD *Employment Outlook June 2000*
c) Average hours actually worked per person in employment (including part time employees) Source OECD *Employment Outlook June 2000*
d) Dependent employment in 1997
e) Labour force weighted average of the members with data above

Differences in institutions are a major factor behind different levels of output per capita and output per hour. However, differences within Europe are probably greater than differences between the best in Europe and the US. US labour markets are more flexible and employees are less protected, and skill levels are both different and are probably higher. The US workforce has higher levels of those with university and college level graduate qualifications, and these people have skills, albeit of a different form from the more numerous intermediate skilled members of Europe's workforce[27].

[27] We can judge relative skill levels only if we can weight together disparate skill groups. There are a number of ways to do this, but one way rests on assuming skill differentials are reflected in wages. If we use relative earnings as a set of weights, the US workforce is more skilled than that in Europe using either US earnings or, for instance, German relative earnings.

US product markets are more integrated and probably more competitive, and US financial markets are significantly less segmented than in Europe. These give producers more scope for their activities and easier access to capital to finance them, and this encourages enterprise and innovation. These latter differences can be gradually diminished as the Single Market Programme expands to ensure that the gains from specialisation and scale that should be available in such a large economic area are fully reaped.

Comparisons between US and European labour markets normally focus on greater flexibility in the US, with greater mobility of labour. Individuals have shorter tenure in jobs and shorter spells of unemployment in the US than in Europe. They also move longer distances when they migrate, and they are more likely to migrate between major regions than Europeans are likely to migrate between countries. The greater overall level of flexibility in the US clearly makes it easier to match individuals to jobs, and labour is hence used more efficiently. However, we have to accept that, partly as a result of greater flexibility, the dispersion of earnings in the US is greater than it is in Europe. We would argue that we should proceed with caution in following the US example of increasing flexibility by changing institutions as maintaining social cohesion within Europe is one of the core objectives of policy.

Institutions in the two major economies differ, and these may explain some of the significant differences that can be observed. The lack of employment protection and the rather limited level of social protection in the US are clearly factors behind shorter job tenures and shorter unemployment spells. The stronger role of trade unions in the majority of European labour markets may also reduce the speed of turnover in employment and the dispersion of earnings in a number of European countries as compared to the US. Limited social protection and a low minimum wage may also help explain the higher level of participation in the US workforce.

However, other factors may be at work, some beneficial to Europe, others to the US. Many European countries, such as Germany, the Netherlands, France and Austria, have relied heavily on developing intermediate skills within the workplace and outside of university level education, and the skill structure of European populations reflects this pattern. A higher proportion of the US workforce has university level education. This difference in patterns of knowledge accumulation may influence labour market tenures and the perceived flexibility of the US economy. The accumulated stock of skills can be made to change only slowly, even if it is desired that it changes, and hence differences may persist between the US and Europe for some time.

National Action Plans and Employment Strategies have been designed to address perceived problems in European labour markets, and we discuss them below. In general they have not been structured in order to take Europe to a US style labour market, but rather to increase skills and reduce unemployment. Hence they may not induce US style flexibility. However, it should be clear that this might not necessarily be the best objective for policy makers in the area. Social protection and social insurance have a role. In addition, the benefits from rapid job turnover are not always clear. Longer term attachments may be associated with greater rates of product improvement and process innovation, as knowledgeable workforces co-operate in the workplace where they are clearly stakeholders and they are more likely to contribute to the accumulation of knowledge by improving ways of doing and producing.

In periods when growth is driven by process innovation, as it appears to have been for much of the last 30 years, European institutions may be no worse than those in the US for enhancing growth. However, labour markets with greater turnover may also promote greater levels of entrepreneurship and risk taking. In periods of product innovation, which we may now be facing with the ICT revolution, an American style labour market may be better

adapted to ensuring that growth is relatively rapid. However, this is not an argument for changing the structure of European labour markets, especially if the period of product innovation may be nearly over and the longer period of process innovation is about to begin. European institutions are well designed for such phases of development.

3 Employment Strategies and National Action Plans

The last two years have seen the design and implementation of National Action Plans to address employment in the European Union. These plans were designed in relation to agreed objectives, and have played a useful role in focussing efforts in areas where individual economies were performing worse than the Community average. In addition, the Lisbon summit set in process active labour market policies to help engender the growth of a knowledge based society. Recent decisions suggest that increasing emphasis should be put on lifelong learning and the improvement of the quality of the existing workforce, rather than just improving the skills and abilities of new entrants.

The four pillars in the strategy that countries are expected to follow in their NAPS are.

- Attention should be paid to improving the employability of the unemployed.
- Serious consideration should be given to developing entrepreneurship
- Flexibility in companies and on the part of employees should be encouraged
- Policies for equal opportunities for men and women should be constructed

Each NAP has to offer discussion of the effects of spending and taxes on employment and suggest details for the implementation of specific employment oriented initiatives. These features have to be backed up by a sound coverage of relevant labour market statistics. The first three pillars are backed by clear quantitative guidelines from the Commission. If specific guidelines are achieved then the Commission will adjust the guidelines and targets it sets for individual countries to achieve.

The successes and problems of different strategies are very variable, but different approaches to labour markets have worked well in countries such as the UK, Finland, France and Italy, which we discuss here. All have adapted the employment guidelines to their own circumstances and have had significant successes. The rest of the EU can learn from their experiences. These examples illustrate different approaches to increasing flexibility. All have succeeded, in that employment growth has been relatively rapid in the last three years, even given the strength of output growth in Europe. It is clear that there is not one unique employment strategy for Europe, but (at least) one for each individual country within the European Union. Problems and institutions are diverse, and solutions to problems must, we would argue, be equally diverse.

The Italian example provides clear lessons. The indexation system in wage contracting was a major factor behind the acceleration of inflation in past expansionary periods. Hence this specific institution had to be reformed in 1992-93 when the degree of price indexation of wage contracts was reduced, reducing the short-term nominal wage sensitivity to prices. It also appears to have reduced both real wage rigidity and the level of sustainable unemployment, reducing the short-term growth-inflation trade-off.

Different countries will have to focus on different problems. For instance, targets in relation to youth unemployment are important in the UK, and matter a great deal more in Italy and Spain, where youth unemployment is a relatively serious problem. However, in countries such as Germany the structure of benefits and the nature of the intermediate skills training programmes have militated against youth unemployment. Hence there is no need to

emphasise this problem in any evaluation of successes and failure in such countries, whereas it must be a central plank in the design and evaluation of strategies elsewhere.

Many of the policies put forward in the Luxembourg process echo those emphasised by the OECD Jobs Strategy, but do not emphasise so strongly the role of wage flexibility and wage dispersion in job creation. There is also much less emphasis on reforms to employment protection. This reflects both emerging evidence and political realities within Europe. It is not as clear as the OECD work suggests that increased flexibility enhances job creation, at least in simple ways, and the evidence on the reduction of employment protection on the level of employment is also mixed. The focus of the European employment creation process is more clearly on the development of the skills of the potential workforce to enhance their flexibility in response to labour market conditions.

The Luxembourg and Lisbon guidelines recommend that incentives to work are improved and that tax and benefit reforms are encouraged in order to increase employment. In particular, stress is placed on measures to ensure that the unemployed have their transitions to employment facilitated, and that the inactive are enabled to play a useful role in the workforce. All the guidelines have some common targets. In particular every unemployed person should be offered a new start before 6 months (for youths) or 12 months (for adults) unemployment by the year 2002. At least 20 per cent of the unemployed should be in training schemes by the same time in all countries in the Union. There is also a strong emphasis on the reduction of the regulatory and administrative burdens placed on businesses, and especially on new firms. The need for this latter emphasis has been strengthened by the focus of the Lisbon summit on the need to ensure that Europe takes its place in the development of the information society.

Given the heterogeneity of the NAPs and the associated recommendations it is difficult to assess the process, especially as we are only two years into the programme of development. However, as can be seen from our forecasts, unemployment has been falling and employment rising everywhere. Our forecast suggests that inflationary pressures do not appear to be emerging in most countries, in contrast to the experience of the late 1980s and early 1990s. Clearly the current stable macroeconomic environment has contributed to these successes, and it is important that a high level of output and stable growth be maintained.

However, even where there were common targets, success has been rather variable. Policies to give the unemployed a new start within a year had been implemented in a number of countries, but there was no real compliance in Italy, Greece and Belgium. The desire to ensure that the unemployed were placed into training schemes appears to have largely been met, although it is not clear that this has been achieved in France, Austria, Portugal and Ireland. If the European Union is not to encourage the removal of employment protection then it is important that more efforts are made to reduce the stock of unemployed by enabling them to find employment in the face of the constraints that regulations place on employers. In addition, the existence of minimum wages, and their adoption in the UK, means that all European Union member countries have to have conscious policies to support the unskilled. They have either to ensure that the unemployed and the inactive have sufficient skills that they become employable at wages that the market can pay, or they should be prepared to provide permanent subsidies to produce an acceptable level of employment amongst these groups.

The Lisbon emphasis on lifelong learning had no concrete common targets and hence is a little difficult to evaluate. Clear strategies in response to the initiative were put forward by the UK, Finland and the Netherlands with targets and implementation measures that were well specified. However, these fitted closely with existing policies in these countries, and others

have put together existing plans into bundles in an attempt to begin to address the questions the Commission set in this area. Significant pressure needs to be exerted at the national level in order to ensure that effective policies are implemented.

4 Labour Market Reform in the UK

There is little dispute about the fact that the UK labour market has performed remarkably well during the second half of the 1990s. Registered unemployment at 3.6 per cent of the labour force in the third quarter of 2000 was at its lowest since 1975. Similarly, ILO unemployment is exceptionally low at 5.5 per cent of the labour force. The employment rate at 74.6 per cent of the population of working age is at the peak it reached in the late 1980s boom, when ILO (registered) unemployment was around noticeably higher than today. The 1 to 2 percentage points fall in labour market participation is partly due to increasing participation in full-time education. At the same time, there is little evidence of excess wage pressure, suggesting that structural unemployment has fallen.

While unemployment in the late 1990s is comparable to the levels last seen in the late 1970s, a number of things have changed. The reforms of the 1980s involved the reduction of union power, significant changes in employment protection legislation increasing employer flexibility, significant reductions in unemployment benefits and changes to the pension system that shifted incentives in favour of work. The effects of these changes came through only slowly, and the recession of the early 1990s clearly delayed their impact on the economy. The recent successes of labour market policies in the UK have been significantly helped by a period of sustained economic growth, and it is clearly easier to reap the benefits from reform in such periods.

Recent policies have aimed to activate the unemployed and inactive benefit recipients. The Job Seekers allowance replaced unemployment benefit in 1995, and helped stimulate re-entry into the workforce. A number of measures have since been undertaken activating the unemployed, with perhaps the most important being the New Deal for Young People. The OECD have been "advocating" the merits of stricter benefit regimes − benefit sanctions in particular − for some time, and the UK reforms are very much in line with these recommendations, involving both benefit sanctions and activation programmes. A number of schemes have recently been introduced to ensure that work pays, and the working family tax credit has helped raise participation, for instance. However there are still significant problems of workless families and high level of unemployment amongst the unskilled.

There have also been initiatives to improve the matching of individuals to vacancies, and to ensure that all those who wish to undertake training can do so. In particular, localised, rather than regional, unemployment problems appear to have emerged and task forces and special schemes have been introduced to help eradicate these pockets of disadvantage. Other policies have been designed to increase fairness in the workplace. Minimum wages have been introduced in the UK for the first time, and employment protection has been strengthened.

In Britain the New Deal for Young People (NDYP), aimed specifically at preventing long-term unemployment among young people by combining help in finding work with benefit conditionality, was implemented in April 1998. The New Deal for the Long-Term Unemployed (NDLTU), implemented in Britain in June 1998, has hitherto provided job search assistance, as well as subsidised employment and training opportunities for long-term unemployed adults, but without benefit conditionality. This is to be introduced as of April 2001

The overall beneficial effects of NDYP on the youth labour market have implications for the whole economy. By creating a greater pool of effective job-seekers, the NDYP has reduced wage pressure and so allowed the economy to grow further without triggering policy action to restrain inflation. While the precise magnitude of these effects is difficult to quantify, some estimates suggest that national income is around £½ billion per annum higher as a consequence of the programme. Also, by March 2000, the NDYP has probably reduced unemployment among all age groups, including the young, by around 45 thousand and raised employment, excluding those on government employment schemes, by around 25 thousand.

The Emphasis of Finnish Employment Policy

The government's employment target is to raise the employment rate to 70 percent by the end of the legislative period (2003). Reaching this goal will require an active labour market policy and tax cuts, particularly for low-income workers. Further cooperation between the government and labour market organizations will be the cornerstone of the strategy.

Active Labour Market Policy becoming less important. According to the government's budget proposal for 2001, the level of active labour market policy (the training and subsidized measures of the labour administration) will continue to decline. Along with falling unemployment, the government's subsidized measures will be targeted in accordance with the recent proposals set forth by a working group on active social policy. To reduce exclusion, the government will rehabilitate the long-term unemployed (with an emphasis on persons under the age of 25 and over 45) for employment. The aim is to provide government-subsidized work practice to an average of 4,000 long-term unemployed each year, mostly within local government services.

In recent years, active labour market policy measures have been intensified in order to combat structural unemployment amongst elderly persons over 50 years of age. In addition, labour market organizations have cooperated with the government to change social security legislation by tightening the eligibility criteria for, and reducing the attractiveness of, continuous receipt of unemployment allowance beyond the normal maximum number of days, a benefit coined the "unemployment-pension tube" in Finland.

Tax cuts for low-income workers increased The aim of the government's employment strategy is to improve labour demand and encourage job search with the aid of macroeconomic policies. According to the government, the most effective way to raise the employment rate and labour force participation rate is to boost wage earners' purchasing power by reducing income taxes within a setting of moderate wage growth. With the help of a marked improvement in the public sector budgetary position and greater room for tax cuts, the government's influence on the outcome of centralized tripartite wage rounds has grown.

Given the two-year incomes policy agreement reached in December 2000, which was expedited by promises of tax cuts, the government may well reach its target for the employment rate. Income tax cuts will be targeted towards low-income workers, which will encourage employment and labour force participation. ETLA projects that the tax cuts will boost labour supply particularly amongst younger age groups. The positive effect of the tax cuts on the job search of older persons will be small.

Labour Market Reforms in Italy

Over the last five years the Italian labour market underwent several structural reforms that are producing important results in terms of reducing unemployment. However more measures are needed in order to decrease inefficiencies both in labour demand and supply.

Data for unemployment show that the Italian economy has not yet fully recovered from the 1992-93 crisis. Heavy losses in agricultural and industrial employment were only partly counterbalanced by the increase in the service sector. Nevertheless, a very positive trend in employment can be detected starting from 1998. This is largely due to the reforms in labour market regulation agreed by government and social partners in 1997 (the so called *Treu Package*), that reduces substantially firms' hiring costs and established temporary employment, lessened the sanctions on fixed-term contracts, extended apprenticeships, and introduced private employment agencies. These reforms are having a big impact on labour market development. Over the last two years nearly 60 per cent of the newly employed were hired with *atypical* contracts. Although fixed-term and part-time relationships are growing, their proportion in the labour force (around 10 per cent) is still much lower than in the other EU countries. Overall, these new forms of employment contributed significantly to the reduction of the unemployment rate: for the first time in six years, from 1999 unemployment rate has been falling (in October 2000 it was 10 per cent, the 1999 average 11.4per cent).

For the future, the 2001 Budget Law establishes important incentives for any new employees, subject to some constraints (not temporary contracts, for people older than 25 and without a job in the last 24 months, etc.). Moreover, reforms of the schooling system are in the making, in order to reduce the mismatch between high school syllabuses and the professional requirements of the business sector.

Significant rigidities still exist. OECD[28] estimates that Italy still has one of the most tightly regulated market, especially in the domain of hiring and firing rules. Contrary to the other EU members, Italian labour law makes it compulsory for a company with more than 15 employed to reinstate workers in case of unfair dismissal. This forces the firm to adopt very cautious hiring practices, penalising disadvantaged workers, youths or the long-term unemployed[29].

Other reforms (planned or under way) are aimed at reducing the wide gap among Northern and Southern Regions. In the former the unemployment rate is below 5 per cent whereas in the latter is above 20 per cent. One of the first step is to increase the degree of decentralisation in wage bargaining, in order to take into account the wide regional differentials in labour productivity. A move in this direction was made in 1997, when special contracts between social partners and local authorities were stipulated, allowing some temporary derogation from national wage agreement. Moreover, the incentives established by the 2001 Budget Law for any new employees are bigger for the South.

Reforms are proceeding much more slowly for what concerns labour supply, whose growth is extremely important in order to achieve non-inflationary output growth. It is widely known that Italy has one of the lowest participation rates among industrial economies. This can be explained by demographic reasons (very low birth and immigration rates) and by the interplay of social-cultural and economic conditions. Any measure increasing the incentives for people to enter the labour market is inevitably linked to the broader issue of the reform of the welfare system, started in the last years.

Changes in the French labour market.

Recent changes in the French labour market have moved it in the direction of greater flexibility, with reductions in working time, tax reduction on the lowest wages and reduction of inactivity traps. This has helped the process of employment growth, and the employment rate has been rising in the last three years, and unemployment has fallen significantly. The

[28] OECD" 1999-2000 Annual Review – Italy", February 2000.

[29] OECD, ibidem p.81.

strong macroeconomic environment has helped employment growth, but it is reasonably clear that the functioning of the labour market has improved and policies are proving effective.

Since 1992, part time jobs have been developing rapidly, encouraged by tax system. In 2000, 17 per cent of the jobs in the business sector were part time compared with 11 per cent in 1990. Indeed, incentives amounted to up to 50 per cent of the employer contribution from January 1993 to April 1994, 30 per cent from April 1994 on. They could be cumulated with exemptions from family contributions on lower wages from April 1994, and with lower health contribution since September 1995. From October 1996 on, reductions on family and health contribution were merged. In January 1998, they were prorated, which was not the case before. The incentives specific to part time jobs disappeared with the reduction in working time.

More recently, the reduction in working time (from 39 to 35 hours a week) has also been accompanied by changes in organisation towards more flexibility. First, negotiations were strongly encouraged by the law, because subsidies were conditioned on them. Thus 1999 and 2000 saw a rise in the number of agreements reached between unions and employers, after years of stasis. These agreements were signed at all levels but especially at the firm level. In particular they allowed the annualisation of the working time. Second, the shortening has not been of 4 hours in all firms, as working time could be redefined in the agreements between employers and employees. Thus, time for dressing up or for other tasks necessary for work, as well as pauses could be excluded from the working time count, although they are still paid. For white-collar workers, the law itself did not imply a reduction of 10 per cent in the working time. The reduction in working time went with the setting of hours over the whole year rather than for the week, which hardly existed in France before. Some employers complained about the difficulty of this reorganisation, but most will benefit from it.

The reduction in working time was also the occasion to continue the process of reducing the tax burden on lower wages. The first step in 1994 was a total exemption of family contributions paid by employers (at the rate of 54 per cent for employees earning up to 1.1 times the minimum wage (SMIC), and a half-exemption for wages between 1.1 and 1.2 times the SMIC. In September 1995, a cut in the employer contributions for health was implemented, of EUR 122 at the SMIC level to 0 at 1.2 times the SMIC. In 2000, alongside the implementation of the working time reduction, the relief and the ceiling have been increased. For firms signing a working-time agreement, the social contribution reduction amounts to EUR 3300 per year and per employee at the SMIC level. The total cost of the scheme is estimated to be EUR 16 billion per year, compared to EUR 6 billion before. Such tax exemptions have greatly reduced the impact of the SMIC on total labour costs.

Finally, inactivity traps have been reduced in 2000. Taxes on housing and income have been reformed in order not to disadvantage low-wage earners as compared to the recipients of the minimum income (RMI). The amount of the housing benefit is now calculated on the basis of the overall income, whatever its source, allowance or wage. From 2001, a new employment ‘bonus’ will be introduced as a tax refund to low-wage earners. Those four measures will imply a 12 per cent increase in the income for a single earning the SMIC, and a 10.3 per cent increase for a family with 2 children earning the SMIC.

