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**Keskusteluaiheita - Discussion papers**

No. 598

Knut A. Magnussen\* - Mette Rolland\*

**THE EUROPEAN ECONOMY\*\*****Medium-term perspectives**

\* Statistics Norway

\*\* Report presented at the AIECE-meeting Venice, 5-7th May, 1997  
on behalf of the Working Group on Longer-Term Prospects and  
Structural Change

MAGNUSSEN, Knut A. - ROLLAND, Mette, **THE EUROPEAN ECONOMY. Medium-term perspectives.** Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 1997, 22 p. (Keskusteluaiheita, Discussion Papers, ISSN 0781-6847; No. 598).

**ABSTRACT:** In this report the medium-term forecasts of the AIECE Working Group on Longer-Term Prospects and Structural Change, based on the most recent forecasts from member institutes, are presented and discussed. In addition, projections issued by the LINK-project in March this year are utilized, in particular for analysing the global economic outlook. LINK-forecasts for the AIECE member-countries are also presented and compared with forecasts from the institutes. Both sources paint a similar picture of the European economic development towards 2000; moderate growth in most western countries and continued rapid expansion among central European economies. Inflation will remain subdued in the period ahead in the former countries and will edge downwards in the latter. The report also includes two special topics, an analysis of old age pensions and the fiscal challenges facing European countries due to ageing populations, and a model based simulation of the effects of a reduction of German interest rates.

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**TIIVISTELMÄ:** Tässä raportissa esitetään Euroopan suhdanneinstituuttien liiton, AIECE:n keskipitkän aikavälin ja rekenteellisen muutoksen työryhmän keskipitkän aikavälin kehitysarvio. Raportti perustuu jäsenlaitosten arvioihin. Globaalissa maailmantalouden arviossa on käytetty hyväksi ns. LINK-mallia, jolla tehdyt ennusteet on julkaistu viime maaliskuussa. Instituuttien ennusteita on verrattu LINK-ennusteisiin. Molemmat kehitysarviot antavat samanlaisen kuvan Euroopan talouskehityksestä vuoteen 2000 mennessä. Länsi-Euroopan maiden verraten hidaskasvu jatkuu. Keski- ja Itä-Euroopassa kokonaistuotannon riipeä lisäys jatkuu. Inflaatio säilyy hitaana Länsi-Euroopassa ja hidastuu KIE-maissa. Raportissa käsitellään myös kahta erillisaihetta. Ensimmäisessä käsitellään Euroopan vanhenevan väestön ja eläkejärjestelmän rahoituksellisia paineita. Toisessa erillisteemassa on simuloitu Saksan korkotason laskun vaikutuksia.

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<sup>1</sup> This report was prepared by Statistics Norway. We would like to thank the following institutes for providing us with their medium-term projections and answers to the questions. Projections of each institute are reproduced in detail in the Annex of this report.

Austria	WIFO
Czech Republic	CNB
Finland	ETLA
France	BIPE
	OFCE
Germany	IFO
	IFW
	DIW
Ireland	ESRI
Italy	Prometeia
Poland	FTRI
Slovenia	SKEP
United Kingdom	NIESR

## 1. Introduction

This report gives an overview of the latest medium-term forecasts of the AIECE Working Group on Longer-Term Prospects and Structural Change. The focus is as usual on the recent forecasts from the member institutes, mainly issued in the spring of 1997. Some of the institutes publish medium term forecasts only occasionally and for this report we received answers from 13 institutes covering 10 European countries; 7 EU-countries and 3 countries from central and eastern Europe. All forecasts from the member institutes are presented in detail in an annex to the report.

In addition to the forecasts from the institutes, we also utilise projections issued by the LINK-project, a model based forecasting group organised by the UN, in March this year. In particular this information is used in discussing the global economic situation, including both industrial countries outside Europe, transition economies (with focus on Russia), and developing countries. The LINK forecasts for the AIECE-member countries are also presented and compared to forecasts from the institutes.