Chapter VIII. Macro Policies in the Medium Term

1 Introduction

In the coming years Europe will face many important policy challenges. The favourable economic situation and outlook that our central scenario describes provides a good opportunity to address the issues emphasised in the Commission Recommendation for the 2000 Broad Economic Guidelines. The main objectives are to achieve a low unemployment rate and a high employment rate, and to raise the rate of growth whilst maintaining macroeconomic stability in an environment that enhances social cohesion.

Frequent explanations of relatively low growth in Europe in the past two decades stress the low flexibility of labour and product markets and the high and rising tax burden on labour and capital. Some policies in relation to these areas are discussed in our chapters on labour markets and on tax and pension reform. Progress in these areas is central to enhancing growth in the European Union as well as ensuring that unemployment remains low and employment rates are high.

Following recent US experience, raising the use, and where possible the production, of new technologies in Europe could allow a significant productivity increase (see chapter on new technology). This has important implications for the design of a wide range of policies. One urgent task is to ensure that training and skills policies fulfil the educational requirements needed to ensure that the workforce can adapt to and effectively utilise new technologies. The promotion of greater competition in the service sector is also an important way of stimulating growth and employment and it would reduce the relative prices of services to tradable goods. Outsourcing publicly supplied services may also enhance competition and productive efficiency.

2 Public Sector Reforms and the sustainability of the Public Finances

There are a number of areas where it is important to continue the process of reform in the public sector. Resources can be used more efficiently, and the need for certain publicly provided services changes, as the process of European integration proceeds. In addition, public sector investment needs to be encouraged where it is productive, and consideration needs to be given to continuing the process of ensuring that public borrowing is set at a level that enhances the prospects for growth.

There is a strong case for a thorough comparative cost-advantage analysis of public spending by functions (education, health, security, justice...) that could highlight the best national practices. This could provide a better and more rational basis for implementing any desired budgetary savings rather than the all too frequent across-the-board spending cuts that we have seen intermittently in Europe in the last two decades. For example, despite the emergence of a single market in Europe and the abolition of many barriers to entry we have not seen a significant restructuring of customs services or a complete harmonisation of national production standards. There are clear resource savings to be made in these areas, and productive efficiency in the private sector would also be enhanced by further co-ordination of standards.

Public investment in infrastructure has also often been a prime target for budgetary cuts, despite the wider evidence that such a policy might reduce the potential for growth in the European economy. Shifting the structure of public finances from consumption to investment expenditures, as envisaged by the BEPG should thus be supported as long as it helps to foster the growth of potential output in Europe. But externalities from public sector projects need to be carefully evaluated, as it is easy to undertake unproductive investment in public works as

the present example of Japan clearly shows. In addition, the scale of the financing requirements for new investments in telecommunications and other information technologies is such that it may crowd out other infrastructure projects, whatever their long-term returns. It may be necessary to have a European-wide monitoring of public and private investment projects in order to reduce the likelihood of booms and busts over the medium-term.

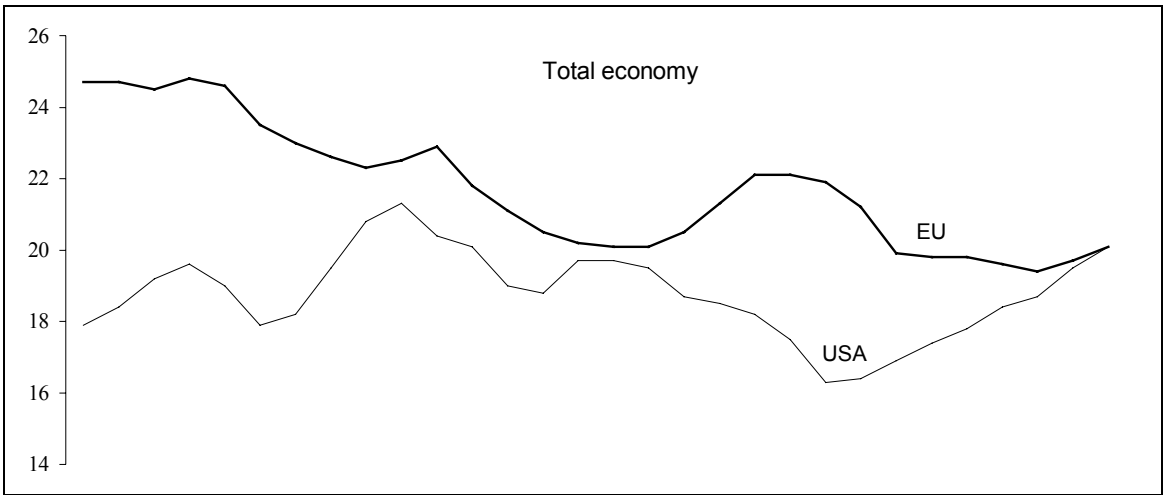
Consideration also needs to be given as to whether the requirements of the Stability and Growth Pact pose a constraint when there is an urgent need for higher public investment after years of underinvestment. The targets set out in the Stability and Growth Pact have been useful in setting a medium term framework for public finances in Europe. The decision to put further constraints on the potential for public borrowing was clearly wise in the early period of construction of Monetary Union in Europe, and we would not advocate that the guidelines be changed in the current conjuncture. However, in the medium term it will be worth discussing alternatives to the SGP, looking in particular at the sustainability of public finances in the European Union and at the role of the public sector in strengthening the prospects for output growth. It is not clear that the SGP is necessarily the best framework for these objectives.

Public sector infrastructure investment can be an important source of productivity growth, and there may be periods when it would be wise to raise public investment well above its current levels, for instance in a period of rapid technical change. At these times, it could be optimal to raise borrowing, rather than taxes, so that the costs of the increased investment could be shared by the generations who would benefit from it. The SGP would prevent this, and it is our worry that the SGP may reduce the level of public investment in Europe. As can be seen from the chart, this is already low in comparison to US levels. We would advocate that the policy debate in Europe should consider that the next stage of evolution in the fiscal framework should move us toward a position where public borrowing could, over the cycle, be justified in relation to public investment. This is currently the position in the UK, which is discussed in the final section of this chapter. We would also argue that slightly looser fiscal targets would involve little chance of individual European countries exceeding deficits of 3 percent of GDP and hence such a change would be in the spirit of the SGP.

However, there are good reasons for keeping a close eye on the evolution of fiscal policy even if the targeting framework is changed to allow scope for more public investment. The ‘close to balance’ rule can also be seen as being designed to offset some of potential biases introduced into the budgetary system. These can result from simple bureaucratic procedures and offsets and from politicians who find it difficult to ascertain the difference between a cyclical improvement in the public finances and a permanent one that results from the implementation of their policies. There is clear evidence that expenditures exhibit a pro-cyclical pattern, as budgetary constraints become looser when revenues are strong. This should mean that the target balance that is embedded in any European fiscal policy guidelines has to be set to take account of the asymmetric nature of the outturns for the deficit, especially if financial market based constraints on government behaviour have been eased by the formation of EMU. We would presume, as in the 1980s and 1990s, governments will find it difficult to run surpluses even when they are appropriate to the cyclical position. Hence a tighter target would be appropriate, and it would allow automatic stabilisers to work fully in recessions and allow some offset for bureaucratic laxity in upturns.

Chart 15: Gross fixed capital formation in the USA and EU 1970 – 1999

As a percentage of GDP



It is important to use any leeway allowed by the return to a healthier position of public finances to correct for past shortfalls in public investment, where they can identified. For example, the Guidelines call for improvements in the UK transport network. But it also important to recognise that whilst such investments ultimately raise potential output, their short-run effects on demand may induce tighter monetary conditions. This could generate crowding out of private investment as well as sectoral and regional disparities if there are differences in the sensitivities of regions and industries to financial conditions and foreign competition. The alternative strategy of redistributing budgetary surpluses in favour of low income households, rather than increasing public investment, has also to be considered as it may then bring a better outcome, insofar as it simultaneously increases employability and living conditions. It should be recognised that there are at times choices between policies to raise potential output and policies to maintain social cohesion.

In our view the BEPG do not take enough account of the close connection between declining investment rates and the weak labour market performance in many European economies. In Europe the ratio of fixed investment to GDP averaged just 20 per cent in the 1990s compared to 25 per cent in the early 1970s. During the same period investment in the United States increased to more than 20 per cent from 17 per cent in the early 1970s. The comparative American advantage appears even greater when taking into account the lower price of capital goods in the USA (around 10 per cent in the mid-1990s). There are many factors behind these differences including capacity utilisation, demand expectations, the availability of capital and qualified labour, profit expectations and product innovations.

The development of new technologies may help to increase productivity through direct effects in the ICT sector as well as through capital deepening in the rest of the economy as new technologies are diffused. Policies designed to stimulate investment rather than consumption should thus be at the forefront of the policy agenda if the objective is to raise potential output and help solve the unemployment problem. Additional financing can be obtained from abroad, but higher domestic saving would also be beneficial as it could help to minimise potential exchange rate instability.

The Stability and Growth Pact has been an important step towards sensible planning of the medium-term public finances. It should not preclude a broader initiative trying to monitor the soundness of both public and private finances. This may have implications on how private sector expectations are affected by both the economic and finance authorities and by central banks. Clear signals should be given about the sustainable growth path as well as targeted inflation.

3 Wage Policy and the Prospects for Stable Inflation in the Medium Term

The objective of social cohesion targeted under the Lisbon process implies that the distribution of income should be taken into account in policy making, and that measures should be considered to ensure that income inequalities are stabilised. In addition it is important to ensure that capital is used effectively. Estimates by the European Commission suggest that the net return on the net capital stock in the United States is higher than in the European Union. Part of this gap arises from a lower cost of capital in the United States, helped by recent declines in risk premiums and longer than usual wage moderation.

Wage moderation has of course also been recommended and implemented as a central policy in Europe during most of the last two decades, and this has helped to produce a strong recovery in profit margins. Having achieved this, real wages should be encouraged to grow in line with productivity gains in the future. Creating an institutional framework to address this issue is becoming more urgent now that unemployment rates have generally declined in Europe, and may have neared their sustainable levels in some countries.

The ECB has stated several times that the strong economic upturn in the Euro Area and a significant decrease of unemployment raise the risk of greater inflationary pressures as a result of accelerated wage growth. At present this does not appear likely as our central forecast shows. In several major countries like France, Germany and Italy, long term wage settlements point to a continuation of wage moderation. Wage settlements in some smaller countries such as Belgium and Austria tend to follow closely developments in the larger economies. However this does not mean that further growth at or above trend rates would not ultimately lead to pressures for larger wage increases.

The ECB might be much more confident of the likelihood of non-inflationary wage settlements if there were the means to ensure more widespread credible commitments. One instrument to achieve this could be the existing Macroeconomic Dialogue between the government, trade unions, the employers association and the national central bank in many countries. Wage settlements help to preserve price stability if nominal wage increases are equal to the sum of targeted inflation and the trend rate of productivity growth. Participants at the Macroeconomic Dialogue could recommend such a wage path and review on an annual basis whether it has been followed.

Wage settlements in line with productivity growth and the target inflation rate for the Euro Area as a whole would help to avoid inflation. Of course if wage settlements were to exceed the target related to productivity growth in some countries, other countries with a similar weight for European inflation would have to be below the target, unless profit margins were to be squeezed or inflation rates were to rise above target. There is no obvious mechanism by which this could be achieved at all points in time. However, in the long-run companies from those economies with excessive wage settlements would become less competitive in other European markets with the likely outcome of lower growth and higher unemployment for a period of time. Such adjustments can be avoided if real wages follow trend productivity in every country over the medium term. Hence, the Macroeconomic Dialogue in each country

should also monitor wage trends in other European counties and provide respective recommendations.

The opposite case of excess deflation induced by wage competition may even be more difficult to handle. In a country where wage settlements constantly stay below the target based on productivity growth then competitiveness increases. For a small country with a relatively high export ratio the effects of such a development may turn out to be positive, at least in the short run, since higher exports mean a higher external surplus and thus higher growth and a better employment performance. The negative impact on other European economies would be hardly felt, given the difference in size. Small countries thus have a strong incentive to follow such a path. The development of the Dutch economy since the early 1980s provides an instructive example.

Again it is only in the long-run that the need to prevent overheating in the small country induces either a strong fiscal restraint or much higher wages. If this strategy were to be adopted by a large country with a relatively small export ratio, they would be more likely to be faced with a similar response in other economies. Hence a downward race for lower wages would be more likely, potentially endangering both price stability and social cohesion. Market forces would obviously put some limit to this process, especially over the medium term. It is also difficult to see how such a process could even begin in those European Union countries that do not have disciplined centralised bargaining at the heart of wage setting.

A stability oriented wage policy would also have implications for profit expectations and the behaviour of financial markets. In situations with high unemployment the low bargaining power of employees ensures that profits rise above their sustainable medium-term path. If this is not recognised it can generate overoptimistic expectations and excessive speculation in bond and stock markets. This could allow unproductive investments to be undertaken, leading to an accumulation of bad loans and higher systemic risk in the financial sector. The cases of Japan in the late 1980s, the Asian emerging markets in the 1990s, and possibly the present US situation are examples that European policymakers should try not to replicate.

Equally, if unemployment were to fall below its sustainable level, inducing a significant rise in unit labour costs, financial markets may be too quick to punish borrowers and stakeholders with ever rising risk premiums. That would in turn raise the risk of excessive reductions in debt and investment, ultimately endangering potential output and productivity. But there are some capital market reforms that could usefully be undertaken. The increasing development of bond markets, especially through the securitisation of loans by banks and mortgage institutions has improved the availability of capital, world-wide, and European markets have yet to improve their efficiency in that respect. More could also be done to provide clear regulations and responsibilities for financial supervision.

4 Monetary Policy and Medium Term Prospects

It is difficult to state precisely the pace at which potential output is growing in Europe and how far the European economy stands from the current level. The output gap has shrunk significantly during the recent years of recovery in Europe. Capacity utilisation is high, with past investment proving insufficient to allow the capital stock to increase in line with demand. European Commission estimates suggest that the potential growth rate in the Euro Area was around 2.2 per cent in 1995. But the recent investment upsurge observed since 1997, combined with a likely better efficient use of the existing capital stock, has raised this estimate up to 2.8 per cent by 1999. A similar rate of growth might be possible in the next few years, considering the present and expected rate of investment, the ongoing implications of the diffusion of new technologies and structural reforms to labour and product markets. A

potential growth rate of 3 per cent per annum is within reach. It is important to be clear about the developments that have made this improvement possible, so as to provide a clear framework for evaluating future policies and to provide appropriate incentives to entrepreneurs.

The targets in the BEPG are stated under the condition of price stability. Central in that respect is the behaviour of the European central banks, and in particular the ECB. The ECB is following an innovative strategy which is different from the strategies of all other central banks. It rests on two pillars (a prominent role for money and a broadly based assessment of the risks to price stability), and each pillar is not identical to either monetary targeting or inflation targeting, i.e. strategies pursued by other major central banks today or in earlier years. While this may seem vague to some observers, this choice can easily be defended. Little was known about fundamental relationships in the Euro Area. The ECB could not rely on extensive empirical studies on macroeconomic relationships such as the link between monetary policy and output and inflation mainly because of a lack of adequate data. Even if it could have relied on such models, there would have always been the risk of parameter instability because relationships would be changing once Monetary Union was formed.

In the future, there may be a better understanding of the fundamental relations in the Euro Area. The economy of the Euro Area will become more internally coherent as a result of Monetary Union, and research on the underlying economic relationships will be able to rely on longer runs of relevant data. On the basis of more experience and better empirical foundations, the ECB may decide whether it should abandon one of the two pillars or change its strategy completely.

There has been some criticism of the choice of a reference value of 4½ per cent per annum for the growth of M3. One argument is that the decline in the velocity of circulation has been higher in the past decade, a fact which by itself would have called for a reference value of 5 per cent instead. Another argument for a higher reference value could be made if the growth rate of potential output was now higher than assumed by the ECB. The ECB has discussed the various estimates of potential output by international organisations and other institutions. They came to the conclusion that there was not yet enough evidence in favour of a higher growth rate of potential output, but it stated in the Monthly Bulletin of December 2000 that the estimates "... have become skewed towards the upside".

It is appropriate that a central bank is cautious when it evaluates whether the link between money growth and inflation is being altered by fundamental changes which are difficult to identify empirically, particularly if they have occurred only recently. This caution is especially appropriate for the ECB as it is a new institution which still has to gain reputation. Therefore it should avoid the impression that it seeks to loosen monetary policy too soon. Apart from that, the emergence of the New Economy is a supply side phenomenon which will materialise even if the central bank does not accommodate it. However, if the ECB does not accommodate the changes then in a world with sticky prices the effect on actual output will probably be smaller in the short run than if the central bank did accommodate. On the other hand, however, there are also risks that the ECB loses credibility if its policy is not consistent with its own assessments.

During the past two years, the policy decisions of the ECB have not always been explained in a consistent manner to the public. The impression has been left that there has been a shift in the arguments for the interest rate increases since November 1999. As far as the analysis of the risks to price stability is concerned, it was not clear to the public and to market participants what weight was attached to movements of important indicators such as the money stock, labour costs, output, import prices, the exchange rate and so on. The exchange

rate of the euro obviously became more of a concern in the course of 2000 as can be seen by the repeated interventions of the ECB in the foreign exchange market.

Against this background, the ECB was urged to make its thinking about inflationary tendencies more transparent and to publish its inflation forecasts. In December 2000, the ECB did so for the first time, along with forecasts for real GDP and its components. This can be judged as a step forward in terms of transparency of monetary policy. But there are also some risks involved if there are inconsistencies which are not properly explained. It is worth recalling that both the Federal Reserve and the Bundesbank have not always been transparent but have proved nevertheless to be successful.

While there is always uncertainty around any projection, it should be clear that what is published is the best assessment the ECB can make at a particular point in time. The projections they have produced are not directly comparable to forecasts of other institutions and are not intended to be. It is, however, important to discuss whether the assessments in the projections are consistent with other analyses produced by the ECB, and if not, what the implications are for monetary policy or for judgements on other important macroeconomic variables. Such discussions are essential if the inflation projections are to be useful and strengthen the credibility of the central bank.

According to the projections for the Euro Area, and assuming that the uncertainty around the ECB's central forecasts is symmetrical, the expected path for real GDP in the next two years is steep, with the central rates of growth being 3.1 per cent and 3 per cent, respectively. This implies that the output gap will rise substantially, with actual output growing by approximately 1.5 percentage points more than potential until the end of 2002, given the ECB's assumption of potential output growth in framing the reference value for M3. The projected outlook is thus difficult to reconcile with other judgements. While one factor stimulating real GDP in 2001 is certainly fiscal policy, there is no such impulse to be expected, or for that matter assumed, by the ECB in 2002. All in all, the ECB estimates the growth of real GDP during the years 2000 to 2002 to be well above the growth of potential output which needs to be explained.

This is especially important because it would seem to imply that interest rates may have to be increased. If growth remains so strong then there is a risk that the targets embedded in either of the two pillars will be breached. If the ECB persists with such a view, it may fail to make the reductions in interest rates that our own forecasts imply are now becoming appropriate.

The projections of the ECB seem to imply an unusual behaviour for M3 velocity. If the ECB succeeds in keeping the annual growth of M3 at 4½ per cent, as stated in the reference value, velocity is likely to increase in both 2001 and 2002, as nominal GDP will be rising by more than 4½ per cent. Such a positive deviation of velocity from its trend would usually be accompanied by higher interest rates. As the demand for money would rise substantially due to the strong upswing, monetary growth can be kept on target only if interest rates are raised. If, however, it is assumed that the behaviour of velocity will be more in line with past experience then the forecast projections imply that monetary growth will be higher than 4½ per cent. In this case the ECB would have to explain why it was willing to allow another overshoot of the reference value.

An increasingly positive output gap would in most econometric models, including the ones used by the ECB, raise the risk of higher inflation. The projection implies that the core rate of inflation will rise to approximately 2 per cent, i.e. close to or even slightly above the upper limit compatible with price stability as the central bank has defined it. On the basis of this analysis, it would be difficult for the ECB to loosen monetary policy in the near future unless

there are unexpected events that would lead to a downward revision of the projections. This is true even if - as the ECB has recurrently stated - the projections are only one of many sets of information the ECB uses when evaluating its policy.