The report also includes two special topics. First, we present an analysis of old age pensions and the fiscal challenges meeting European countries due to ageing populations in the first half of the next century. In addition a model based, highly illustrative, simulation of the effects of a reduction of German interest rates is presented, focusing both on possible effects for Germany and other major European countries.

The outline of the report is as follows. In section 2 we review the current economic situation in different regions of the world. Section 3 is devoted to the AIECE-projections. We compare main assumptions made by the institutes and forecasts from the institutes are presented and compared with historical figures. In this section we also briefly discuss the EMU and main risks to the forecasts according to the view of the answering institutes. In section 4 the special topics are presented.

## 2. The Global Economic Situation

World economic conditions remain generally encouraging, and the global economic expansion is expected to continue at a satisfactory pace over the medium term. The growth in total world output will accelerate from around 3 per cent in 1997 to an average of about 3 1/2 per cent from 1998 to 2000 according to projections from Project LINK in March this year.<sup>2</sup> Economies in most of the developing world will continue to grow more than twice as fast as industrialized economies. The solid growth is matched by increased trade between countries. Spurred by intra-industry trade, liberalization in the wake of the Uruguay-round and the growing impact of regional agreements, world trade is expected to grow by 6-7 per cent annually towards the turn of the century. The trade volume is expanding most rapidly in the developing countries.

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<sup>2</sup> Project LINK is an international economic research network of more than 50 country teams, co-ordinated by the United Nations Department for Economic and Social Information and Policy Analysis (DESIPA). The forecasts for the world economy are based on model simulations. Each of the country teams participate with a macroeconomic model for their national economy. The models are then simulated simultaneously to incorporate the effect that one country's export is another country's import. This makes the projections more consistent than when the national teams simulate their models separately.

## 2.1. Industrial countries outside Europe<sup>3</sup>

In North America the outlook is rather bright. The US is now in its sixth year with moderate to high growth with price inflation still at a subdued level. According to the project LINK this will continue towards the turn of the century. GDP is expected to expand by 2.6 per cent this year before slowing down to an annual «cruising speed» of 2.2 per cent the next three years. The private consumption deflator is projected to inch up gradually from 2.3 per cent this year to 2.7 per cent at the end of the forecast period. The increase is expected in spite of the tighter monetary policy conducted lately. The Federal funds rate was raised by half a percentage point in March 1997 and further interest rate increases cannot be ruled out. In Canada the worst seems to be over and the growth rates are expected to exceed potential growth from 1997 through 2000 at above 3 1/2 per cent per year, mainly due to expansionary monetary policy. There is no appreciable increase in the inflation rate in sight.

We posed a question to the institutes regarding the business cycle development in the US. The majority of respondents answer rather explicitly that they do not forecast a recession in the US economy during the projection period. Whether this is a result of the overall forecasting strategy (not explicitly forecasting business cycles) or a clear opinion that the US economy is capable of maintaining the favourable situation with low inflation and relatively strong growth, we cannot know. However, the implication of such forecasts is that we will see the longest upturn in the US economy since the 1960s. Some institutes are in favour of a slowdown/soft landing in the US towards the end of the decade, and one institute also mention the possibility of a mild recession, possibly initiated by a collapse of an overpriced stock-market. The general view is, however, that the US economy will continue to give positive impulses to Europe throughout the forecasting period.

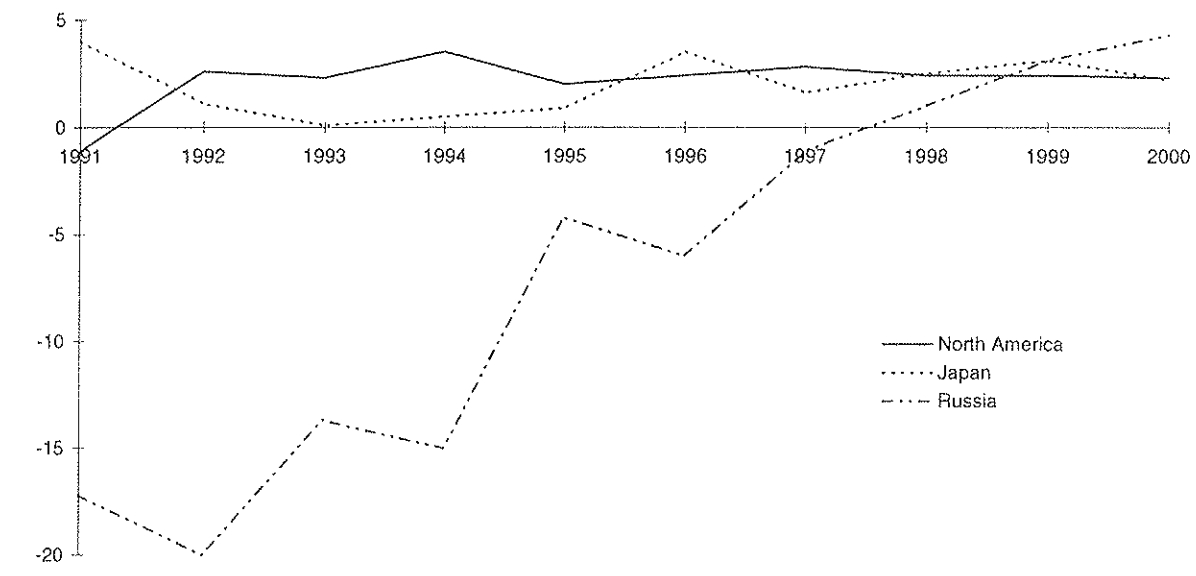
The Japanese GDP expanded by 3.6 per cent in 1996, after four years of weak growth at or below 1 per cent. The surge in activity is seen as temporary, however, mainly due to a scale back of the large economic stimulus packages launched by the authorities during the protracted recession. In 1997 GDP will only expand by around 1 1/2 per cent according to Project LINK, while the growth rate is expected to increase to an annual 2.5 - 3 per cent towards 2000. Inflationary pressures have been very weak in Japan during the last years. This situation is expected to change with the revival of the economy. The inflation rate will nevertheless not exceed 2 per cent during the forecast period.

With regard to Japan, we asked if institutes believe in a continuation of the present recovery of the Japanese economy towards 2000. All institutes with a view on this agree that this is the most likely scenario. However, the arguments behind such a development is somewhat mixed, and some stress that they do not anticipate to see the high growth rates from the 1970s and 1980s coming back. One view is that private sector will take over as the main engine to growth, when the public stimulation of the economy is scaled down. One institute also points at the very favourable exchange rate position of the Japanese economy and expects a positive development for the export industries.

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<sup>3</sup> The IMF has recently redefined Hong Kong, Israel, Singapore, South Korea and Taiwan from developing countries to industrial countries. Here, however, we have chosen to discuss the five countries under the geographical region to which they belong.

Figure 2.1. Industrial and transitional countries. GDP-growth rates



## 2.2. Transition economies

The economic situation in the transition countries of eastern Europe and the former Soviet Union remained very diversified in 1996. Market reforms and stabilisation efforts have proceeded at various speeds, followed different programs and achieved varying degrees of success. As opposed to the considerable progress made in many countries of eastern Europe, where economic recovery is well under way and medium-term prospects for growth are much improved, the situation is very different in the countries of the former Soviet Union. Most of them are still in deep economic decline and macroeconomic, as well as political, stability is far from being achieved.