5 Broad Economic Policy Guidelines: the UK

The UK is not a member of the Monetary Union, and although it may become one its stance is currently very different from the other potential members as well as the members. The monetary policy framework is very different. There is an independent Central Bank with a panel of experts (the Monetary Policy Committee) who set interest rates in relation to an explicit target range set by the government. The ECB does not have the same source for its objectives, but has rather been given the general remit of ensuring price stability. The government has developed a fiscal strategy that has a strong medium term basis, but is differently focussed from the SGP. In addition, the nature of the labour bargain is different, and there are no social partners, in the continental sense, and therefore there is no Macroeconomic Dialogue.

The central economic objective of the present UK government is to achieve high and stable levels of growth and employment through a combination of macroeconomic stability and active microeconomic reforms to improve the operation of labour, capital and product markets. Key policies include measures to help people move from welfare to work, reforms to increase competition in many service sectors, plans to expand expenditure on public investment significantly, and policies such as R&D tax credits designed to stimulate productivity growth. These policies have been introduced at a time of steadily improving macroeconomic outcomes, with inflation remaining low, the public finances having moved into surplus, and the unemployment rate having fallen to its lowest level for over 20 years.

Whilst recognising these developments, the Broad Economic Policy Guidelines still offer a number of specific recommendations for the UK. In particular it is argued that productivity could be improved by measures to raise R&D, improve the operation of the transport network and investigate obstacles to institutional investment in venture capital. The government has begun to respond to these suggestions, with the publication of a new 10-year transport strategy plan and a review of institutional investment. We agree that all the specific BEPG recommendations are important, although there is comparatively little firmly-based empirical evidence of the extent to which any will provide a measurable improvement in the rate of productivity growth. We would argue that more attention should also be given to planned evolution of fiscal policy and the role of the exchange rate.

The present UK government has two key fiscal rules, that over the economic cycle it borrows no more than is necessary to finance its net investment and that public sector net debt is held below 40 per cent of GDP. These rules offered a useful guide when they were first introduced, as this was a time when the public finances needed to be brought under control. But they allow the government considerable discretion at times of a budget surplus. It is for instance possible to expand expenditure significantly whilst still appearing to adhere to the fiscal rules by promising to achieve a current budget balance close to zero in the medium term.

Under present plans the UK government is intending to reduce the estimated cyclically-adjusted current budget surplus from 1.9 per cent of GDP in 1999-2000 to 0.6 per cent of GDP by 2003-04.[30] Neither of its fiscal rules would be broken by this planned change. The danger of such a policy at a time when the economy is already close to sustainable

[30] Pre-Budget Report 2000, Table B1.

employment is that it leaves all of the burden of ensuring macroeconomic stability to monetary policy, with the risk that the burden of adjustment falls, at least initially, on those parts of the economy relatively exposed to external trade. We would suggest that further thought be given to the appropriate path for the adjustment of the public finances back towards medium-term targets.

Looser fiscal policy is also unlikely to help deal with the other key macroeconomic issue that has faced the UK for much of the last 5 years – the level of the exchange rate. The appreciation of sterling since 1996 has clearly acted to unbalance the economy, with much of manufacturing industry having been pushed close to recession, whilst the service sector has expanded rapidly. Whilst there are signs that UK export performance began to stabilise during 2000, suggesting that the surviving parts of the manufacturing sector are now more able to cope with a higher exchange rate, the structure of the economy is now different from it might have been had the exchange rate not appreciated.

This has had some impact on the regional distribution of economic activity, with regions with comparatively high concentrations of manufacturing companies having experienced slower growth over the past few years. In the third quarter of 2000, regional ILO unemployment rates ranged from 3.1 per cent in the South-East of England to 9 per cent in the North-East. The government has recently announced a series of new regional policy initiatives designed to encourage the development of clusters of activity in different locations. We would argue that a greater recognition needs to be given to the role of the exchange rate in the determination of the location of economic activity. In a world of increasingly mobile capital, temporary exchange rate fluctuations can have long-lasting effects. The BEPG guidelines draw attention to the need to reduce concentrated unemployment in deprived communities and more could be done to tackle social exclusion in parts of the UK.

The UK government will also have to carefully weigh the costs and benefits of remaining outside the Euro Area, particularly if membership of the Area continues to expand. In this regard it is again notable that the government's five 'economic tests' for evaluating this issue do not include any mention of the real exchange rate. There are presently comparatively few macroeconomic differences between the state of the two economies, and these tests, and especially those that relate to the business cycle and to interest rates, can be seen as broadly met. However, it would be premature to conclude that UK should enter the Euro Area at the exchange rate that prevailed toward the end of 2000. The appreciation of the euro discussed in our forecast in Section I would help remove the pressures UK manufacturing has recently faced.

Chapter IX: The Reform of Taxes and Pensions in the European Union

1 Tax reforms in the European Union

Tax reforms remain a current issue in most European countries because the tax burden is felt in many countries to be too heavy and wrongly structured. Further pressure for reforms, in particular for tax harmonisation, seems to be coming from increasing European integration and from the creation of the single market. In addition, the objectives of the tax system may periodically change with the political climate – for instance with environmental incentives recently becoming more important in designing the system.

European countries implemented restrictive fiscal policies between 1993 and 1999, and OECD estimates of the structural primary public balance (cyclically adjusted taxes minus expenditure net of interest payments) suggest that it improved from –0.6 percentage point of GDP in 1992 to +3.5 in 1999. This consolidation process has created the leeway to implement tax reforms. No country in the European Union needs to implement a restrictive fiscal policy for purely public finance motives. There are, however, plans for a continuing reduction of public spending as a per cent of GDP in most European Union countries, and this will give room for ongoing tax cuts or debt repayment

Increasing integration through the European Single Market programme has been accompanied by ongoing discussions on tax harmonisation in Europe. There is widespread support for leaving taxation to national decision makers. Some harmonisation may nevertheless be needed to prevent more mobile factors, and in particular non-residents capital and income and also multinational corporations, from escaping taxation. Tax competition should result from the construction of coherent systems, and not from idiosyncratic measure involving the special treatment of non-residents. In addition, it would clearly be better if any ecological taxation addressing greenhouse effects were decided jointly.

Tax reforms have to reconcile two competing objectives for the tax system. On the one hand lower marginal tax rates may be required to reduce existing disincentives to work; on the other hand tax revenues are needed to finance the provision of public goods and redistribution. High marginal tax rates on labour or capital incomes reduce the incentives to work, to set up enterprises or to save, and hence cutting high marginal rates is often seen as a priority. High marginal rates are paid by both the highest and the lowest earners, if impacts on means-tested benefits are taken into account. These can imply only small differences between benefits and labour incomes for low-skilled workers, partly causing the high levels of unemployment amongst the unskilled that we observe in a number of European economies.

The Commission set out criteria to assess tax measures in the spring of 2000.

1. Member States must meet or make progress towards the medium-term target of ‘close-to-balance or in surplus’. This reflects the Stability and Growth Pact guidelines, and we have argued in our chapter on macro-policies in the medium term that it should be regarded as too narrow a criterion for judging the medium to long term evolution of fiscal policy.
2. Reforms must not be pro-cyclical. This clearly makes sense in the current policy environment, but as fiscal policies were in the past pro-cyclical, a fundamental change in behaviour seems to be needed.
3. Account must be taken of the level of government debt and long-term budgetary sustainability. If the first criterion is implemented, then the third is clearly redundant, as a deficit close to balance or in surplus will always be associated over the medium term with a decline in the debt stock as a percent of GDP.

4. Tax reductions should form part of a comprehensive reform package. This is clearly wise, as if public expenditure is thought to have some utility and if benefit systems meet social needs then there is no necessary reason why the level of taxation should be cut as part of a tax reform programme.

Taxes on Personal Income and Social Security Contributions

The tax reforms currently implemented in Europe generally include strong cuts in personal income tax, the tax to which households appear most sensitive. It is a progressive tax and hence plays a major role in the redistribution engendered by the tax system. Reforms reflect delicate compromises between the opposing objectives of cutting the highest marginal tax rates and not excessively favouring the most affluent. The current reforms are very similar in all European countries. There are widespread reductions of marginal tax rates, sometimes stronger for the low-income earners (Denmark, France, Italy, Austria, Sweden), sometimes for the higher tax rates (Germany, Spain, the Netherlands). Reductions in tax allowances in the UK and Germany, for instance, have been used to partly offset the effects of low tax rates on higher earners. Higher thresholds for income tax exemption have been introduced (Germany, Italy, Sweden, the Netherlands, the UK) and increased allowances for families with children, which can be seen as substitutes for benefits (the UK, Italy, Austria) have also been implemented.

As long as different countries have differing objectives over income distribution the subsidiarity principle indicates that decisions over personal income tax should remain strictly national. However, some countries (Belgium, the UK) have tax systems which allow non-domiciled foreign residents to pay no tax on their income of foreign origin, and these tax measures generate unnecessary tax competition. As interest payments to domestic households are subject to taxation in all European countries, either through a withholding system or income tax, the non-taxation of non-residents has no justification. It should be hoped that the process initiated in Feira, and confirmed in Nice, aiming at moving towards a system of exchanges of information between financial companies and fiscal authorities of the country of origin of the holder of capital will help end this anomaly. However, it is regrettable that in November 2000 the ECOFIN Council delayed the end of the transition period to 2010.

Lowering social security contributions (SSC) is a substantial element in most of the European tax reform programmes. A lump-sum reduction of both employers' and employees' SSC was introduced in Belgium in 2000. Revenues from environmental taxes are being used to lower SSC in Germany. A lump-sum rebate on employers' SSC was introduced to compensate for part of the costs resulting from the reduction of working time in France, along with a reduction in SCCs for low-wage earners as well as of all unemployment contributions. In Italy, SSC rebates for new and young employees and general reductions of about 0.8 percentage point in 1999, 2000 and 2001 were introduced. Unemployment and pensions contribution rates were also lowered in Finland. In the UK, the threshold above which employees pay National Insurance Contributions (NIC) was increased.

In periods when employment is high the social security system is in surplus and it is logical, although pro-cyclical, that contributions rates could be lowered. From a more structural point of view, countries should re-examine the respective shares of contributions and taxes in the fiscal burden, so that health expenditure, family allowances and assistance benefits could be financed by taxation whereas pension and unemployment benefits could be financed by contributions. The 1998 fiscal reform, and especially the creation of IRAP (Regional Tax on value added) in Italy is a good example that could be followed elsewhere in the European Union. In the long run, contributions will have to rise because of the ageing of the population

and these rises would be better borne by employees in order that company profitability and competitiveness are not deleteriously affected by choices made on funding pensions. Conversely, lowering contributions and benefits at the same time is not necessarily a sensible strategy. Employees in general may gain nothing from it, since they would have to subscribe to private health or pension insurance, and the whole system would produce less redistribution as the more disadvantaged would be more exposed in these circumstances.

Many countries have chosen to lower SSC for workers at the lower end of the wage distribution. Implementing lower employers' SSC rates on low wages can be justified if the unemployment rate of low-wage employees is above the average (because they face a stronger competition from low-wage countries products or are victims of capital/labour substitution). It can also be justified if governments do not wish to see a too great an increase in wage inequalities. They are harder to justify if the general level of salaries is reduced by mass unemployment because the unqualified may well be displaced in employment by qualified people unable to find skilled jobs. There is also the risk that the reform might generate "low-wage traps", with very few opportunities of escape.

Lower employees' SSC are justified if there are "inactivity traps" caused by a too narrow gap between low wages and assistance benefits. This also requires that many low-wage jobs are available and that a significant number of people prefer to stay in assistance. A "making work pay" strategy has been widely implemented by the UK government for a number of years and, starting from 2000, by the French government. Such a strategy only pays off in a favourable macroeconomic environment. It is less dangerous if an increase in the gap between net wages and assistance benefits can be generated by increasing net wages. In France, for instance, the *Conseil Constitutionnel* opposes any cut in the taxation of low-wage earnings because such cuts depend only on the wage-earnings of the individual worker and not on their other incomes and or family context.

Corporation tax

Most governments lowered corporate tax rates as public sector accounts improved. Though improving firms' profitability may be welcome, in countries where unemployment is still high, decreasing employers' SSC may prove to be a better use of available funds. In Denmark, the corporate tax rate has been lowered from 32 to 30 percent. In Germany, the corporate tax rate on retained profits will decrease from 40 per cent in 1999 to 25 per cent and the corporate tax on distributed earnings will be cut from 30 per cent to 25 per cent in 2003. Including the solidarity surcharge and the business tax, the corporate tax rate will then amount to 38.6 per cent. In France, the tax rate will fall from 40 per cent in 1999 to 36.4 in 2001, in Ireland, from 28 per cent in 1999 to 12.5 per cent in 2003. In Italy, the marginal tax rate on corporate income, including IRAP, is expected to fall from 53.2 per cent in 1998 to 40.2 per cent in 2001 and the Dual Income Tax reform has introduced a lower taxation rate for "normal profits".

Insofar as a growing number of firms can choose where to locate their production in Europe, the Single Market is likely to lead to some harmonisation of corporate tax. Countries, and in particular the smaller ones, would then be induced to increase tax competition. It would in our opinion perhaps be wise for tax harmonisation on this matter to involve a common minimum rate with possibilities of exemptions for small companies and for regions with high unemployment. If dividends were taxed at a sufficiently high rate it would not be necessary to impose rules concerning the tax on the shareholders at community level. Distributed benefits could be exonerated or be submitted to income tax with a tax credit. Capital gains could then

be either taxed or not. However, such an approach to harmonisation is hardly compatible with the system of Dual Income Tax recently introduced in Italy, for instance.

Indirect taxation

Prospects for the co-ordination of indirect taxes appear poor, although it is this area that pressures are currently most obvious. The project of a European VAT system based on the source principle seems to have been abandoned. The system suggested by the Commission in 1996 seemed to be too complex to be implemented. It could have created room for multiple conflicts between Member States. The current system may, anyway, be encouraging indirect tax rates to converge: for instance, in 2000, the French government decided to cut the normal VAT rate from 20.6 per cent to 19.6 per cent. In 2001, the normal VAT rate has risen from 17.5 per cent to 19 percent in the Netherlands as a counterpart of cuts in income tax.

As allowed by the Directive of 22 October 1999, many countries (Belgium, Netherlands, Greece, Spain, France, Italy, Luxembourg, Portugal) have introduced lower VAT rates for labour intensive services. (Two sectors out of five: small scale repair services, the rehabilitation of private dwellings, window cleaning, and cleaning in private households, domestic care services or hairdressing.). Targeted cuts in VAT rates have the advantage of allowing stronger ex-ante measures to ensure that there is less impact on prices. But they have the defects that all sectors will ask for specific reductions, for instance because they produce labour intensive products, necessity products, cultural goods or services, or products bought by the poor or the disabled. These criteria may be contradictory: opera shows, and cultural services in general, are labour-intensive, but the poor do not particularly consume them. Targeted cuts in VAT rates are also less efficient at promoting employment than cuts in social contribution rates as they induce distortions in consumption behaviour.

Environmental taxation

Environmental taxes have been raised or introduced in many countries in combination with cuts in social contributions in order to generate a "double dividend'': environmental and employment incentives. This is the case in Denmark, Germany, France, the Netherlands, Portugal, Finland, Italy, Sweden, and the UK. Even if this reform does not worsen company profitability and competitiveness, at the macro-economic level, it has adverse effects on energy-intensive industries. That is why governments have generally either set ceilings on new taxes (as in Germany) or have replaced it in the affected sectors by negotiated agreements on long-term energy saving plans.

There seems to be no reason why the more energy-consuming industries should be granted tax cuts or exemptions. Increases in output prices of these industries are desirable at the macro-economic level, as they will induce a trade-off of consumption in favour of less environmental-expensive products. But rapid increases in taxes are likely to cause the transfer of the highly energy-consuming sectors towards countries where the taxation of energy is low if not absent, which would finally have no impact on the level of world-wide gas emissions, whereas it would destroy jobs in Europe. Environmental tax harmonisation within Europe is therefore an important issue, and we recommend that they be raised at the Community level. But it does not completely solve the problem as companies can move to countries outside the EU. Taxing the marginal increase in energy consumption would also be an alternative, so that the increase in the fiscal burden would not be too heavy on energy-intensive industries, albeit providing them with an incentive to save energy.

The introduction of an effective marginal taxation system would be complex and would require precise monitoring of existing and potential techniques of production in each

industry. As the receipts from the energy taxation would shrink, they would become too small to finance a substantial fall in employers' social contributions. However, environmental taxes may run into problems with constitutional courts. For instance, the French government wished to increase environmental taxation by the end of 2000, but the *Conseil Constitutionnel* opposed it as it was too complex and it did not follow the principle of the equal treatment of firms by the tax system.

2 On Pensions Reforms in Europe

Pensions are one of the biggest issues European countries have to tackle. The increase in the ratio of the retired population to the working population is explained mainly by the increase in life expectancy and also by falling birth rates. In the medium term (2005-2025), it will also be increased when the relatively numerous cohort from the post-war baby-boom reach retirement age. However the financing problem associated with pensions will be less acute if employment rates rise. The majority of the European countries have already implemented measures to face the financial consequences of the ageing population in the years to come.

The Situation in Europe

In most European countries, dependency ratios will start to rise rapidly after 2005 up to 2030

Table 13. Population aged 60 and over/population aged 20-60

(per cent)	1995	2000	2005	2010	2020	2030	2040
Austria	34.1	35.7	36.7	39.6	47.9	64.8	77.3
Belgium	39.0	39.3	39.9	43.8	54.7	71.2	73.4
Denmark	35.6	35.9	39.5	45.2	52.7	63.0	66.5
Finland	34.1	35.7	38.3	46.5	59.3	68.0	67.2
France	37.4	37.8	38.2	42.8	52.7	61.1	66.6
Germany	36.5	41.7	44.4	45.2	54.1	72.6	73.9
Greece	40.8	44.0	44.7	47.8	55.8	69.5	88.2
Ireland	29.0	28.1	28.7	31.4	39.2	45.4	55.1
Italy	40.2	43.3	45.7	50.0	59.8	80.9	98.1
Luxembourg	33.7	34.6	35.9	38.9	48.7	60.6	67.4
The Netherlands	30.9	31.9	34.6	40.5	52.9	71.3	77.6
Portugal	37.1	37.6	38.5	41.3	47.4	58.9	79.0
Spain	38.3	38.5	39.5	42.1	51.4	70.4	97.9
Sweden	41.9	42.0	45.7	51.3	58.6	68.9	71.7
United Kingdom	38.6	38.9	40.3	44.1	51.1	62.7	64.6
EU-15	37.6	39.5	41.4	44.6	53.6	68.6	77.2
United-States	30.0	29.8	30.8	33.9	45.0	53.0	53.9

Source: United Nations, 1999.

In the long run, the rise will be a little less for countries that have had a higher birth rate (the United Kingdom, Denmark, Sweden, Ireland and France). The Netherlands, Austria and all the Southern European countries, where birth rates have declined, will see a rise unless inward migration is higher, as in Germany, where the rise is expected to be slightly less.

Although these United Nations projections are based on some recovery of fertility rates[31], many countries may still see their population decrease significantly in the coming 50 years. This is especially true for Italy (-28 per cent from 2000 to 2050), Spain (-24 per cent), Greece

[31] Immigration is low in these projections, especially for countries such as Italy.

(-23 per cent), Portugal (-18 per cent), Austria (-13 per cent), Belgium (-12 per cent), and Germany (-11 per cent). If it is assumed that the ratio of the average pension to the average wage and the retirement age both remain unchanged, then the ratio of retirement pensions to GDP will increase for the EU as a whole from 12.5 per cent in 1998 to 20.9 per cent in 2040. On this basis, the level will be especially high in Italy, Austria, the Netherlands and Greece. However, reforms in some countries are already under way to reduce pension promises and increase effective and official retirement ages.

Table 14. Pensions as a Percentage of GDP.