In Russia output fell by 6 per cent in 1996 while in Ukraine the GDP contracted by 10 per cent. The rate of inflation declined substantially in both countries, but were nevertheless high; 21.8 and 80.3 per cent respectively. The official statistics may underestimate the economic activity. In Russia, indirect indicators such as energy consumption and freight figures, suggest higher output. This may, to a large extent, be explained by a blooming informal sector, which is also reflected in the production pattern. Industrial production is shrinking while services are now believed to exceed 50 per cent of Russia's GDP.

The Russian government has recently prepared a medium-term program where an economic turnaround in 1997 is envisaged. The program is expected to lead to a consolidated recovery with increasing annual growth rates reaching 5 per cent in 2000. This rebound will largely be fuelled by growth in industrial and agricultural production, revitalization of investments and strong performance of the external sector. According to the Project LINK the growth scenario is too optimistic. A further contraction of output is expected this year, before a feeble upturn of 1 per cent in 1998. The foundation for accelerating growth is rather weak. Investments have fallen sharply every year since the collapse of the old system and Russia also lags behind the eastern European economies in attracting foreign direct investments. In 1996 FDI in Russia

was around a fifth of the amount entering the CEFTA-countries (Central European Free Trade Association).

### 2.3. Developing countries

*Asia* continued to be the fastest growing region among the developing countries in 1996, despite the export slowdown experienced by many countries. Regional disparities continued to widen, however, with the newly industrialized economies (NIEs) growing at a rate of 6 per cent, south *Asia* growing at 6.5 per cent while south-east *Asia* grew at 7.5 per cent.<sup>4</sup> In China growth in GDP came down to 9.7 per cent last year, after a three-year austerity program.

The most important growth engine of the region up until now has been exports. One likely cause of the weaker export performance last year is *Asia*'s dependence on trade in electronic equipment (e.g. semiconductors) which slowed sharply last year after strong growth in 1995. In addition, countries that peg their currencies to the dollar, such as Singapore and Hong Kong, have lost competitiveness in Japanese and western European countries as the dollar have strengthened.

These factors behind the slowdown in GDP growth rates are mainly cyclical and it is expected that growth will accelerate again this year and be close to 7 per cent per year for the Asian region (excluding China) towards the turn of the century. In China GDP is likely to expand faster, at an annual rate of between 9 and 10 per cent the next four years. The slower growth rate in the Asian region led to lower inflation last year, and the projections point towards subdued inflation through the forecast period in the range of 6 - 7 per cent.

There are downside risks to these forecasts. Even if the present slowdown in *Asia* is regarded as mainly cyclical, it has revealed structural problems. Among these is an overheated property market which is exposing strains in *Asia*'s underdeveloped financial systems, most conspicuously seen in Thailand and South Korea. Property and banking problems may spread to other countries such as Malaysia, Indonesia and the Philippines as well. Analysts, however, reject the notion that *Asia* is headed for severe Japanese-style deflation since the economies are not stagnating. Despite its recent success in reining in the galloping economy, China still faces formidable challenges. Among the pressing problems is the need to restructure loss-making state enterprises, high unemployment, infrastructure bottlenecks and environmental degradation.

The dominant feature of the economic development in *Latin America* in 1996 was the re-emergence of modest growth accompanied by price stability that characterised the region during the 1990s until the Mexican financial crisis erupted at the end of 1994. The average growth rate in GDP for the region as a whole is estimated at 3.4 per cent. Average inflation dropped below 20 per cent and in more than half the countries price rises were at or near single-digit levels.

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<sup>4</sup> NIEs: Hong Kong, South Korea, Singapore, Taiwan  
 South-east *Asia*: Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam  
 South *Asia*: Bangladesh, Bhutan, India, Maldives, Nepal, Sri Lanka, Pakistan



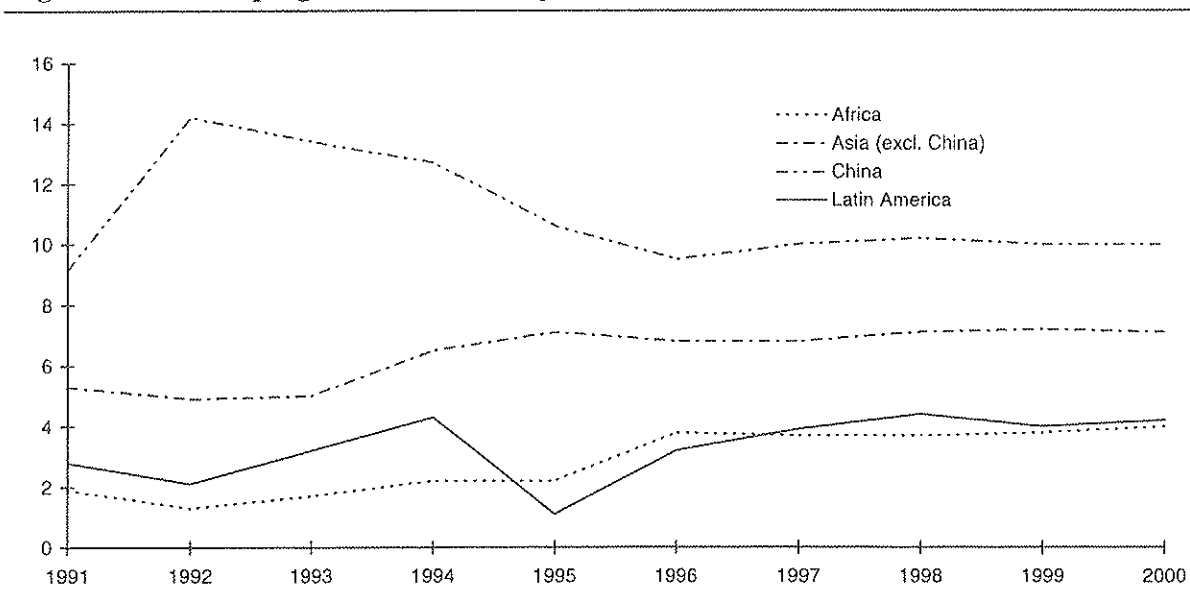
The Project LINK's forecasts point to an annual growth rate for the region of 4 per cent in the forecast period 1997 - 2000 and inflation is expected to moderate further. Among the countries that most likely will grow fast are Chile at above 5.5 per cent per year for the whole period and Argentina, Brazil and Mexico with projected growth rates of 4.5 - 5 per cent.

The rather optimistic view must be seen in connection with the recent change in the pattern of capital flows to the region. In the early 1990s the vast majority of foreign capital was portfolio investment. The turmoil in the financial markets following the Mexican crisis illustrated the vulnerable position of countries with large portfolio investment. After little inflow of capital in 1995 the amount of autonomous capital inflows more than doubled last year and reached 50 billion US dollars, of which 30.8 billion were foreign direct investment. This reflects the macroeconomic policy being implemented in many Latin American countries to encourage long-term capital flows and thereby prepare for stability and growth.

In 1996 *Africa* registered growth above 4 per cent and this was the second year in a row with positive growth per capita since the early 1980s. The situation was particularly encouraging in many of the CFA franc zone countries, as well as Ghana, Kenya and particularly Malawi and Uganda. In South Africa, economic policies have begun to set the stage for a gradual strengthening of growth performance although unemployment will be a severe problem for some time.

According to Project LINK the region as a whole will expand by an average of 3.8 per cent per year to 2000 with the countries in the north expected to grow slightly faster than the Sub-Saharan region. The rather positive development last year was to a large extent due to favourable weather conditions which boosted agricultural production. Africa is very dependent on external factors, in particular developments in the industrial countries. As opposed to the other regions of developing countries intraregional trade is virtually non-existent and the trade pattern from the colonial days has been maintained.