	Total Pensions		***Public Pensions***	
	1998	*2040*	*2000*	*2040*
Austria	13.7	24.5	14.5	17.0
Belgium	11.8	19.3	9.3	13.0
Denmark	11.5	17.8	10.2	13.9
Finland	9.4	16.1	11.3	16.0
France	13.4	20.7	12.1	15.8
Germany	12.4	20.4	10.3	14.4
Greece	12.9	22.8	n.a.	n.a.
Ireland	4.0	6.2	4.6	8.3
Italy	16.1	28.9	14.2	15.7
Netherlands	11.7	23.3	7.9	14.1
Portugal	10.0	18.9	9.8	15.8
Spain	10.0	18.7	9.4	16.3
Sweden	13.1	19.7	9.0	10.7
The United-Kingdom	11.8	17.7	5.1	4.4

Source: Total Pensions*: Eurostat,* 2000, for 1998 numbers. OFCE calculations for 2040 *under the hypothesis that for total pensions the ratio of the average pension to the average wage and the average retirement age are supposed remain unchanged at 1998 levels. The public pensions numbers are national government forecasts and can be above or below OFCE projections for 2040 as assumptions vary by country.*

Public Pensions: *Economic Policy Committee.*

In every country, the retirement system is the combination of several regimes. Some give all old-residents a *flat-rate benefit* (according to the *Beveridge* principle), financed by taxes. In Scandinavia, these benefits are a major part of public pension provisions, but they are high relative to average incomes. In other countries like France, elderly people are entitled to a minimum pension income, which is a means-tested benefit. In most continental countries, public pensions are *earnings-related*, according to the *Bismarkian* principle of social insurance. These systems are managed on a Pay As You Go (PAYG) basis. In these countries, *funded pensions* are negligible, while socially managed funded complementary schemes are important in Scandinavia. In the UK, where public pensions are much lower, *funded pensions* amount to 40 per cent of total pensioners' benefits, and will play an increasing role in the future. The Netherlands and Ireland also have major funded sectors.

Possible Reforms to Pension Systems

In countries with predominantly PAYG schemes, the choice between elements of three painful strategies is unavoidable, given projected demographic trends.

- The first strategy consists of implementing a progressive increase of contribution rates (by about 50 per cent). This increase should, we suggest, be paid exclusively by workers

and not by firms, so that it would not entail a deterioration of competitiveness. However, there is a risk that active people would refuse to pay if contribution rates become too heavy, and that those with qualifications would choose to work in countries where social contributions were lower. The social contribution rate in a PAYG system would be close to the saving rate required to have the same rights as in a funded system if the rate of return on financial assets were not significantly higher than the growth rate of wages and salaries. However, in the UK, at least, the rate of return on funded systems has been significantly higher. Public PAYG systems may have some advantages over funded pensions in that it may be politically easier to ensure that they are indexed to wages.

- The second strategy would involve an increase in the effective retirement age. This is consistent with the anticipated continued increase in life expectancy (71 years in 1980, 75 in 2000, 79 in 2040). The postponement of the average retirement age from 60 years to 65, would lead, if 60-65 year-olds have a job, to a reduction in the dependency ratio in Europe from 60 per cent to 40 per cent in 2025 and in the contribution rate from 33.1 per cent to 24.4 per cent. This strategy would be easy to implement only if European countries were near full employment, so that the people aged 60-65 could be more easily employed.
- The third strategy would involve cuts in benefits relative to wages. In recent years almost every government in the European Union has introduced measures intended to reduce benefits. For instance, we have seen the removal of the link between benefits and wages, an increase in the number of working years taken as a reference to calculate retirement benefits, and reductions in replacement ratios. In Italy, for instance, the official pensions related retirement age is already 65 for men and 60 for women and early retirement has been substantially restricted. However, a system where the living standard of pensioners would be significantly lower than that of the active population in 20 or 40 years is both difficult to manage and to justify. Such a strategy must give the population of working-age incentives to save to finance part of their old-age pensions. The reduction of benefits should, we believe, be progressive and comprehensible to ensure support.

In Southern European countries, one of the objectives of reforms was also to simplify complicated and inequitable systems that had been built over a long period of time. In countries where wage-related pension schemes prevail, the relation between salaries and benefits has been tightened. In Italy and Sweden public sector pension schemes were turned into a notional contribution pension fund, with benefits calculated as the actuarially neutral annuity drawn from the notional capital accumulated by means of contributions credited with a rate of return equal to nominal GDP growth. In the UK, on the contrary, the state earnings-related pension scheme is to be scaled down from 2007.

In Germany and the UK there is a planned path for the replacement ratio over the coming decades. In the UK, the government has announced a reduction of the (already low) replacement ratio, except for those on low-incomes. In Germany, the replacement ratio will be slightly reduced and workers will be given incentives to save in pension funds. In Italy and Sweden contribution rates will be kept unchanged, which will imply a dramatic cut in benefits in the future. In France the path for replacement ratios is unclear. It depends on periodical negotiations between the social partners. Many employees anticipate a decrease in the benefits provided by the PAYG system and have begun accumulating assets in order to provide insurance. Long-term saving schemes for employees have been encouraged by strong fiscal incentives, but setting up an explicit funded pension scheme remains a taboo. Thus the future levels of both funded and unfunded pensions are much more transparent in the UK or Germany than in France.

Existing, wage-related defined benefit occupational pension schemes are declining in importance. In the UK, many newly created occupational pension schemes are based on defined contributions. In Germany occupational schemes, which are generally on a 'book reserve' basis, are commonly being transformed into funded schemes. In the UK, reforms have had to address specific issues as a result of the widespread, and unwise, move to personal pension schemes fostered by the Conservative government in the 1980s.

An intermediate system might involve a move to the accumulation of an overall actuarially sound reserve fund without the introduction of individual actuarial sound pensions. The rules defining retirement benefits would therefore not be altered, and they would continue to guarantee a certain percentage of the wages of equivalent active workers. But public schemes would accumulate reserves so as to settle a collective capitalisation. These reserves would make it possible to reduce the impact of the cyclical fluctuations of the economy on receipts and expenditure. They would smooth the funding problem for PAYG systems induced by the departure at retirement of the baby-boom generation. In addition, reserves would strengthen intergenerational equity by ensuring that the present generation pays more and future generations less.

Capitalisation, through the construction of a reserve fund, is unlikely to solve the problem resulting from the ageing population. Employees must increase their savings in a system based on capitalisation, while contributions must increase in a PAYG system in order to ensure a relatively stable living standard over a lifetime. Capitalisation is however preferable if it entails increases in production. Social security contributions are a tax on labour and thus lower labour supply. However, if pensions are directly proportional to the contributions paid during the working life, contributions should be compared to insurance premiums rather than a direct tax on labour income. The PAYG system can then be seen as an investment in a notional asset which accumulates at the growth rate of the wage bill.

PAYG systems are confronted with the risk that future generations may refuse to pay rising contributions. It is thus necessary that pensions are proportional to the contributions in order to maintain political support for the system. The system can however preserve some degree of redistribution, as is illustrated by the United States. Assistance systems are strongly opposed in the United States, while Social Security, which pays pensions to almost all pensioners, is very popular, in spite of the vertical redistribution it generates.

It may be the case that a capitalisation system would induce a rise in households' savings, and perhaps therefore a fall in interest rates, a rise in capital accumulation and hence of capacity output. However, in countries with retirement systems dominated by PAYG, households' saving ratios are not lower than in countries with a higher share of capitalisation systems. In 1999, the saving ratio of the household sector was 15.7 per cent in France, 13.1 per cent in Germany, 12.7 per cent in Italy, and only 6.2 per cent in the UK and 6.6 per cent in the US. Over 1991-2000, the national rate of gross saving was on average 22 per cent in Germany, 20.4 per cent in France, 20.6 per cent in Italy, as compared to 16.2 per cent in the UK and 17.1 per cent in the US. The level of national savings can of course be influenced by using fiscal policy and public debt management whatever retirement systems are in place. Fiscal policy is perhaps a more flexible instrument for this purpose than retirement systems rules or management.

Conclusion on Harmonisation and Suggestions for a Strategy

The political difficulties involved in constructing a common European pension system are almost beyond doubt insurmountable. However, some simplification of national systems that

would facilitate the transfers of rights might be desirable. Labour mobility would then be encouraged. Other pressures may ensure that there is *de facto* harmonisation. Tax competition could induce governments to lower social security contributions so as to reduce corporate costs. In addition, insurance companies are strongly critical of the existing monopoly of compulsory complementary regimes, and would like to see such barriers removed to ensure competition.

According to the principle of subsidiarity, retirement issues remain in the field of national decisions. The social agenda of the EU proposes only "to achieve a high level of employment to reduce the weight of the retirements by occupied people" and "exchange of views between States on the strategies suitable to guarantee the future of the sure and viable pensions". The preliminary communication of the Commission entitled 'The future evolution of social protection in a long-term prospect: sure and viable pensions' does not propose a common strategy. It relies on economic growth, the rise of activity rates and the return to full employment, but also on recourse to immigration. It recommends a limit on early retirement and the postponement of the statutory age of retirement. It evokes recourse to "private capitalisation regimes to reduce the weight on public finances". However, the communication indicates that all national systems should make it possible for pensioners to preserve the living standard of their working life, to strengthen the solidarity of the system, and to make the amount of the retirement pension for each person foreseeable.

The issues in this area are being widely discussed at a European level and the Commission is currently looking at a proposal on occupational retirement institutions aimed at guaranteeing free provision of services and respecting prudential requirements. We would suggest that a successful strategy might contain the following:

- Governments should encourage later retirement and build stronger institutions to safeguard continuing employment as part of their strategy for ensuring low unemployment and high levels of participation in the workforce.
- All policies should ensure that social cohesion is maintained and the distributional objectives are safeguarded.
- Any reforms must be fair, and provide information on how the system will evolve. In a PAYG system, the evolution of replacement ratios must be publicly decided together with the corresponding evolution of contribution rates.
- In a capitalisation system, the amount of saving required to obtain a satisfactory life annuity at the time of the retirement, taking into account favourable assumptions over the life expectancy and unfavourable ones on savings' returns, must be clear.
- Any significant cut in public pensions should be compensated for by an almost compulsory system of capitalisation, as in the UK's current proposals.
- Tax advantages must be balanced, giving an incentive to employees to subscribe without completely escaping their obligation to pay toward social assurance provided by publicly funded pensions. The amounts transferred from one system to the other must be subject once, and once only, to income tax.

ANNEX I: TABLES

Annex I, Table 1. Short-term Interest Rates (% points)

	USA	Japan	Euro Area	Denmark	Sweden	UK
1998	5.5	0.7	3.9	4.1	4.2	7.3
1999	5.3	0.3	3.0	3.3	3.1	5.4
2000	6.4	0.2	4.4	5.0	4.1	6.1
2001	5.7	0.4	4.8	5.1	4.9	6.0
2002	5.7	0.9	4.6	4.8	4.8	6.0
2000Q1	6.0	0.1	3.5	4.0	3.8	6.1
2000Q2	6.6	0.1	4.2	4.8	4.0	6.2
2000Q3	6.6	0.3	4.7	5.7	4.0	6.1
2000Q4	6.6	0.3	5.0	5.4	4.5	6.1
2001Q1	5.8	0.3	4.8	5.1	4.8	6.0
2001Q2	5.7	0.3	4.8	5.1	5.0	6.0
2001Q3	5.7	0.3	4.8	5.1	5.0	6.0
2001Q4	5.7	0.5	4.8	5.0	5.0	6.0
2002Q1	5.7	0.6	4.8	5.0	5.0	6.0
2002Q2	5.7	0.8	4.5	4.7	4.8	6.0
2002Q3	5.7	1.0	4.5	4.7	4.8	6.0
2002Q4	5.7	1.1	4.5	4.7	4.8	6.0

Annex I, Table 2. Long-term Interest Rates (% points)

	USA	Japan	Euro Area	Denmark	Sweden	UK
1998	5.3	1.4	4.7	4.9	5.0	5.5
1999	5.6	1.8	4.7	5.0	5.0	5.1
2000	6.1	1.8	5.4	5.7	5.4	5.3
2001	5.4	1.8	5.0	5.2	5.1	5.0
2002	5.6	2.0	5.0	5.1	5.1	5.0
2000Q1	6.5	1.8	5.6	5.8	5.8	5.6
2000Q2	6.2	1.7	5.5	5.7	5.3	5.3
2000Q3	5.9	1.9	5.4	5.7	5.3	5.3
2000Q4	5.6	1.7	5.3	5.5	5.3	4.9
2001Q1	5.3	1.8	5.1	5.3	5.1	5.0
2001Q2	5.4	1.8	5.0	5.2	5.1	5.0
2001Q3	5.4	1.9	5.0	5.1	5.1	5.0
2001Q4	5.5	1.9	5.0	5.1	5.1	5.0
2002Q1	5.5	2.0	5.0	5.1	5.1	5.0
2002Q2	5.6	2.0	5.0	5.1	5.1	5.0
2002Q3	5.6	2.1	5.0	5.1	5.1	5.0
2002Q4	5.7	2.1	5.0	5.1	5.1	5.0

Annex I,Table 3. Bilateral Euro Exchange Rate (per euro)

	USA	Japan	Denmark	Sweden	UK
1999	1.07	121.38	7.43	8.81	0.659
2000	0.92	99.50	7.45	8.44	0.609
2001	0.96	105.51	7.46	8.91	0.623
2002	1.03	107.71	7.46	8.95	0.631
2000Q1	0.99	105.62	7.44	8.49	0.614
2000Q2	0.93	99.56	7.44	8.26	0.609
2000Q3	0.90	97.36	7.46	8.40	0.612
2000Q4	0.87	95.46	7.45	8.61	0.601
2001Q1	0.92	103.04	7.46	8.90	0.621
2001Q2	0.95	104.99	7.46	8.91	0.622
2001Q3	0.98	106.35	7.46	8.92	0.624
2001Q4	1.00	107.67	7.46	8.93	0.626
2002Q1	1.01	107.39	7.46	8.94	0.627
2002Q2	1.03	108.18	7.46	8.94	0.629
2002Q3	1.04	107.84	7.46	8.95	0.632
2002Q4	1.05	107.44	7.46	8.96	0.634

Annex I, Table 4. Effective Exchange Rates (1994=100)

	USA	Japan	Euro Area	Denmark	Sweden	UK
1998	126.6	86.7	99.9	102.1	103.7	117.3
1999	124.2	99.1	96.3	101.0	102.6	117.4
2000	127.3	108.3	88.2	97.5	103.5	121.8
2001	128.4	106.9	91.6	99.5	99.8	121.3
2002	125.3	110.0	95.0	101.0	101.3	122.2
2000Q1	123.6	106.4	90.7	98.5	103.8	122.7
2000Q2	126.5	108.9	88.4	97.4	105.9	122.1
2000Q3	127.8	109.1	87.5	97.1	103.9	120.6
2000Q4	131.5	108.7	86.1	97.0	100.4	121.9
2001Q1	130.2	106.2	89.6	98.6	98.9	120.2
2001Q2	128.9	106.6	91.0	99.2	99.6	121.1
2001Q3	127.8	107.2	92.3	99.8	100.1	121.6
2001Q4	126.7	107.8	93.5	100.3	100.7	122.1
2002Q1	126.2	108.7	94.0	100.5	100.8	122.2
2002Q2	125.4	109.4	94.9	100.9	101.3	122.5
2002Q3	125.0	110.4	95.4	101.1	101.4	122.2
2002Q4	124.7	111.4	95.8	101.3	101.5	122.0

Annex I, Table 5. Austria

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	3.3	2.8	3.4	2.4	2.7
Private Consumption	2.9	2.3	2.7	2.0	2.1
Public Consumption	2.8	3.2	2.5	1.5	1.5
Gross Fixed Investment	2.4	2.0	3.2	2.3	2.9
Stockbuilding (chg as % of GDP)	-0.3	0.2	0.1	0.0	0.0
Domestic Demand	2.5	2.6	2.8	2.0	2.2
Exports (goods and services)	5.5	7.6	7.5	5.7	5.8
Imports (goods and services)	3.7	7.1	6.3	4.9	4.9
Employment	0.2	1.1	1.0	0.9	0.9
Unemployment Rate (%)	4.7	3.8	3.3	3.2	3.2
Compensation per employee hour	3.1	2.5	2.5	2.9	2.6
Unit Labour Costs	0.7	0.9	0.1	1.0	0.5
Household Real Disposable Income	3.0	3.4	3.9	1.9	1.8
GDP Deflator	0.7	0.9	1.4	1.6	1.4
Private Consumption Deflator	0.6	0.9	1.5	1.4	1.4
Harmonised Consumer Price Index	0.8	0.5	2.0	1.9	1.4
Real Effective Exchange Rate	-0.6	-0.6	-2.4	0.4	0.6
Current Account (% of GDP)	-2.5	-2.7	-3.2	-2.9	-1.7
General Govt. Balance (% of GDP)	-2.4	-2.0	-1.4	-0.9	-0.2
General Govt. Gross Debt (% of GDP)	63.5	64.9	63.2	61.7	59.4

Annex I, Table 6. Belgium

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	2.6	2.7	3.9	2.9	2.9
Private Consumption	3.7	1.8	2.9	2.4	2.3
Public Consumption	1.6	3.6	1.5	1.4	1.6
Gross Fixed Investment	4.2	4.3	4.4	3.7	3.0
Stockbuilding (chg as % of GDP)	0.9	-0.9	0.0	-0.1	0.0
Domestic Demand	4.2	1.9	2.9	2.4	2.3
Exports (goods and services)	4.0	5.3	12.0	7.7	7.8
Imports (goods and services)	6.4	4.3	11.0	7.6	7.3
Employment	1.2	0.9	1.1	1.1	1.0
Unemployment Rate (%)	9.5	9.1	8.5	8.1	7.7
Compensation per employee hour	2.1	3.5	3.0	3.3	3.5
Unit Labour Costs	1.1	1.3	-0.2	1.5	1.5
Household Real Disposable Income	2.8	2.7	1.8	0.7	2.0
GDP Deflator	1.6	1.0	1.7	1.1	1.7
Private Consumption Deflator	1.0	1.2	2.5	1.9	1.4
Harmonised Consumer Price Index	0.9	1.1	3.0	1.7	1.3
Real Effective Exchange Rate	-0.2	-1.2	-2.3	1.0	0.9
Current Account (% of GDP)	4.8	4.7	5.3	5.1	5.8
General Govt. Balance (% of GDP)	-1.0	-0.7	-0.1	0.3	0.7
General Govt. Gross Debt (% of GDP)	117.4	114.4	108.4	103.8	98.4

Annex I, Table 7. Denmark

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	2.8	2.1	2.9	2.2	2.2
Private Consumption	3.6	0.5	0.3	1.5	1.9
Public Consumption	3.1	1.4	0.8	1.9	0.9
Gross Fixed Investment	7.6	1.5	9.1	3.2	2.9
Stockbuilding (chg as % of GDP)	0.3	-1.6	0.4	0.0	0.1
Domestic Demand	4.5	-0.6	2.8	2.0	2.0
Exports (goods and services)	2.4	9.7	7.4	5.6	5.7
Imports (goods and services)	7.4	2.2	7.6	5.5	5.5
Employment	2.1	1.0	0.7	0.9	0.9
Unemployment Rate (%)	5.1	5.2	4.9	4.6	4.0
Compensation per employee hour	4.2	3.8	4.1	3.2	3.4
Unit Labour Costs	2.8	3.1	2.3	1.4	1.6
Household Real Disposable Income	4.8	0.1	0.1	0.6	1.5
GDP Deflator	1.9	3.0	3.2	2.1	2.0
Private Consumption Deflator	1.9	2.5	3.4	2.4	1.8
Harmonised Consumer Price Index	1.3	2.1	2.7	2.1	1.8
Real Effective Exchange Rate	1.5	0.2	-2.1	2.4	1.3
Current Account (% of GDP)	-1.1	1.5	1.5	2.6	2.2
General Govt. Balance (% of GDP)	1.2	2.8	2.4	2.3	2.6
General Govt. Gross Debt (% of GDP)	55.6	52.6	47.8	43.0	38.9

Annex I, Table 8. Finland

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	5.3	4.2	5.7	4.5	4.1
Private Consumption	5.1	3.7	3.9	3.9	2.4
Public Consumption	1.7	2.0	0.6	1.5	2.0
Gross Fixed Investment	9.3	2.7	8.0	5.9	5.1
Stockbuilding (chg as % of GDP)	-0.3	-0.2	-0.8	-0.5	0.3
Domestic Demand	4.8	2.9	3.1	3.3	3.3
Exports (goods and services)	8.9	7.1	13.6	7.3	6.8
Imports (goods and services)	8.5	4.3	8.5	5.3	6.0
Employment	2.4	3.3	1.7	1.4	1.4
Unemployment Rate (%)	11.4	10.2	9.8	9.0	8.2
Compensation per employee hour	4.9	2.9	4.1	4.5	3.5
Unit Labour Costs	1.7	2.6	1.3	1.0	1.0
Household Real Disposable Income	4.2	4.0	0.7	3.4	2.3
GDP Deflator	3.1	0.6	2.8	2.3	1.0
Private Consumption Deflator	1.9	1.7	2.9	2.1	1.3
Harmonised Consumer Price Index	1.4	1.3	3.0	1.7	1.5
Real Effective Exchange Rate	0.0	-1.2	-3.2	2.5	1.0
Current Account (% of GDP)	5.6	5.4	5.7	5.4	5.4
General Govt. Balance (% of GDP)	1.3	1.9	4.1	4.4	5.6
General Govt. Gross Debt (% of GDP)	49.0	47.1	41.8	36.6	31.0