**Figure 2.2. Developing countries. GDP-growth rates**



### 3. Projections for European economies

#### 3.1. Main assumptions

As already discussed the view on the US economy is rather common for most of the institutes. The forecasts of GDP-growth in the US are mostly in the interval of 2.0 to 2.5 per cent during the forecast period. Some institutes assume somewhat lower growth rates in 1999/2000.

For the GDP-development in the EU-area there are some more discrepancies between institutes and over time. Some forecast stronger growth towards the end of the century and there is also a tendency towards cyclical forecasts, e.g. with low growth rates in the start and end years, and stronger growth in the middle years.

Only one institute forecasts constant growth rates for both EU and the US during the entire period, an example of technical assumptions. No institute forecasts growth rates below 1 or above 3 per cent for any of the two economies in the forecasting period.

For the crude oil price, a majority of forecasts lie around 20 to 22 dollars per barrel, while a few assume somewhat lower prices at around 17-18 dollars. The differences with regard to oil prices probably reflect differences in the date of the forecasts. As one should expect for this highly volatile price, there is a clear tendency in using technical assumptions, implying that the oil price forecasts are fairly constant for the years to come.

Exchange rate assumptions can also to some extent be viewed as technical, with countries assuming constant domestic rates vs. the dollar. Most institutes also assume rather stable exchange rates vs. the DM, and fixed rates in 1999 and 2000, in line with the proposed start of the EMU in 1999.

#### 3.2. Economic and Monetary Union

In line with forecasts showing that most countries do not fulfil the Maastricht criteria, there is also a high degree of uncertainty regarding the prospects for the start of the EMU in 1999. Most of the institutes argue in favour of start of EMU as planned, but with a varying number of participants. In particular the fact that core countries such as Germany and France do not seem to fulfil the criteria, possibly raise the probabilities of other countries (e.g. Italy and Spain) in joining the first stage of the monetary union.

There is also the view that EMU will give positive effects in at least two ways:

- 1) by the confidence effects (i.e. by reducing the uncertainty)
- 2) by a reduction of interest rates

There is some disagreement on whether the EMU will imply an easing of the imminent pressure on fiscal policies. The problems facing countries not attending the EMU from the start is also discussed to some extent. One institute mentions the possibility that disqualifying countries may be permanently excluded from membership due to increased difficulties in meeting the criteria outside a union.

### 3.3. Institute projections

The overall outlook for the reporting countries shows moderate to strong average growth over the projection period. Poland and Ireland have the highest GDP-growth rates, but strong growth is also expected in the Czech Republic, Slovenia and in Finland. For the remaining countries GDP-growth is projected at 1.9-2.4 per cent on average. Concerning inflation there is a sharp division between EU-countries and the other group. In EU growth in consumer prices is expected to be 2 to 3 per cent, with Italy and the UK having the highest forecasts. For the Czech Republic and Slovenia inflation is expected to be 7.5 per cent, while Poland has the highest rate with around 13 per cent on average for the projection period. Accordingly, the long-term interest rates are also highest for the two former countries, while interest rate forecasts lies between 6 and 8 per cent for the EU-countries.

**Table 3.1. Growth, inflation and long term interest rates in some European countries. Average for the period 1996-2000.**

		GDP	Inflation	Long-term interest rates
Austria	WIFO	1.9	1.8	6.1
Czech Republic	CNB	4.4	7.6	9.9
Finland	ETLA	3.9	1.9	5.7
France	BIPE	2.4	2.2	5.8
	OFCE	1.9	1.6	6.0
Germany	IFO	2.3	1.7	6.8
	IFW	2.1	-	-
	DIW	2.3 <sup>1</sup>	-	-
Ireland	ESRI	5.5 <sup>2</sup>	1.9	6.0
Italy	Prometeia	2.0	2.9	7.5
Norway	Statistics Norway	2.8	2.3	-
Slovenia	SKEP	4.1	7.5	18.0
Poland	FTRI	5.7	12.8	-
United Kingdom	NIESR	2.4	2.6	7.7

<sup>1</sup> For the period 1996-2010

<sup>2</sup> For the period 1997-2000

#### *EU-countries*

The average projection for economic growth in EU in the period 1996-2000 is only marginally lower than a year ago, reflecting the same tendency for all demand components and exports. The average GDP-forecast for the period is only slightly higher than the actual growth rates for the first half of the 1990s, and considerably lower than for the last half of the 1980s. In particular both private consumption and investment will grow slower in the period 1996-2000 than in the period 1986-1990. Comparing the 1980s with the 1990s also show that the growth in public consumption has dropped from around 2 per cent a year to around 1 per cent a year. Import growth is expected to grow by almost 5 per cent a year, reflecting a stronger growth in domestic demand than in the early 1990s. More interestingly is the high degree of stability over time in export performance. The growth rates in the 1990s are close to the previous decade at around 5 percent.

More pronounced differences is seen when looking at consumer prices and unemployment. There has been a clear downward trend in inflation rates since the early 1980s. Inflation rates were more than halved from the first to the second half of that decade, and a further halving can be expected when looking at the projections for the period 1996-2000. Consumer price forecasts for this period are also lower than a year ago. For unemployment a less favourable picture emerges. According to the forecasts the level of the unemployment rate will not decrease during the 5 years period. On average the projected rate equals exactly the observed rate for the first half of the 1990s. The individual forecasts over this period indicate a relatively stable development, in particular for Germany and Italy. A slight reduction in the unemployment rate is forecast for the UK economy, while the two French institutes are divided on the unemployment development for France; one anticipates a further increase, the other a reduction. Two smaller EU-countries, Finland and Ireland, also foresee a reduction of their unemployment rates, while it is assumed to remain stable (at a low level) in Austria.

**Table 3.2. EU-countries. Average growth rates**

	1981-85	1986-90	1991-95	1996-2000 Institutes Spring 1997 <sup>1</sup>	1996-2000 Institutes Spring 1996
GDP	1.5	3.3	1.8	2.2	2.4
Private consumption	1.4	3.6	1.4	2.0	2.2
Public consumption	2.0	2.2	1.4	1.0	1.2
Gross fixed investments	-0.5	5.8	-0.4	2.8	3.3
Exports of goods and services	4.2	5.1	5.4	5.5	5.8
Imports of goods and services	2.1	7.7	3.9	4.9	5.3
Consumer prices	8.8	4.2	3.8	2.2	2.6
Unemployment rate (%) <sup>1</sup>	9.0	9.2	10.4	10.4	9.4

<sup>1</sup> Weighted average of forecast for Italy, the UK, France (average of two institutes) and Germany (only IFO)  
Source: OECD Economic Outlook (historical figures) and forecasts from the institutes.