Annex I, Table 9. France

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	3.2	2.9	3.1	2.9	2.5
Private Consumption	3.5	2.3	2.4	2.9	2.5
Public Consumption	0.3	2.5	1.4	1.2	1.1
Gross Fixed Investment	6.6	7.3	7.0	5.8	4.5
Stockbuilding (chg as % of GDP)	0.7	-0.4	0.2	-0.3	0.0
Domestic Demand	3.9	2.9	3.2	2.8	2.6
Exports (goods and services)	7.7	3.8	13.1	7.6	6.5
Imports (goods and services)	11.3	3.8	14.3	7.6	7.0
Employment	1.4	2.1	2.4	1.9	1.3
Unemployment Rate (%)	11.7	11.3	9.7	9.0	8.7
Compensation per employee hour	2.0	1.6	2.1	3.7	3.6
Unit Labour Costs	0.6	0.9	0.8	1.3	1.0
Household Real Disposable Income	3.0	2.4	2.3	2.5	1.9
GDP Deflator	0.8	0.4	0.7	1.2	1.2
Private Consumption Deflator	0.7	0.6	1.4	1.7	1.5
Harmonised Consumer Price Index	0.7	0.6	1.8	2.0	1.3
Real Effective Exchange Rate	-0.1	-2.0	-3.7	0.9	1.0
Current Account (% of GDP)	2.7	2.6	2.1	2.4	1.8
General Govt. Balance (% of GDP)	-2.7	-1.8	-1.4	-1.3	-1.0
General Govt. Gross Debt (% of GDP)	59.3	58.6	57.7	56.7	55.7

Annex I, Table 10. Germany

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	1.8	1.4	3.0	2.4	2.6
Private Consumption	1.9	2.5	1.9	2.3	2.1
Public Consumption	0.5	-0.1	1.1	0.6	0.8
Gross Fixed Investment	2.3	2.9	2.1	1.2	3.2
Stockbuilding (chg as % of GDP)	0.5	0.2	0.5	0.3	0.2
Domestic Demand	2.2	2.3	2.4	2.0	2.3
Exports (goods and services)	6.3	4.6	11.3	7.2	7.3
Imports (goods and services)	8.1	7.8	9.2	6.3	6.7
Employment	0.9	1.1	1.5	0.9	0.7
Unemployment Rate (%)	9.4	8.8	8.3	7.8	7.4
Compensation per employee hour	1.0	1.3	1.9	1.7	2.7
Unit Labour Costs	0.1	1.0	0.2	0.4	0.8
Household Real Disposable Income	1.7	1.9	1.6	2.5	1.8
GDP Deflator	1.1	0.9	-0.2	0.6	0.8
Private Consumption Deflator	1.1	0.3	1.4	1.3	1.4
Harmonised Consumer Price Index	0.6	0.6	2.1	1.6	1.4
Real Effective Exchange Rate	0.2	-2.7	-4.5	0.7	1.1
Current Account (% of GDP)	-0.2	-0.9	-1.0	-1.0	-0.8
General Govt. Balance (% of GDP)	-1.7	-1.4	-1.2	-1.6	-0.9
General Govt. Gross Debt (% of GDP)	60.7	61.1	59.5	58.9	57.9

Annex I, Table 11. Greece

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	3.1	3.4	4.1	4.2	3.7
Private Consumption	3.1	2.9	3.2	3.2	3.4
Public Consumption	1.7	-0.1	0.7	0.9	1.1
Gross Fixed Investment	11.8	7.3	8.6	8.4	8.4
Stockbuilding (chg as % of GDP)	0.2	-0.5	-0.1	0.0	0.0
Domestic Demand	4.7	3.0	3.9	4.0	4.3
Exports (goods and services)	5.9	6.5	7.5	7.8	5.6
Imports (goods and services)	11.3	3.9	6.2	5.7	7.2
Employment	3.4	1.0	1.1	1.5	1.1
Unemployment Rate (%)	11.0	12.0	11.8	10.7	9.8
Compensation per employee hour	5.8	4.8	5.6	6.6	5.5
Unit Labour Costs	6.8	2.4	1.5	4.0	3.3
Household Real Disposable Income	-0.3	2.5	2.6	3.0	2.5
GDP Deflator	4.9	2.5	3.0	3.4	2.7
Private Consumption Deflator	4.7	2.6	2.6	2.8	2.6
Harmonised Consumer Price Index	4.5	2.2	2.9	3.2	2.6
Real Effective Exchange Rate	-3.1	1.3	-5.0	0.5	1.8
Current Account (% of GDP)	0.3	-1.8	-3.7	-3.3	-3.9
General Govt. Balance (% of GDP)	-2.5	-1.8	-0.9	-0.4	-0.1
General Govt. Gross Debt (% of GDP)	105.4	104.4	103.0	95.9	90.0

Annex I, Table 12. Ireland

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	8.9	9.8	9.8	7.4	7.1
Private Consumption	7.4	7.7	9.3	7.4	7.5
Public Consumption	5.9	5.2	4.4	4.3	4.3
Gross Fixed Investment	16.8	13.0	10.0	9.9	9.3
Stockbuilding (chg as % of GDP)	0.2	-0.7	0.3	-0.1	0.1
Domestic Demand	9.5	7.7	9.0	7.5	7.6
Exports (goods and services)	20.5	12.4	15.7	8.8	12.4
Imports (goods and services)	23.2	10.5	16.0	9.2	13.7
Employment	10.2	6.1	4.2	3.3	3.4
Unemployment Rate (%)	7.7	5.7	4.5	3.9	3.9
Compensation per employee hour	5.5	7.6	7.4	9.1	9.5
Unit Labour Costs	5.1	2.0	0.9	5.0	5.0
Household Real Disposable Income	7.3	7.6	6.5	7.6	9.0
GDP Deflator	5.7	3.8	5.0	5.0	1.4
Private Consumption Deflator	3.7	3.3	5.3	4.5	1.7
Harmonised Consumer Price Index	2.1	2.5	5.4	4.1	1.7
Real Effective Exchange Rate	-3.1	-1.2	-2.5	5.0	1.8
Current Account (% of GDP)	1.1	0.7	-0.5	-0.6	-1.7
General Govt. Balance (% of GDP)	2.1	1.9	4.1	4.6	4.2
General Govt. Gross Debt (% of GDP)	55.6	52.4	42.6	33.8	27.1

Annex I, Table 13. Italy

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	1.5	1.4	2.7	2.4	2.7
Private Consumption	2.3	1.7	2.1	2.3	2.9
Public Consumption	0.6	0.7	1.0	1.0	0.8
Gross Fixed Investment	4.2	4.3	6.5	4.4	6.0
Stockbuilding (chg as % of GDP)	0.6	0.4	-0.4	0.0	0.0
Domestic Demand	2.9	2.5	2.4	2.5	3.1
Exports (goods and services)	3.4	-0.4	9.8	7.7	7.2
Imports (goods and services)	9.1	3.4	9.0	8.2	8.7
Employment	1.1	1.2	1.4	1.3	1.2
Unemployment Rate (%)	11.8	11.4	10.5	9.8	9.4
Compensation per employee hour	-1.6	1.9	2.4	2.5	2.5
Unit Labour Costs	-2.2	2.0	1.3	1.6	1.0
Household Real Disposable Income	0.8	0.9	1.8	2.5	2.7
GDP Deflator	2.7	1.5	1.3	2.5	2.0
Private Consumption Deflator	2.1	2.2	2.8	2.4	1.7
Harmonised Consumer Price Index	2.0	1.6	2.6	2.3	1.6
Real Effective Exchange Rate	0.7	-0.6	-2.2	1.8	1.2
Current Account (% of GDP)	1.7	0.5	-1.2	-0.6	-0.2
General Govt. Balance (% of GDP)	-2.8	-1.9	-1.5	-1.2	-0.5
General Govt. Gross Debt (% of GDP)	116.3	114.9	111.9	106.7	102.4

Annex I, Table 14. Netherlands

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	4.1	3.9	4.2	3.3	3.0
Private Consumption	4.4	4.4	3.7	4.0	3.6
Public Consumption	3.4	2.5	3.2	2.4	1.7
Gross Fixed Investment	5.2	5.7	6.4	4.0	3.4
Stockbuilding (chg as % of GDP)	-0.1	0.0	-0.2	-0.1	0.1
Domestic Demand	4.2	4.2	4.0	3.5	3.2
Exports (goods and services)	7.4	5.6	8.0	6.7	6.3
Imports (goods and services)	8.0	6.3	8.0	7.3	6.9
Employment	3.3	3.0	2.0	1.9	1.2
Unemployment Rate (%)	4.1	3.1	2.7	2.4	2.7
Compensation per employee hour	2.9	3.5	4.6	4.9	4.6
Unit Labour Costs	2.4	2.7	2.0	3.1	2.1
Household Real Disposable Income	2.4	2.7	2.7	4.5	3.5
GDP Deflator	2.0	1.7	2.5	4.6	1.0
Private Consumption Deflator	1.8	1.9	3.2	3.7	1.4
Harmonised Consumer Price Index	1.8	2.0	2.4	3.6	1.4
Real Effective Exchange Rate	0.7	-0.7	-2.0	3.3	0.9
Current Account (% of GDP)	4.1	4.3	5.5	5.3	5.1
General Govt. Balance (% of GDP)	-0.7	1.0	1.5	1.1	1.3
General Govt. Gross Debt (% of GDP)	67.0	63.8	57.5	51.9	48.4

Annex I, Table 15. Portugal

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	3.6	3.0	3.1	2.9	2.9
Private Consumption	6.0	4.6	3.0	3.9	3.1
Public Consumption	3.0	3.8	3.1	2.3	2.6
Gross Fixed Investment	8.6	5.7	4.9	5.3	3.6
Stockbuilding (chg as % of GDP)	0.0	0.0	0.1	-0.2	0.0
Domestic Demand	6.1	4.7	3.6	3.8	3.1
Exports (goods and services)	7.6	2.5	9.2	7.1	9.2
Imports (goods and services)	13.8	7.0	8.6	8.6	8.1
Employment	4.6	1.9	2.7	1.2	1.6
Unemployment Rate (%)	5.1	4.5	4.3	4.0	4.0
Compensation per employee hour	5.7	4.6	3.8	5.3	4.4
Unit Labour Costs	6.3	4.1	3.7	3.4	2.4
Household Real Disposable Income	5.4	3.3	2.3	3.0	3.4
GDP Deflator	4.1	2.7	2.6	3.4	2.3
Private Consumption Deflator	2.9	2.4	2.8	3.0	2.5
Harmonised Consumer Price Index	2.2	2.1	2.8	3.0	2.5
Real Effective Exchange Rate	0.3	0.0	-1.5	1.8	1.5
Current Account (% of GDP)	-7.4	-9.1	-12.3	-10.4	-9.7
General Govt. Balance (% of GDP)	-2.1	-2.0	-1.3	-0.9	-0.4
General Govt. Gross Debt (% of GDP)	56.5	56.8	54.9	52.3	50.1

Annex I, Table 16. Spain

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	4.3	4.0	4.1	3.1	2.5
Private Consumption	4.5	4.7	3.9	2.9	2.9
Public Consumption	3.7	2.9	1.1	1.7	1.5
Gross Fixed Investment	9.7	8.9	6.2	5.7	4.4
Stockbuilding (chg as % of GDP)	0.1	0.2	0.4	-0.4	0.0
Domestic Demand	5.6	5.5	4.3	3.0	3.0
Exports (goods and services)	8.3	6.6	10.1	9.1	5.7
Imports (goods and services)	13.4	11.9	10.7	8.2	7.1
Employment	3.4	4.6	4.4	2.3	1.9
Unemployment Rate (%)	18.8	15.9	14.2	13.9	14.0
Compensation per employee hour	2.1	0.6	1.8	3.5	2.7
Unit Labour Costs	2.7	2.7	2.5	2.7	2.5
Household Real Disposable Income	3.8	3.8	2.6	3.4	3.5
GDP Deflator	2.3	2.9	2.9	3.0	1.8
Private Consumption Deflator	2.0	2.4	3.1	3.1	2.1
Harmonised Consumer Price Index	1.7	2.3	3.5	3.4	2.1
Real Effective Exchange Rate	0.3	-0.3	-1.7	2.2	1.5
Current Account (% of GDP)	-0.5	-2.1	-2.5	-2.9	-3.4
General Govt. Balance (% of GDP)	-2.6	-1.1	-0.3	0.0	-0.2
General Govt. Gross Debt (% of GDP)	64.9	63.5	58.4	54.9	52.8

Annex I, Table 17. Sweden

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	3.6	3.9	3.7	3.2	2.7
Private Consumption	2.6	3.9	4.9	3.5	2.6
Public Consumption	2.9	1.4	-1.8	1.5	2.9
Gross Fixed Investment	8.2	7.9	5.1	3.8	3.7
Stockbuilding (chg as % of GDP)	0.6	-1.2	0.5	-0.1	0.0
Domestic Demand	4.3	2.6	3.6	2.9	2.9
Exports (goods and services)	8.4	6.8	9.8	7.6	5.4
Imports (goods and services)	11.1	4.4	10.9	7.9	6.2
Employment	1.5	2.2	2.0	1.5	0.8
Unemployment Rate (%)	8.3	7.2	6.0	5.7	5.7
Compensation per employee hour	3.2	2.3	2.4	3.9	3.4
Unit Labour Costs	1.1	1.1	1.1	1.7	1.1
Household Real Disposable Income	2.8	3.3	2.3	2.4	2.7
GDP Deflator	1.3	0.5	1.0	2.4	2.2
Private Consumption Deflator	1.0	0.7	1.4	1.8	1.7
Harmonised Consumer Price Index	1.0	0.6	1.3	1.8	1.7
Real Effective Exchange Rate	-2.3	-1.8	0.0	-4.0	1.1
Current Account (% of GDP)	1.9	2.5	2.2	2.9	2.8
General Govt. Balance (% of GDP)	1.9	1.9	3.3	3.5	2.5
General Govt. Gross Debt (% of GDP)	72.4	65.5	59.1	52.3	47.2

Annex I, Table 18. UK

(percentage change unless otherwise stated)

	1998	1999	2000	2001	2002
GDP at constant prices	2.6	2.3	3.1	3.0	2.6
Private Consumption	4.0	4.4	3.9	2.9	2.2
Public Consumption	1.1	4.0	3.2	4.0	4.0
Gross Fixed Investment	10.4	5.2	1.7	4.5	5.0
Stockbuilding (chg as % of GDP)	0.1	-0.7	0.5	-0.1	0.0
Domestic Demand	4.6	3.8	3.8	3.3	3.1
Exports (goods and services)	2.6	4.0	7.8	6.4	5.5
Imports (goods and services)	8.8	8.1	9.0	6.5	6.2
Employment	1.6	0.8	0.5	0.2	0.2
Unemployment Rate (%)	6.3	6.1	5.5	5.3	5.3
Compensation per employee hour	4.9	6.2	5.3	4.8	5.3
Unit Labour Costs	4.3	4.0	2.0	1.5	2.1
Household Real Disposable Income	0.1	3.5	2.8	3.5	3.3
GDP Deflator	3.0	2.3	1.6	1.7	1.5
Private Consumption Deflator	2.4	1.6	0.6	1.1	1.6
Harmonised Consumer Price Index	1.6	1.4	0.8	1.1	1.6
Real Effective Exchange Rate	5.0	0.3	2.2	-1.6	0.5
Current Account (% of GDP)	0.0	-1.0	-1.3	-1.1	-1.6
General Govt. Balance (% of GDP)	0.4	1.3	2.6	1.8	1.1
General Govt. Gross Debt (% of GDP)	48.4	46.0	41.0	37.2	34.4

ANNEX II: STABILITY AND CONVERGENCE PROGRAMME TABLES

General Government Finances in the Stability and Convergence Programmes 2000-2004

as percent of GDP

	1999	2000	2001	2002	2003	2004
Austria						
Total revenue	51.5	50.4	50.2	50.0	49.6	49.4
Total expenditure	53.7	51.8	50.9	50.0	49.6	49.4
Financial balance	– 2.1	– 1.4	– 0.8	± 0.0	± 0.0	± 0.0
Gross debt	64.6	63.1	61.4	59.1	57.2	55.3
GDP, volume[1]	+ 2.8	+ 3.5	+ 2.8	+ 2.7	+ 2.3	+ 2.5
Germany						
Total revenue	47.1	47.0	45.0	44.5	44.0	44.0
Total expenditure	48.5	48.0	46.5	45.5	44.5	44.0
Financial balance	– 1.4	– 1.0	– 1.5	– 1.0	– 0.5	± 0.0
Gross debt	61.1	60.0	58.0	57.5	56.5	54.5
GDP, volume[1]	+ 1.6	+ 2.8	+ 2.8	+ 2.5	+ 2.5	+ 2.5
Belgium						
Total revenue	46.4	45.8	45.5	45.4	45.2	
Total expenditure	47.4	46.7	46.1	45.5	44.8	
Financial balance	– 1.1	– 1.0	– 0.6	– 0.1	+ 0.4	
Gross debt	114.9	112.4	108.9	105.2	101.2	
GDP, volume[1]	+ 1.7	+ 2.5	+ 2.5	+ 2.3	+ 2.3	
Netherlands						
Total revenue	47.8	47.7	45.8			
Total expenditure	47.6	46.9	45.2			
Financial balance	+ 1.0	+ 1.0	+ 0.7	+ 0.3	+ 0.3	+ 0.3
Gross debt	62.9	56.6	52.3	50.3	48.8	46.8
GDP, volume[1]	+ 3.9	+ 4.5	+ 4.0	+ 2.0	+ 2.0	+ 2.0
France						
Total revenue	52.1	51.6	51.1	50.8	50.3	50.0
Total expenditure	53.9	53.0	52.1	51.4	50.7	49.8
Financial balance	– 1.8	– 1.4	– 1.0	– 0.6	– 0.4	+ 0.2
Gross debt	58.9	58.4	57.2	55.9	54.6	52.9
GDP, volume[1]	+ 3.0	+ 3.3	+ 3.0	+ 3.0	+ 3.0	+ 3.0
Italy						
Total revenue	46.9	46.8				
Total expenditure	48.8	48.1				
Financial balance	– 1.9	– 1.3	– 0.8	– 0.5	+ 0.0	+ 0.3
Gross debt	114.9	112.1	106.6	103.5	99.6	94.9
GDP, volume[1]	+ 1.4	+ 2.8	+ 2.9	+ 3.1	+ 3.1	+ 3.1
Spain						
Total revenue	40.1	40.1	40.0	39.9	39.8	
Total expenditure	41.3	40.8	40.4	39.8	39.5	
Financial balance	– 1.3	– 0.8	– 0.4	+ 0.1	+ 0.2	
Gross debt	63.5	62.8	60.6	58.1	55.8	
GDP, volume[1]	+ 3.7	+ 3.7	+ 3.3	+ 3.3	+ 3.3	

Portugal						
Total revenue		48.1	48.3	48.2	48.0	47.8
Total expenditure		49.5	49.3	48.8	48.3	47.8
Financial balance	– 2.0	– 1.5	– 1.1	– 0.7	– 0.3	± 0.0
Gross debt		57.1	55.2	53.3	51.0	48.4
GDP, volume[1]	+ 3.1	+ 3.3	+ 3.6	+ 3.6	+ 3.5	+ 3.5
Greece						
Total revenue	45.2	45.6	45.7	45.5	44.9	44.2
Total expenditure	47.1	46.3	45.2	44.0	42.9	42.3
Financial balance	– 1.8	– 1.2	+ 0.5	+ 1.5	+ 2.0	+ 2.0
Gross debt	104.6	103.9	98.9	96.0	90.5	84.0
GDP, volume[1]	+ 3.4	+ 4.1	+ 5.0	+ 5.2	+ 5.5	+ 5.5
Finland						
Total revenue	49.0	49.5	48.4	47.3	46.7	46.3
Total expenditure	47.1	44.7	43.4	42.7	42.0	41.2
Financial balance	+ 1.9	+ 4.5	+ 4.7	+ 4.4	+ 4.5	+ 4.9
Gross debt	46.6	42.4	39.2	37.1	34.9	32.2
GDP, volume[1]	+ 4.0	+ 5.2	+ 4.2	+ 3.2	+ 2.7	+ 2.7
United Kingdom						
Total revenue	39.4	40.0	40.2	40.0	39.6	39.6
Total expenditure	37.7	39.1	39.7	40.1	40.6	40.7
Financial balance	+ 1.8	+ 1.1	+ 0.6	- 0.1	- 0.9	- 1.0
Gross debt	43.6	40.1	37.7	36.1	35.6	35.5
GDP, volume[1]	+ 2.3	+ 3.0	+ 2.3	+ 2.3	+ 2.3	+2.3
Sweden						
Total revenue	60.2	58.9	57.2	56.4	56.5	
Total expenditure	58.4	55.5	53.7	53.1	52.9	
Financial balance	+ 1.9	+ 3.4	+ 3.5	+ 2.0	+ 2.0	
Gross debt	65.6	58.9	53.2	50.2	48.2	
GDP, volume[1]	+ 3.8	+ 3.9	+ 3.5	+ 2.1	+2.1	
Ireland						
Total revenue		33.3	32.5	32.5	32.7	
Total expenditure		28.6	28.2	28.3	27.2	
Financial balance	+ 3.9	+ 4.7	+ 4.3	+ 3.8	+ 4.6	
Gross debt	50.1	39.0	33.0	28.0	24.0	
GDP, volume[1]	+ 9.8	+10.7	+ 8.8	+ 6.3	+ 5.7	
Luxembourg						
Total revenue	46.4	45.2	44.3	43.4	42.4	
Total expenditure	44.1	42.7	41.7	40.5	39.3	
Financial balance	+ 2.3	+ 2.5	+ 2.6	+ 2.9	+ 3.1	
Gross debt	4.3					
GDP, volume[1]	+ 4.9	+ 4.9	+ 5.1	+ 5.2	+ 5.4	
Denmark						
Total revenue	57.8	56.2	56.4	55.8	55.1	54.7
Total expenditure	55.0	53.5	53.5	53.2	52.5	52.0
Financial balance	+ 2.8	+ 2.7	+ 2.8	+ 2.6	+ 2.6	+ 2.7
Gross debt	52.6	48.3	44.7	41.8	39.2	36.8
GDP, volume[1]	+ 1.7	+ 2.4	+ 1.8	+ 1.7	+ 1.7	+ 1.6

[1] Percentage change over previous year.

Source: National Stability and Convergence Programmes, most recent available update.

ANNEX III: THE NEW ECONOMY

OECD's ICT definition. Available on (http://www.oecd.org/dsti/sti/it/stats/defin.htm)

ICT manufacturing:

3000 Manufacture of office, accounting and computing machinery.
3130 Manufacture of insulated wire and cable
3210 Manufacture of electronic valves and tubes and other electronic components
3220 Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy

3230 Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods
3312 Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment
3313 Manufacture of industrial process control equipment

Services -- goods related:

5150 Wholesale of machinery, equipment and supplies
7123 Renting of office machinery and equipment (including computers)
Services -- intangible:
6420 Telecommunications
7200 Computer and related activities.

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ANNEX IV: TAX AND PENSIONS REFORMS IN INDIVIDUAL COUNTRIES

Tax Reform: Country Notes

The German Tax Reform

In July 2000, the German *Bundestag* adopted the *Tax Reform 2000*, based on the results of the mediation procedure achieved on 4 July 2000. This reform came into effect on 1 January 2001, as scheduled. All in all, the reform includes six main elements: a reduction of income tax, a reduction of corporation tax, a change of the system of taxing corporations and shareholders, specific reform measures benefiting unincorporated companies, a broadening of the tax base and the continuation of the ecological tax reform.

The personal income tax burden is reduced in different stages: cuts of the top marginal income tax rate from 53% in 1998 to 42% in 2005 (48.5% in 2001), and of the basic income tax rate from 25.9% to 15% (19.9 in 2001); an increase in the personal allowance (12,300 DM in 1998, 15,000 DM in 2005); the top rate will apply only to taxable income in excess of 102,000 DM.

The corporate tax will be cut to a uniform rate from 2001. The corporate tax rate on retained earnings in Germany will decrease from 40% in 1999 to 25%; the corporate tax on distributed earnings will be cut from 30% to 25%. Including the solidarity surcharge and the professional tax, the corporate tax rate will amount to 38.6%.

As regards the taxation of dividends, the full-imputation system will be replaced by the half-income system from 2002. Under this system, only half of the distributed profits will be included in the shareholder's personal income tax base. Beginning in 2002, capital gains from the sale of shareholdings between corporations will generally be exempted from tax. This was already the case for the sale of shareholdings of foreign corporations amounting to more than 10% of the capital. To prevent any abuse, a minimum holding period of one year has been set. Private shareholders will be able to sell their stakes in corporations after a minimum holding period of one year without paying tax as before, however the threshold for this exemption is reduced from 10% to 1%. The change in the taxation of profits and dividends aims at creating an incentive for companies to finance themselves from retained earnings, while the change in the taxation of capital gains is aimed at promoting an optimisation of the shareholdings structures.

The initially proposed alternative for unincorporated business to opt for taxation as an incorporated company has disappeared, mainly because the top rate for income tax has been reduced further. Unincorporated companies (subject to the income tax and to the local business tax) will see an additional reduction of their tax burden as the trade tax will be credited against their income tax liability in a standardised form: their income tax will be reduced by an amount corresponding to 1.8 times the assessment base of the trade tax. The trade tax will still be deductible as operating expenditure.

The total tax relief of the reforms between 1999 and 2005 amounts to DM 152.8 billion (€76.4 billion). The net tax relief amounts to DM 95 billion (€47.5 billion Euro, 2.5% of the GDP). The lower net tax relief is due to many financing measures. Some of them have already in application. The aim is to harmonise the determination of fiscal benefits with international standards trough a broadening of the income tax base (suppression of the exemptions of some kinds of incomes and of certain abatements, imposition of the speculative capital gains, controls more strict of professional benefit determination, limitation of the possibilities of constituting provisions, limitation of the possibilities of report of the deficits on a category of incomes on the other incomes). From 2001, the tax reform 2000

introduces new measures. The declining tax balance depreciation rate for movable assets will be reduced from 30 to 20 per cent, the depreciation rate for company buildings will fall from 4 to 3 per cent.

The ecological tax reform relies upon two laws, voted respectively in March and December 1999. A decrease of 1 percentage point the pension insurance contribution rate (20.3 to 19.5 in April 1999, 19.3 in January 2000) has already been allowed. Further steps are planned, up to the fiscal year 2003, which would allow a further decrease of 0.8 percentage points in the pension insurance contribution rate. The net financial effect of the ecological tax implies a net burden of DM 10 billion (€5 billion). The ecological tax reform not only aims at achieving ecological restructuring in the German economy but also to reduce the labour cost. Between 1991 and 1998, the burden of the German reunification induced an increase of 4.3 percentage points in the social contribution rates.

The net impact of the reforms that started to be enforced in 1999 (excluding the ecological tax reform) is quite different for SMEs, big companies and private households. The reform leads to a net tax relief of DM 29.8 billion for SMEs. Companies with an annual turnover of up to DM 100 millions are in this group, that is nearly all German companies, also including most of unincorporated companies subject to income tax. Sole-traders or unincorporated companies amount for 84% of the companies, 78% of them have taxable profits of less than DM 100 000 (€50 000). By contrast, the reform implies an additional net burden of 1,7 bill. DM for big companies. This is explained both by the sharing of the burden resulting bill. The broadening of the income tax base and by the sharing of the tax cuts. Large companies pay 50% of the broadening, whereas the SMEs share approximately 25%, 28% of the tax relief goes to SMEs, to compare with 17% for large companies.

The tax reform will lead to a net tax relief of DM 93.4 billion (€46,7 billion) for households. The first steps of the reform have been more favourable to medium and low income earners. The last steps will be more favourable to high (2003) and medium (2005) earners.

The total net tax relief is similar to that of the former great tax reforms (1986, 1988 and 1990). Frequent reforms of income tax are justified in Germany because of a greater progressivity of income tax, due to the fact that there is no automatic price indexation of the income tax schedules. In this respect, the new tax reform mitigates the implicit progressivity of income taxes. Taking into consideration this progressivity there is a much lower tax relief for households. The reform of corporate taxation introduces in this respect more radical changes. The net tax relief for SME will support output growth in East Germany, where the proportion of SME is higher than in West Germany. The reform of corporate taxation will help to improve the competitive position of Germany, where (including local and state taxes); the tax level was high before the reform by international standards. Last but not least, the exemption from tax of the sale of shareholdings between corporations will promote an optimisation of the shareholdings structures.

Tax reform in France

Both the economic recovery and the progressivity of the tax system led to buoyant tax receipts in 1999 (45.7 % of the GDP). This has created opportunities for implementing new fiscal policy measures. The government chose a general and strong fall in taxes over four years: the cuts enforced in 2000 and 2001 together with those announced for 2002 and 2003 amount to 2.8 percent of GDP (table 1). Tax receipts are expected to reach 43.9 per cent of GDP in 2003. Public sector accounts are expected to be balanced in 2003, which means that GDP growth must remain strong (at least 3 per cent per annum) and public expenditure is managed very rigorously (with real annual rises of 1.3 % only).

Annex IV, Table 1: Tax measures between 1999 and 2003 (in € billions)

Households	***-25.0***	***Firms***	***-13.8***
		Corporate tax rate	-5.2
Income tax	-8.5	Corporate tax base	3.0
General social contribution	-4.0	CSB [2]	1.5
Local housing tax	-1.7	Eco-tax (TGAP)	1.8
Car tax	-1.9	Social contributions	-8.4
TIPP [1]	-0.1	Local professional tax	-2.7
VAT	-6.9	VAT	-0.9
Others	-1.8	Others	-1.6
Unedic[3]	-0.9	Unedic[4]	-1.4
Total	**-38.8**	**(2.8 % of GDP)**	

1. TIPP : oil duties ; 2. CSB : social contribution on company incomes; 3. Unedic : social contributions financing unemployment allowances.

The main cuts apply to employers' social contributions (€13 billion) and households direct taxation (€16 billion). The government also carries out a "tax grooming" by reducing or removing a few taxes (housing, professional tax, transfer tax, right of lease, car taxation). Lastly, VAT is reduced by €8 billion through a one percentage point cut in the normal rate (to 19.6 %) and a tax reduction targeted on household works.

Tax cuts concerning firms primarily aim at reducing labour costs: wages are progressively removed from the "professional tax" base; a huge reduction of the employers' social security contributions is implemented *via* two measures: the extension up to 1.8 SMIC (minimum wage) of the decreasing rebate on low wages and an annual €610 benefit for each employee in companies signing an agreement on working time reduction (from 39 to 35 hours a week). The first measure will cost €3.8 billion per annum in the long term and is to be financed by tax rises on other production factors: a tax on polluting activities (the so-called TGAP) and a levy on corporate incomes (CSB). The fix-part reduction of contributions (€6.1 billion in a full year) partly finances the cost induced by the reduction of working time. In addition, the Unedic (the organisation that manages the unemployment benefits system) announced a fall in employers' and employees' contributions.

The rate of corporate taxation will be reduced to 33 1/3 % (except CSB) from 2003 and a part of small companies' incomes will profit from a reduced rate (15 %). At the same time, the government is reducing the possibilities for decreasing amortisation and tax credit between companies, which penalises company financial investments.

The government is significantly cutting direct households taxation: income tax, general social contribution (CSG-CRDS), and dwelling tax. All income tax brackets will see their rate reduced. The lower brackets will benefit from the more substantial cuts: the rates of the two first lower brackets will drop by 3.5 points whereas the two higher rates will fall by 1.5 points only. The higher rate will be reduced from 54% in 2000 to 52.5 % from 2003. The local dwelling tax will also be reduced and the reductions for low-income families will be reformed. The government plan proposed abolishing the general social contribution paid by

minimum wage (SMIC) workers, and introducing reductions for wages under 1.4 SMIC. Decreasing relief under 1.4 SMIC did not take other incomes and family status into account. For this reason, the Constitutional court forbade this measure, considering it was unfair for families. The government will propose alternative cuts in favour of low incomes in the months to come.

Most of personal income tax cuts aim at fighting “poverty traps”, i.e. at increasing the gap between low wages and assistance benefits, without reducing the latter and rising labour costs. The housing tax and the housing allowance were reformed. They now depend only on family income, whereas before, with equal incomes, assistance recipients were favoured as compared to part-time employees. If the rebate on the general social contribution had been introduced, it would have increased the full-time minimum wage by €82 per month (€41 for a half-part-timer). The fall in the lower income tax rate favours minimum wage single persons.

These reforms (including CSG cuts) strengthen the incentives to work. A single person, who works half-time and is paid on the minimum wage (SMIC) will get €110 more per month than on assistance. In 1999, it would have earned €20 less (notwithstanding the system of wage-benefit-sharing which temporarily made it possible to cumulate part of its assistance benefits and wage-earnings). But when a couple without child is on assistance, it is still not worth one of them having a job paid at half the minimum wage: the household’s income remains lower (by €140 per month) than assistance benefits (except with wage-benefit-sharing schemes). Thus, the issue of the poverty trap is not completely tackled. Unfortunately, the decreasing rebates on social contributions are likely to prevent low wages from being increased above the minimum wage, since any rise in the net wage is very costly for the employer: owing to the progressivity of contributions, a €15 increase in the take-home pay of a SMIC worker will cost €51 to the company. These measures may actually create a "wage gap". The role of the State in wage policy (through the setting of the SMIC) is considerably reinforced.

Cuts in direct taxes on households are relatively stronger for those on lower incomes. However, the reform benefit the richest people more than the middle classes, taking into account the extent of the fall of income tax and its progressivity. On the whole, the 25 % richest households get more than 50 % (€12 billion) of the amount of tax reductions. It is regrettable that the reform has no impact on social minima recipients and parents earning wages above 1.4 SMIC and who do not pay income taxes, thanks to the existing family quotient that takes the number of children into account. Taxes on wealth and capital incomes are almost unchanged. The tax on dividends is weighted for the high incomes. The taxation of the new “voluntary wage saving plan” envisages the quasi-exemption of social security contributions of the employers' additional amount, which makes these placements very advantageous to the detriment of the receipts from the Social security.

The reform has two main objectives: it supports employment through lower labour costs and it increases households’ incomes, especially at the lower end of the wage scale. The reform suffers from several inconsistencies and limits. Some measures are not as complete as they should be. If the government considers that VAT cuts in labour-intensive services support employment, why should they be restricted to housing rehabilitation? The redefinition of the rental values used as a base of the local tax did not came into effect, although they have become deeply unfair over the years. The government gave up part of its environmental policy following social contests; the progressive increase in pollution taxes (rises in the excises on the gasohol and eco-tax) was partly cancelled by cuts in oil taxation and by the abolition of the annual tax paid by car owners. Furthermore, the Constitutional court invalidated the introduction of a tax on corporate consumption of energy, since it was very

complex and unfair between firms. Environmental tax measures are a hard political issue: they will benefit the whole population in the long-term whereas they negatively affect specific activities and taxpayers in the short-term. A majority of European countries have engaged in pluri-annual plans for tax cuts. But the French plan is specific, in that it does not favour the reduction of company and capital income taxation, which are areas where tax competition is the fiercest. Will such a strategy be sustainable in the years to come?

Italian Tax Reform

In 1998, a very comprehensive fiscal reform was introduced. It carried out big changes in the tax structure with the main target being the taxation re-equilibrium between the different factors of production and between the different forms of financing. The measures led to simplification of the administrative procedures, decentralisation, enlargement of the taxable base and an increase in tax neutrality. The reform lowered the statutory rate on profits and the statutory personal income structure was modified in order to reduce the fiscal burden for low incomes.

The **corporate tax** reform consisted in the substitution of the local income tax (Ilor 16.2%), the net worth tax (Imposta patrimoniale 0.75%) and the contributions to the national health system (11.46%) with an unique tax, IRAP (regional tax on productive activities), collected at local level. The taxable base was defined as the value added net of the depreciation allowances and hence the interest payments on debt were no more exempted. IRAP gives rise to a tax liability irrespective of the combination of production factor used (labour and capital) and structure of liabilities (equities and debt financing). The rate of IRAP was set at 4.25%. On the whole the introduction of IRAP implied the fall of the statutory rate on profits from 53.2% to 41.25% as well as the discrimination among the difference sources of was reduced.

A second major change was the introduction of the Dual Income Tax (DIT), which partially replaced the previous corporate one (IRPEG 37%). DIT mechanism operates by dividing the taxable income into two components: "ordinary income", ascribable to new capital, and "residual income". The first component is calculated by applying an imputed official yield (now at 7%) to the capital accumulated since September 1996, and it is taxed at the preferential rate of 19%. The "residual income" consists of two components: any profit related to the new capital over and above "ordinary income", and profit related to existing capital. The "residual income" is taxed at the standard corporate tax rate of 37% (IRPEG). The average corporate tax rate ranges hence between 19% and 37%, depending on the capitalisation and the source its financing, nevertheless, until 2000 the average rate could not be lower than 27%.

Annex IV, Table 2: The 1998 corporate tax reform

	Pre reform	***Post reform***
Corporate sector	• *Local income tax : 16.2% on profits* • *Wealth tax : 0.75% on total assets* • *Corporate profit tax (IRPEG) : 37%*	• *Regional tax (IRAP) : 4.25% on net value added* • *Dual Income Tax (DIT) :* *a) 19% on « ordinary income »* *b) 37% on residual profits*
Non corporate sector	• *Local income tax : 16.2% on profits* • *Wealth tax : 0.75% on total assets* • *Personal income tax rates : from 10% to 51%*	• *Regional tax (IRAP) : 4.25% on net value added* • *Dual Income Tax (DIT) :* *a) 19% on « ordinary income »* *b) personal income rates (from 19% to 46%) on residual profits*

Taxation on income from capital was also deeply modified aiming at increasing the neutrality of taxation of income from capital, whether derived from financial assets or from business activities. The main changes were the reduction in the number of rates to two and the broadening of the tax base. Most capital incomes, matured (even though not realised) capital gains, and dividends are taxed at the rate of 12.5%, with the exception of bank deposits still at 27%. In the old system capital gains were taxed upon realisation at a preferential rate, dividends were included in the personal income tax base, but benefited from a tax credit.

Individual income tax (IRPEF) was modified in order to minimise the redistributive effects of the suppression of contributions to the national health system, which were deductible from the taxable income. The income brackets were hence reduced from 7 to 5. In addition, the maximum rate was reduced from 51% to 46%, thus diminishing the income tax progressivity, together with minor changes on the tax credits for employees and self-employed persons.

The tax reform included in the 2001-2003 Budget Plan

The Budget law for the years 2001-03 follows the guideline already enacted with the previous budget policy of reducing the fiscal burden tax relief, especially for households and small enterprises together with the control of the current expenditure.

On the **personal income** front, the Budget Law includes:

- a cut in the average tax rate of about 1.5 percentage points in three years;
- enlargement of the first income bracket from €7500 to €10000;
- larger income deductions for lower incomes in order to set the full income tax exemption at €6000 (from €4500);
- larger tax credits for family with children, for the primary residence, for low pension income.

Annex IV, Table. 3: Reduction in the personal income tax rate 1999-2003

Income brackets	***Rates***				
Thousand euro	***1999***	***2000***	***2001***	***2002***	***2003***
0-10	*18.5*	*18.5*	*18.0*	*18.0*	*18.0*
10-15	*26.5*	*25.5*	*24.0*	*23.0*	*22.0*
15-30	*33.5*	*33.5*	*32.0*	*32.0*	*32.0*
30-67.5	*39.5*	*39.5*	*39.0*	*38.5*	*38.0*
>67.5	*45.5*	*45.5*	*45.0*	*44.5*	*44.0*

Source : Ministry of Treasury

On the corporate side, the process of the abolition of the costs not directly linked to the labour (started with the abolition of the health contribution) is planned to continue. Starting from 2001 and for the next three years, the **social contribution** rate will be progressively reduced by 0.8 percentage points per year. In 2003 the total reduction will be 2.48 percentage points, corresponding to the family allowances shares.

In addition, the corporate income tax rate is reduced from 37% in 2000 to 36% in 2001 and to 35% in 2003. The 27% limit of the average corporate tax rate is abolished.

Tax Reforms in the UK

The fiscal policy changes made by the present UK government are designed with four objectives in mind: raising the growth rate of productivity, increasing employment

opportunity for all, maintaining fairness for families and communities and protecting the environment. Current budgetary plans emphasise the need to increase public expenditure after some years of restraint. Tax reforms have a secondary role, although since 1997 the government has introduced a range of measures which have acted to broaden the tax base by eliminating tax allowances whilst reducing marginal tax rates. There have also been a number of microeconomic measures aimed at changing incentives to work and the use of less environmentally damaging fuels. The total level of tax revenues as a share of GDP is considerably lower than the EU average, and as can be seen from Table 4, the latest government plans suggest that the tax burden should remain broadly stable over the next few years. In the rest of this section we focus on the measures announced in the March 2000 Budget and the most recent Pre-Budget Report in November 2000.

Annex IV, Table 4: Tax Revenues in the UK (per cent of GDP)

	1999-2000	***2002-2003***	***2005-2006***
Income tax	*10,6*	*11,3*	*11,5*
Corporation tax	*3,6*	*3,4*	*3,2*
Tax credits	*-0,3*	*-0,8*	*-0,7*
VAT + excise duties	*10,0*	*9,9*	*9,5*
Social contributions	*6,2*	*6,1*	*6,2*
North sea income	*0,3*	*0,7*	*0,4*
Others	*6,5*	*6,8*	*6,7*
Total	*36,9*	*37,3*	*36,8*

Source: Pre-Budget Report 2000, Table B8.

Tax changes designed to help raise productivity include reductions in the marginal rate of corporation tax to 30 per cent (10 per cent for small companies), reforms to the taxation of capital gains, tax credits for some types of R&D expenditure, and additional incentives to encourage employee share ownership. Tax changes designed to improve employability include a rise in the earnings threshold before employees have to pay National Insurance contributions, and an extension of the Working Families Tax Credit. Employers' National Insurance contributions are also being reduced in April this year and 2002 to compensate for new environmental taxes. Measures to promote fairness include a new Children's Tax Credit, replacing the Married Couple's Allowance; higher payments to pensioners; and a continuation of reforms that have seen the introduction of a new lower starting rate of income tax (10 per cent) and a reduction in the basic rate of income tax (from 23 to 22 per cent).

To protect the environment, the government is to introduce a climate change levy on the business use of energy in April 2001 and an aggregates levy in April 2002. To compensate for these changes, the rate of employers' National Insurance contribution rates is to be reduced by 0.4 percentage points in two stages. Indirect taxes have also been reduced on energy-saving measures by households. But the sustained real increase in excise duties on petrol has now come to an end, partly as a result of the fuel protests last year. Fuel duties are to be frozen in 2001 and new lower rates of duty have been announced for low-sulphur fuel. Taken together the tax reforms proposed in the March Budget and the November Pre-Budget Report imply an ex-ante reduction in receipts of £3.4 billion in 2001-02 and £3.9 billion in 2002-03. These come in addition to earlier changes which were already set to reduce the tax burden by some £4 billion in 2001-02.

Appendix on Pension Systems

The reform of the German pension system

The German pension system is based on three pillars. The PAYG basic public scheme (Gesetzliche Rentenversicherung) provides 85% of the payment of pensions while occupational schemes, which are not compulsory and are mainly at definite benefit, about 5%. The remaining 10% are made of individual pension plans. There are no means-tested assistance benefits within the pension system in Germany.

Employees and employers contribute equally to the basic public scheme for the fraction of wages below the social security ceiling, which amounts to DM 8700 in the western Länder in 2001, around 1.7 times the medium wage. This ceiling implies that occupational schemes play a substantial role for high incomes. The pension is proportional to the average of past wages and to the number of years the employees have contributed. The net replacement ratio of an employee paid on the medium wage and having contributed for 45 years was 70.7% in 2000. The statutory retirement age is 65 years, but the effective average retirement age was 59.2 for men, 60.1 years for women, including disabled pensions. Most pensions are free of income tax.

A major reform of the pension system was introduced in 1992 (*Rentenreform*). It provided for an automatic adjustment in the parameters of the system. Since 1992, the rights calculation and pensions indexation ensured an integral net parity between pensions and wages (before 1992 indexation was based on the gross medium wage). The public funding is linked to social security contribution rates, it amounts to DM 137 billion in 2001. The combination of both measures insures the stability of the pension system: the requested rise in contribution rates is limited, as an *ex ante* rise leads to a revaluation of the public contribution and to an adjustment of the indexation of rights and of pensions. The 1992 reform also entailed a reform of the calculation of pensions (older retirement age for full rate retirement pension in the early-retirement schemes). Without any reform, the contribution rates would have had to rise from 18.7% in 1991 to 35.8% in 2030. With the reform, the increase is twice lower (26%) with the net replacement ratio remaining at 70%.

Since the Red-Green coalition came to power, further reforms of the pension system have been implemented. The project presented in May 2000 by the Minister for Labour and Social Affairs, Walter Riester, can be considered the fourth step of the reforms.

- The first measure was to cancel the reform voted by the former government, which planned to introduce a demographic factor in the indexation of rights and pensions.
- The second step was to increase energy taxes in several steps, to allow a cut in the social contribution rates (ecological tax reform).
- The third measure was to suspend for two years the normal indexation of rights and pensions to net wages (2000-2001) and increase pensions in line with consumer prices instead. This measure will lead to cut the replacement ratio by nearly 2 percentage points.

All these measures basically aimed at constraining the rise in contribution rates while improving the state of public finances. They are rather short-term and more supply-sided oriented than aimed at solve the future challenges caused by the demographic prospects.

One answer to the future challenges was proposed by the government in its project first presented in May 2000. The Schröder government then went a step further, proposing a radical change in the pension system. However, the project was substantially revised between

May and December 2000, when it took its (probably) final shape, after talks with trade unions. The reform is expected to be voted before February 2001.

The main point of the reform is a clear announcement of a future fall in the level of the pensions provided by the public compulsory scheme, accompanied by the creation of private funded pensions. Starting from 2002, employees are expected to contribute to private funded schemes. The contribution rate will be of 1% in the first year, and will be increased by 1 percentage point every two years, to reach 4% in 2008. This contribution will lower the increase in the net wage that is the basis for calculation of the pension and hence the increase of pensions over the coming years. The contributions will thus enter the calculation of pension rights even if they are not actually paid, which is possible as contributing to private funded pensions is not compulsory. The contributions are to be financed exclusively by employees. These pension funds can be integrated in occupational or individual schemes.

The project entails incentive measures. Occupational schemes require the agreement of the employer today. They will now become a right of the employees. In case of disagreement, the employers will have to sign a contract with life insurance companies. The transferability of the right will also be improved (the minimum number of years in a company will be lowered from 10 to 5 years, the minimum age of the employee from 35 to 30). The contribution to the private pension scheme will be encouraged by fiscal measures (employees of medium and average income can for instance choose a financial aid or a tax deduction). As a counterpart, relative level of public pensions will be lowered. The initial project planned to progressively lower the replacement ratio of newly retired people from 70% in 2011 to 64% in 2030. This would have implied a different treatment of generations, as the replacement ratio of people retiring in 2012 would have been lower than that of people retiring in 2011. Following the December 2000 talks, a reform of the indexation of rights calculation and of pensions – leading to a single and decreasing replacement ratio for all pensioners, reaching the level of 68% in 2030 – has been decided.

Therefore, the rule of the net parity between pensions and wages will be broken. First, changes of the social contribution rates for unemployment and health benefits, and tax rates will no longer affect the indexation of pensions from 2002. The exclusion of tax modification could be justified if the Constitutional Court decides to change the fiscal treatment of pensions in 2001.

The reform is expected to allow the contribution rate to stay below 20% until 2020 (19.1 at the beginning of 2001) and 22% until 2030. Including the non compulsory new contribution, the total the contribution rate would reach 26% in 2030, a rate which is similar to the rate expected with no reform, but the level of pensions will be higher when private pensions are added. Compared to the initial project, the new pattern of the project guarantees more equity within different cohorts. In this respect, it is not very far from the initial project proposed by the former government. While the reform gives a clear signal towards less PAYG financing, the share of funded private pension provision in the system will remain below 10%.

The French pension system and its reform

The French pension system relies almost exclusively on PAYG financing. The system is quite complicated, with several earning-related pension schemes, linked by demographic-compensation transfers, which is in opposition to the philosophy of PAYG systems, that require centralisation.

Low income pensioners are entitled to a means-tested benefit ("minimum vieillesse", FF 3575 a month in 2000, ie 66% of the minimum wage and 143% of the minimum income), financed by taxes.

The earnings-related public schemes provide a high replacement rate at a relatively low retirement age (60 since 1983). Net replacement rates vary from almost 100% at very low wages to 60% for higher wages. They are close to 80% at the average wage. Consequently funded pension schemes play a very marginal role.

Employees from the private sector contribute to two public compulsory schemes (three for the middle and high executive employees).Employees contribute to the general regime (GR) for the fraction of their wages below the social security ceiling (SSC, which is roughly equal to the average wage). They get a pension proportional to the number of years they have contributed and to their average wage (after truncation to the SSC). The supplementary schemes (PAYG as well) provide pensions which are proportional to the cumulated amount of contributions paid during the working life. Every employee contributes to a supplementary scheme (ARRCO) for the fraction over the SSC[32].Executives contribute to another supplementary scheme (AGIRC) for the fraction of their wages between the SSC and 8*SSC. The government manages the GR; the supplementary schemes are co-managed by unions and employers representatives. Employees from the public sector and large state-owned firms have specific schemes, which are in general more generous than the private sector schemes. The self-employed also have their own schemes, less developed than the private sector ones (i.e. lower contributions and lower pensions).

The main issue facing the French public system is the ageing of the population. In the 1990's, reforms of the private sector regimes were enforced. The Balladur reform planned a cut by about one-third in the replacement rate ratio of the GR, indexing pensions on prices instead of wages as it was formerly the case. This can reduce pensions costs only if real wage earnings growth is significant. In other words, the slower wages growth, the higher the contribution rate must be for the scheme to reach balanced accounts. In the mid 1990's, measures were also enforced concerning the supplementary schemes: social partners raised contribution rates and reduced future benefits. However, contrary to the Balladur reform, nothing was decided for the years following 2000. In 1995, the conservative government of Mr Juppé tried to implement a reform of pensions in the public sector. That lead to a strong contest in November 1995, which resulted in its withdrawal.

In 1999, Mr Jospin entrusted a collective thinking to the *Commissariat Général au Plan.* All participants of the group did not share the conclusions presented in the *Charpin report* though. This report recommended to increase to 42.5 years the requested contribution length for reaching the full rate pension before the age of 65 (from 40 decided by Balladur in the general regime and 37.5 in the public sector regime). This would *de facto* rise the normal age of retirement to 65 for most employees. In March 2000, Jospin announced that the government would negotiate with public sector unions to bring the requested length for a full pension in the public sector to 40 years like in the private sector. At the end of 2000, nothing had been done.

Without any reform, the social contribution rate for retirement will have to be raised for 20.1 % in 1997 to 28.3% in 2040, which means a annual 0.25 percentage point increase from 2005 to 2037. This strategy can be implemented, but it must be clearly chosen by the government and the trade unions.

Employers' organisations (the Medef) want the normal length of contributions to be raised to 45 years and the age of retirement to be postponed following the increase in age expectancy (one quarter every year). However, at the same time, sectorial business organisations negotiate with the government to get subsidies in order to finance early retirement for their

[32] With the exception of executives, employees contribute to the ARRCO until 3*SSC.

employees. It also seems difficult to postpone the retirement age at a time when the French economy is still far from full employment and when companies try to get rid of senior workers.

In December 2000, talks between unions and employers' organisations over the future of supplementary schemes failed to reach an agreement. The Medef is against any increase in contribution rates, and wishes that for the future the social system finds its equilibrium by decreasing the level of benefits and by delaying retirement age. The Medef stresses the need for developing pensions funds in France, which would be impossible if the public replacement rate remains generous and if contribution rates increase. The unions want to maintain the current system, to restore the link of pensions to wages, to set the retirement age at 60.

Managing the whole French retirement system is a difficult task because of the diversity of the existing systems. It is socially desirable that the same rules apply to the public and private sectors but there are no common negotiations between the government, the employers and the trade unions of the two sectors. The Balladur reform was inspired by strategic motivations, rather than social or economic: nothing could justify that the reform applies to the private sector only, the methods that were chosen (i.e. suppressing the wage-indexation) did not leave room for a clear debate. Currently, the retirement age depends both on the rules of the general regime and of the supplementary regimes. Employers hope to be able to postpone the retirement age by changing the supplementary systems rules, but the government wants the supplementary regimes to be in line with the rules of the general one. The future rate of replacement depends both on the rate of replacement in the general regime (which will be a decreasing function of the growth rate of real wages) and on the rate of the supplementary regimes (which strongly dropped in the 1990's when pensions were at best price-indexed while the purchasing price of the rights was wage-indexed). Employers and trade unions have totally divergent views on how the supplementary system should be managed. The government created a Retirement Orientation Council with a view to allowing a global discussion, that would be able to lead to a global strategy, but employers refused to participate.

At the beginning of the 1990's, there were many proposals aiming at the creation of pension funds. They were supported by the Medef, the insurance companies, the conservative political organisations, and most of the economists. Unlike in Britain, the public earnings-related pension system has a strong political support in France. Some economists considered that pension funds were no more protected from demographic risks than PAYG schemes. Yet, there are fears concerning the future of PAYG replacement rates, which can explain the success of life insurance assets, which represent 55 % of the French saving flows. Those fears are reinforced by the creation of long run employees saving schemes (with fiscal incentives), which can be seen as unnamed (for political reasons) occupational defined contribution pension funds. In 1999, the government decided to accumulate reserves within PAYG schemes. The economic advantage of such reserves is questioned: accumulating reserves is from a macroeconomic point of view similar to reducing the public debt, especially if these are invested in public debt assets! Yet, it can strengthen confidence in the long-term viability of the public pension system.

A unification of the PAYG system, associated to a clarification of the future contributions/benefits equilibrium is a necessity, so that people can understand the system and decide whether they need to save to increase their pension incomes. This has still to come.

The Italian retirement system and reform

Italy is characterised by a predominant Pay-as-you-go social security system, and only marginal voluntary occupational pension plans, recently started.

The **first pillar** of the system is made up of a very large earnings-related programme. It is a defined benefit and covers both private and public employees. The system is unfunded and the State is called on to subsidise any overall deficit.

A public assistance benefit programme, subject to the eligibility requirement of an income-test and of a retirement age of 65, is also present. The State budget subsidises costs.

Up to 1992 the earning related pension system was characterised by two sources of benefits: seniority and old-age pensions. The seniority benefit was provided upon reaching 35 years of contributions for the private sector and 20 to 25 years for the public sector (*baby pensions*), without any age constraint (early retirements); the old-age pension was subject to the requirements of 60 years of age (55 for women) and 15 years of contributions. Benefits to private sector employees were computed on the basis of "pensionable earnings" obtained by averaging the earnings in the last five years of work. These were converted into benefits by applying a 2% factor (higher for the public sector and public companies) for each year of contribution up to a maximum of 40. In this regime, the replacement rate, in terms of the average wage, for a worker entering the labour market at the age of 25 and working for 40 years, was 76.9%, far above the 68.6% of the European Union average. Social contribution rates were 9.4% for employees and 23.8% for employers in the private sector. They were deductible from the income tax base, while benefits were taxed.

Since 1992 this system has been object of three major reforms, with the target of stabilise the share of pension over GDP.

The **1992 Amato reform** tightened the eligibility criteria for retirement by augmenting both contribution years and required age by one year each two years. The reform also reduced benefits by changing the pension benefit indexation from wages to prices and it gradually extended the number of years (from 5 to 10) on which the pensionable earnings were computed.

The **1995 Dini reform** accelerated the tightening of the eligibility criteria for retirement by augmenting both contribution years and age requirements by one year every 18 months for old-age pensions. As a consequence, since 2001 the age requirement for the old-age pension is 65 years for men and 60 years for women and the contribution years required are 20. The reform has also brought the eligibility requirement for the seniority pension to 57 years of age in addition to the 35 years of contributions (since 2004) or to 40 years of contributions with no age limit (since 2008).

The reform introduced a scheme of defined contributions in determining the pension level, through the creation of a fictitious social security account financed by a fixed share of earnings. The rate of contribution for wage workers in the private and public sector is of 32%. The benefit is the annuity equivalent to the present value at retirement of this account, indexed to a five-year moving average of the nominal GDP growth rate. In addition, since the retirement age is flexible (from 57 to 65 years), a transformation coefficient, more favourable the higher the retirement age, is then applied (4.72% if 57 years, 6.136 % if 65 years). According to actuarial rules, these coefficients will decrease when the retirement span expectancy increase.

The reform, which will be fully phased in 2035, led to the coexistence of three systems:

- the new scheme at defined contribution applying to workers employed from 1996;

- the old scheme at defined benefit applying to workers who had at least 15 years of contributions in 1992; and
- the "pro-rata" scheme, a combination of old and new rules, applying to workers with less than 15 years of contributions in 1992. The Dini reform actually abolishes the option of early retirement and equalises seniority and old-age pensions.

The average replacement rate progressively diminishes as a result of the reforms from 76.9% before reform, to 76.1% in the Amato scheme to 72.8% in the Dini scheme with present lifespan tables and to 63.2% with 2025 expected lifespan tables.

An additional objective of the Dini reform was to realise the convergence of schemes across sectors (given the advantages of the public sector) by equalising the factor transforming earnings into benefits and by submitting all public sector related schemes to the general rules applying to the private sector. In the public sector *baby pensions* have been abolished and early retirement is discouraged by a reduction in the seniority pensions proportionate to the years of service still due. The reform promotes longer employment also by introducing the possibility to cumulate pension benefits with self-employed revenues.

The 1997 Prodi government reduced benefits by suspending in 1998 the automatic revaluation of benefits higher than 5 times the minimum pension and by suspending it for three years from 1999 for benefits higher than 8 times the minimum benefit. For benefits amounting to 5 to 8 times the minimum benefit, it reduced by 30% the revaluation coefficient for three years from 1999. These measures have been recently slightly modified by the 2001 Budget Law.

Summarising, the 1995 reform established the equitable principle that the same amount of contribution has the same value for all workers. But it has maintained incoherence between the final and the transitional phase, and the price will be paid by younger workers. It has therefore allowed different treatments to survive both across generations and across individuals. At present, one of the major shortcomings of the reform is that the pension of someone working longer is subject to lower rates of return than that of someone leaving with a seniority benefit. The maintenance of seniority pensions constitutes hence a violation of the principle of the actuarial equity.

Compared to the scheme applied before 1992, at defined benefits the risk of intolerability of the burden of financing the pension benefits has been reduced. Nevertheless the equilibrium rate of contribution remains high.

The first step towards the development of a **second pillar** was the 1993 law establishing the constitutive process of private occupational pension funds and stating the possibility to devolve the annual severance payment to pension funds. The mandatory severance payment fund (TFR, Trattamento di fine rapporto) is a peculiar instrument of the Italian system of industrial relations, that was justified by the lack of instruments supporting revenue in case of long-term unemployment. The fund provides a benefit in the form of capital to be paid when the worker quits the firm or in case of special events (house purchase, important family needs). Only the employers contribute to the fund at a rate of 6.91% of the gross wage and manages the fund with no constraint on the form of investment other than the interdiction to buy the firm's own stocks. The return assured by the fund is 1.5% plus 75% of the CPI growth. It therefore represents a very cheap source of financing for firms.

The private occupational funds are voluntary, and have to be agreed upon by unions and employers. They are fully funded, at defined contribution.

Severance payments of the newly insured workers have to be entirely converted into contributions to occupational pension funds if the worker chooses to join them and if the fund already exists. Other workers can partly convert them, always at voluntary base. The funds benefit from a tax concession, which reduces the taxable base to 87.5% of annuity. So far few worker categories have their own occupational pension fund.

Concluding, even taking into account the marginal reforms of severance payment scheme and of the fiscal regime complementary schemes the main shortcoming of the different reforms is the lack of a sound second pillar. Diversification of the social security risk has to be made, but the diffusion of the second pillar will depend on the overall development of the entire social security system. With a contribution rate of 33% and the one on the severance payment (6.9%) the overall contribution rate is as high as 40%. Any additional contribution to occupational plans would impose a relevant burden on workers. Moreover, the first pillar guarantees replacement rates above the European Union countries average. The reluctance of employers to convert the TFR into occupational pension plans is due to its role of low cost source of financing. Therefore the debate has been enlarged to a reform of the overall system since the employers' agreement is tied to the request of a reduction in their contribution rate.

The **current debate** on the development of the second pillar is characterised by two major proposals: the first is the *opting out* proposal (by Castellino and Fornero, 1997) suggesting a reduction of 8 points in the contribution to the PAYG system; and its devolution to the complementary schemes, without changing the total contribution to the system. The revenue shortfall should be compensated by reducing the generosity of the system for new retirees. The second proposal (Modigliani, 1999) envisages the gradual suppression of the PAYG system in favour of a fully funded public scheme at defined benefits, which would imply that the final risk would still be paid by the State. The revenue shortfall should be compensated by a temporary additional contribution to be reduced once the effects of higher market returns will have shown.

However, if the public social security is to be reduced in favour of a private system, the new mixed scheme introduced in 1995 has to be modified.

The UK pension system

Over the last 20 years, the British pension policy has aimed at reducing state pensions while developing private funded pensions. In 1996, public pensions represented only 60% of pensioner incomes. The public system provides every one having contributed[33] with a flat-rate pension (the basic state pension, BSP, 16 % of the national average earnings – NAE – in 2000). Employees are also entitled to a supplementary State-Earnings-Related Pension Scheme (Serps), low relative to average earnings. The State pension age is 65 for men as it will be for women from 2020 (60 now). Low income pensioners are entitled to an income support.

Employees (and employers) benefit from a rebate in National Insurance Contributions (NICs) if they "contract out" of the Serps if they are affiliated to an occupational pension scheme (OPS) or a personal pension scheme (PPS). The **occupational system** offers a relatively high level of pension but the losses for workers changing of company are high; only a minority of employees are provided with employers schemes: there is no obligation for employers to operate their own pension scheme. **Personal pension schemes** offer fully portable pensions, but are subject to very high charges and uncertain investment returns. In 1996, only 42 % of

[33] i.e. with earnings over £ 76 per week in 2000-2001.

employees were in occupational schemes, 35 % were in Serps, 22 % were in personal pension schemes and 7 % had no pension schemes apart from BSP[34].

The Thatcher-Major governments introduced measures reducing state pensions. From 1980, state pensions were indexed to prices instead of wages; the state pension age of retirement for women will be raised to 65 (as for men now) over 10 years beginning in 2010; the State earnings-related pension is reduced (over a 10 year period beginning in 1999) from 25 % of average (revalued) earnings over the best 20 years to 20% of average (revalued) earnings over the full career (44 years for men and 39 for women)[35]. They also increased fiscal incentives to contract out of Serps into PPSs, reduced restrictions on private pension schemes, and improved the security of assets in private sector schemes.

Those reforms had several weaknesses. New Personal pension schemes were very successful, but most of the PPSs were not very profitable (especially because of huge management costs and the lack of information of people)**.** Between 1988 and 1993, high pressure sales tactics by PPS providers lead 500 000 members of occupational pension schemes to transfer their assets to PPSs, 90 % of which were inappropriate. In addition, fiscal incentives were very expensive for the public finances.

Blair reforms to the pension system. The objective of current reforms is to reduce public spending on pensions, as a proportion of national income (despite the increase in the number of pensioners), while delivering a decent income in retirement for low-income people. The government wants to restore the confidence towards private pension schemes, so as to make middle and high-income earners contract out.

A **Minimum Income Guarantee** (MIG, £75 per week, i.e. 18% the NAE) was introduced in April 1999. It is means-tested and linked to earnings. It is supposed to be less stigmatising than Income support and less complex to claim. The BSP will remain price-indexed. From April 2002, Serps will be replaced by a new **State second pension** (S2P) more generous for low-income earners. S2P will give the low paid, earning less than £9,500 p.a. (on average) twice the Serps pension at £9,500 (i.e. 40 % of 9500). For those earning more than £21,600 p.a., the rate of 20% will be unaffected. For average earnings between £9,500 and £21,600 the replacement ratio will settle between 20% and 40%. These thresholds will be uprated in line with national average earnings. From April 2007, S2P will become a flat-rate benefit, although contributions will remain earnings-related, which will provide a strong incentive for middle- and high-income earners to contract out. Carers and disabled will be credited into the S2P.

The government refuses to settle a flexible age of retirement (between 60 and 70). Its objective is to increase the employment rate of older people. From 2010, the rate of enhancement for each full year of deferment in the BSP will rise to 10.4% (7.5% today).

From April 2001, new **Stakeholder Pension Schemes** (SPSs) will be introduced, possibly contracted out of S2P. They are defined contribution pension schemes, meeting minimum standards concerning the charging structure (no set-up charges are allowed), the level of charges (no more than 1 % of the fund value), contribution flexibility and transferability, with no penalties if contributions cease temporarily or if the fund is transferred to another provider. SPSs are standardised private pension schemes, especially designed for those on middle incomes, not necessary able to assess the cost-profitability of financial assets. It will be compulsory for employers with at least five employees, and without an OPS, to offer

[34] The total is over 100 % because 5 % are in « contracted in » occupational pension schemes.

[35] Yet earnings are still revalued to average incomes.

access to a SPS. SPSs are supposed to restore confidence in private pension schemes, without making contributions compulsory.

The Dutch pension system

The pension system in the Netherlands consists of three pillars: an unfunded flat-rate state pension (AOW); a collective funded pension provided on a professional basis; and individual pensions. Unlike in most continental countries, there is no PAYG earnings-related public pensions scheme, except for VUT system, which was developed by social partners in the eighties, so as to finance early retirement.

The **state pension scheme** disbursements currently amount to about 5% of GDP and are projected to rise to 8 % in 2030. Contributions are paid by employees at a rate of about 17-18% of the first two brackets of income taxation. The benefit is 50 percent of the net minimum wage for a person with a partner over 65 (i.e. 100 percent for a couple) and 70 percent of the net minimum wage for a single.

The main pillar in Dutch pensions consists of **occupational pensions**. A great majority of companies provide their employees with an occupation scheme. Although this provision is not compulsory, employers are obliged to participate in industry-wide funds whenever they exist. Membership by employees is compulsory whenever an employer offers a pension scheme. As a result, more than 90% of the working population is currently covered by occupational pension schemes, which is very much superior to the proportion in other countries like the United states or the UK. Occupational benefits are salary-related and they are fully pre-funded, with two consequences: Dutch pension funds are among the largest in the world, and the ageing of the population is less of a public policy concern than in many European countries. Pension funds assets are superior to 100% of GDP. Collective pensions (state & occupational schemes) provide Dutch workers with about 70% of gross earnings (90 to 100% of net earnings) before retirement, when retiring at 65 after 40 years of employment.

Recent evolutions and reforms. Reforms favouring portability of pensions were enforced in the nineties, increasing labour mobility. Responding to a growing interest among employees, more room for individual choice has been made within occupational schemes.

The objective of pension reforms consists of two main points:

- a reduction in the public debt so as to ease the financing of the future growing charges of the state pensions; and
- an increase in the labour participation of elderly people.

The government is promoting a reduction in the possibilities of early retirement and the transformation of the VUT PAYG system into a capitalised flexible pension scheme.

Unlike in many European countries, the ageing of the population is not to be tackled through a decrease in the relative revenue of retirees provided by collective pensions. To date, reductions in the replacement ratio seem not to be under consideration. Yet, if occupational schemes are to provide the same level of life annuities in the future, investments on financial markets will have to be increased in line with the rise in life expectancy, unless pension funds asset returns[36] remain much higher than salaries growth. The internationalisation of investments is surely a good point if returns are to remain high (the share of assets invested abroad has risen from 25 percent in 1996 to 60 percent in 1999 according to Kremers 2000).

[36] Pension funds asset returns were 10 percent real on average between 1984 and 1998 according to the European Commission, 1999.

The Danish pension system

The main feature of the Danish pension system is its generous first pillar, which provides basic support to almost every citizen. On top of that there is a second pillar, in which the benefits are linked to labour market participation, not on wages. These features mean that the efficiency losses due to the weak link between paid contributions and received benefits can be large. On the other hand, this system has had a strong political support and the reforms are minor and scarce. The main elements of the current system are:

- *The Public Old-age Pension*. This is a basic pension, which depend on the family income and the pensioner's own earned income but is independent of previous relation to the labour market. Virtually all 67-year-olds and older receive public old-age pension. As from 2004, public old-age pension may be received already at the age of 65. For the majority of pensioners the means-tested public old-age pension is the most significant source of support. The means test begins at high income levels. The pension system is PAYG financed through taxes.
- *Labour Market Supplementary Pension (ATP), Special Pension Savings Scheme (SP), and Employees' Capital Pension Fund (LD)*. These are contribution financed and funded statutory pensions. The size of the pension depends on the number of years of making contributions (not on wages). There are 4.1 million members of the Labour Market Supplementary Pension Fund in 1998. Of these, about 448,000 are pensioners.
- *Civil Service Retirement Payments*. This is a publicly financed labour market pension for civil servants. There are about 170,000 civil servants and employees in civil servant like jobs. About 93,000 received civil service retirement payments in 1997. The pension system is PAYG financed through taxes.
- *Labour Market Pension and Company Pensions*. These are pension schemes agreed by the labour market parties or in the company; they are funded and contribution financed. There are just over 1.6 million payers.
- *Individual Pension Savings*. These are individual pension schemes established in banks, insurance and pension institutes. Today just over 1.1 million pay to individual schemes.

The early retirement allowance scheme was changed in 1999. Under the new rules those who would have retired aged 60 and particularly aged 61 under the old rules have a further incentive to postpone their retirement until the age of 62. The incentive to postpone retirement for one year will be more attractive also to those aged 63-65. The state pension age was reduced from 67 to 65 years.

The government has agreed also on a further reform in the early retirement scheme. The reform changes the eligibility rules and gives to the early retirees a possibility to participate to the pension saving system. The early retirees also start to pay mandatory pension contributions (ATP), but the amount is only one third of the normal level. The implementation of the new rules is planned to begin in 2003.

REFERENCES: The Danish Ministry of Economic Affairs (2000): *A sustainable pension system.*

The Swedish system

The decision to make a major pension reform was taken in 1994. The gradual introduction of the system, however, did not start until the beginning of 1999. The first pension calculated totally according to the new rules will be paid in 2014. The main element of the reform was

to turn the partially prefunded defined benefit earnings related part of the old system to a defined contribution scheme, which includes both a PAYG-financed and a fully prefunded part. Employees can determine the portfolio allocation of their prefunded contributions.

The system aims to keep the contribution rate fixed by using income-related indexation and longevity adjustment of the benefits. The problem of the chosen model is that since the benefits are indexed to average incomes, the reactions of the tax base (total wages) and of the benefits to ageing might be of different sign. There are two ways how the new scheme deals with the problem. The first is to use part of funds collected during the earlier system (the rest are transferred to the state as a compensation for the shift of the disability pension provisions to the state budget). Second is an index brake, which adjusts the pensions if the sustainability of the pension system is endangered. The application of the index brake and the size of the transfer to the state budget are at the moment still under discussion.

Annex IV, Table 5: The old and new Swedish pension systems*

OLD	**NEW**
Basic pension + supplements, PAYG and tax financed, means-tested	Guaranteed pension + supplements, tax financed, means-tested
Earnings-related supplementary pension, partially prefunded, DB	Earnings-related pensions, NDC part, FF DC part
Occupational pensions, both DC and DB	Occupational pensions, both DC and DB
Individual pension plans, DC, FF	Individual pension plans, DC, FF
Disability pensions are a part of the old-age pension system, partially prefunded	Disability pensions are separated from the old-age pension system and are financed from the state budget

*PAYG = Pay-As-You-Go, FF = Fully Funded, DB = Defined Benefits, DC = Defined Contributions, NDC = Notional Defined Benefits (no prefunding)

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The Finnish pension system

The Finnish pension system consists of two main parts. The earnings-related pension system aims to provide retirement income sufficient for consumption comparable both to that of working years and to current workers' consumption. The national pension guarantees a minimum income when the earnings-related pension is absent or insufficient. Both systems are mandatory. Voluntary pensions, whether employer-based or industry-wide supplementary pensions or personal pension arrangements, are of minor importance. The statutory earnings-related pension covers almost all paid work. It covers risks related to old age, disability, long-term unemployment of ageing workers, and death of family earners. The earnings-related system is partially funded.

The private sector funds are collective: individual pension benefits do not depend on the existence or yield of funds. Funds only affect contributions. When a person receives pensions after the age of 65, his funds are used to pay that part of the pension benefit that was

prefunded. The rest comes from the PAYG part, the so-called pooled component in the contribution rate. The earnings-related pensions in the public sector are very similar. The amount of annual funding, however, is discretionary and not formally based on any formulae concerning accrued pension rights or future expenditures.

Recent reforms. Until the severe recession in the beginning of the 1990s, the trend in pension reforms was to raise the benefit level and to loosen the rules for eligibility to early pensions. The recession created an urgent need to cut labour costs and emphasised the problems of long-term sustainability of the pension system. In addition to the expenditure cuts, the following reforms were aimed at several other objectives such as a more stable ratio of pension expenditures to total wages during business cycles, a higher actual retirement age and a higher yield on pension funds.

The first policy reaction was to introduce the employees' pension contribution and to agree that future hikes in the contribution rate would be divided fifty-fifty between the employers and employees. Also, the generous benefit rules of the public sector pension system were scaled down in line with those prevailing in the private sector. Later, the pension benefits were cut by tightening several times the rules for early retirement and by introducing a bent pension index. In the bent index, the weight of earnings is smaller and the weight of consumption prices larger after age 65.

The introduction of the bent index implies that the discussed possibility to use the index system as a means to adjust the expenditures to variations in total wages was ruled out and preference was given to expenditure cuts. The objective of dampening the impact of business cycles was not, however, totally rejected. The labour market parties agreed in 1997 on the introduction of buffer funds both in the unemployment insurance system and in the private pension system. The special buffer reserve in the pension system is about 2.5 per cent of the corresponding total wages.

Another major reform during the latter part of the decade was a shift in the funding rules. The separation of pension contribution determination from the same period yield of the pension funds provided a possibility for a more efficient portfolio allocation. Since the funding rate in the new system depends partly on the yield of the investments, the real value of the assets can be sheltered more efficiently from inflation than in the old fixed interest rate system. This becomes true if the TEL-calculated interest rate follows market rates.

There is a wide consensus that people should not retire as young as they now do. The average retirement age is currently somewhat below 60 years. The current government aims to increase the average age of retirement by 2/3 years in the long term. A National Programme on Ageing Workers for the years 1998 - 2002, organised by the ministries of social affairs and health, labour and education, aims to help older workers to stay in work. The measures include increasing the physical and mental condition of aged workers, designing specific services to be provided by employment agencies, and in general making attitudes more favourable to elderly workers. Also, the economic incentives to retire early have been reduced. These reforms have had a profound impact on the pension expenditure scenarios. Table 6 presents in more detail the contributions of the various reforms to the total 8.4 percentage point cut in expenditures in the long term.

Annex IV, Table 6: The main features of pension reforms in Finland, 1990 – 2000.

Year implemented	Measure
1990	Eligibility rules for surviving spouse's pension were tightened.
1993	Employee's pension contribution was introduced. The public sector pension scheme was curtailed in line with the rules of the private sector scheme. The retirement age was raised from 63 to 65 years and the yearly accrual rate of pensions was lowered from 2.2 per cent to 1.5 per cent. For new employees the replacement rate falls from 66 to 60 per cent. For current workers the rate will be somewhere in between.
1994	The index adjustment (1.3 per cent) in pensions was not implemented. Agreement to divide equally the future hikes in the contribution rate between employers and employees was reached. . The lower age limit for individual early retirement pensions was raised from 55 to 58 years and was lowered for part-time pensions from 60 to 58 years. The accrual rate for employees aged 60-64 was raised from 1.5 per cent to 2.5 per cent.
1996	The way in which pensionable earnings are calculated was changed so that the wages of the last 10 years in every employment contract are used instead of 4 years. The implementation is gradual. The transition period ends in 2005. The accrual rate for the post-contingency period in early retirement pensions was lowered from 1.5 percent to 1.2 percent if the retiree is 50-60 years old and to 0.8 percent if the retiree is 60-65 years old. A two-index system was introduced. During working age an index consisting of an average of consumer prices and wages (half-way index) is used, as earlier, but in the index of paid pensions the weight of wages was reduced from 0.5 to 0.2 and the weight of consumer prices was raised from 0.5 to 0.8 (bent index). When calculating either of the indices the change in employee's pension contribution is reduced from the change in earnings. Means-testing for eligibility to the national pension was extended.
1997	The rules of pension funding were changed. The link between current contributions and the current yield of pension funds was cut. This enables an increase in risky investments without changing the forward-looking funding principle. The lower age limit for additional days in unemployment benefits was raised from 55 to 57 years. This means, in practice, that the long-term unemployed can get earnings-related income transfers either as unemployment allowances or as an unemployment pension from age 55 to 65. This "unemployment tube" started earlier from the age of 53.
1998	The lower age limit for part-time pension was lowered temporarily from 58 to 56 years.
2000	The unemployment pension was cut. The pre-funding of unemployment pensions was increased and the prefunding of the disability pensions was reduced in order to equalise the costs for the employer of using these alternative channels to reduce its labour force. The lower age limit for individual early retirement pensions was raised from 58 to 60 years.

Annex IV, Table 7: Expenditure impact of pension measures in Finland in the 1990s

Measure	Implementation	Change in expenditures, per cent of total wages in 2030
Surviving spouse's pension	1990	- 0.8
Public sector pensions	1993	- 2.7
Eligibility ages	1994	- 0.7
Pensionable wage	1996	- 0.4
Accrual rate for post-contingency period	1996	-1.5
Bent index	1996	-1.5
Means-testing of national pension	1996	- 0.8
TOTAL		**- 8.4**

Source: The Central Pension Security Institute.

Proposals and discussion: simplification of the pension system. Representatives of the pension institutions and labour market parties are currently discussing a package of measures to simplify the pension system and to foster its transparency. The main ideas are to improve the link between benefits and contributions and to simplify the administration of the overall pension system by unifying the rules of various private sector pension schemes. In more detail, the proposed changes are to unify the accrual rate from age 18 to 65 to be 1.5 per cent of corresponding wages, to use the wages of the whole working career to determine the pensionable wage and to link the amount of early retirement pensions to the length of the working career. The initial idea is to implement the reform so that it does not change the amount of future expenditures. The adjusting variable is possibly indexation during working age, which could be made more generous, since the other elements of the reform generate savings. The outcome of the preliminary discussions is not clear, since even though industrial workers support the ideas, clerical workers and others with long employment and/or with seniority rules in wage determination are against some of the proposed changes.

Adjustment of the benefits and pre-funding as a reaction to demographic trends. The updated Finnish population forecasts assume that life expectancy continues to rise for several decades, implying higher pension expenditures. This has generated a discussion about whether the Finnish pension system should adopt a life expectancy adjustment similar to the Swedish reform. Another suggestion is to link the pre-funded amount of contributions also to current birth rates. From the point of view of pension expenditures, uncertainty about the future birth rate is much more important than the uncertainty about longevity. Therefore, intergenerational insurance against unfavourable trends in the birth rate is necessary. The corresponding adjustment on the benefits side could be indexation of the pensions to total wages.

The Future. One of the future challenges of the system is how to increase competition while ensuring the long-term solvency of the institutions. There are positive returns to scale both in the insurance and in the investment operations, which tends to lead to centralisation. At the moment, the main means for competition is the repayments of pension contributions to the customer firms, facilitated by successful investment policy. If the smaller institutions cannot keep up in the competition, they will lose customers. Another related challenge is how to determine the minimum required rate of return on investments so that it is as high as possible, while still leaving room for a sufficient amount of institutions to survive and develop.

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