**Figure 3.1. Major EU-countries. GDP growth rates**

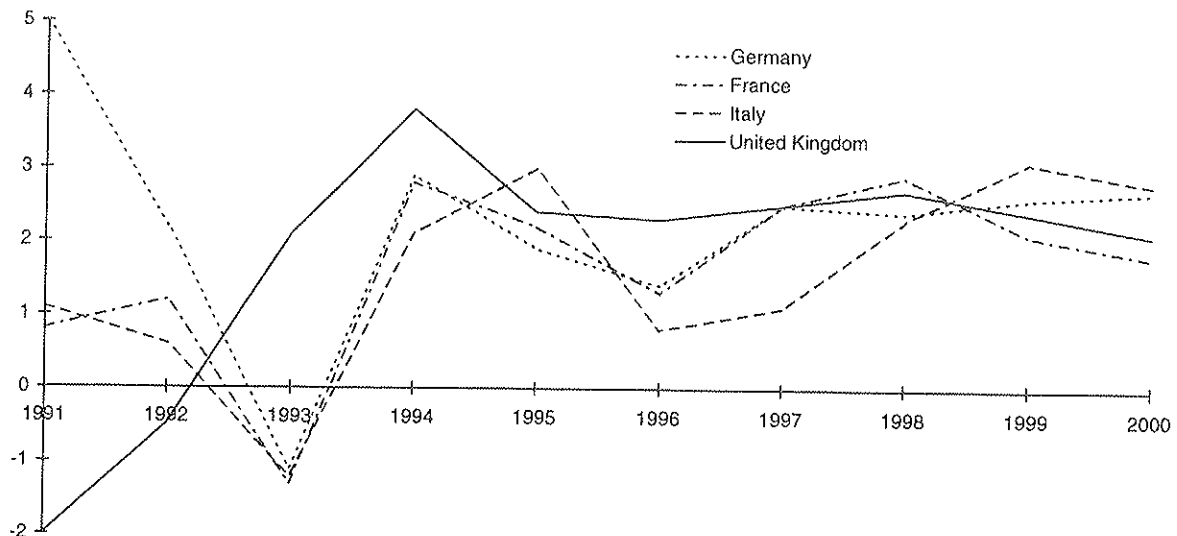
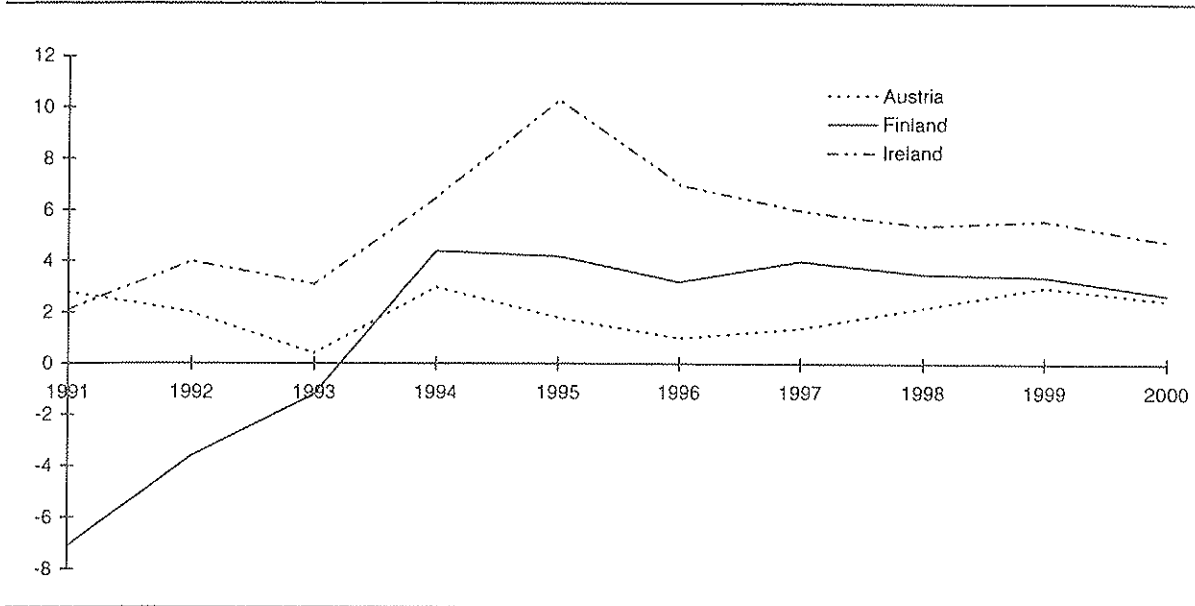


Figure 3.2. Some smaller EU-countries. GDP growth rates



#### *Central and Eastern European Countries (CEECs)*

Forecasts for the central and eastern European countries show that the strong growth rates for the period 1994-95 are likely to continue. According to table 3.3 it even seems as there has been an upward adjustment of the forecasts from last year, but this is probably reflecting that figures for Hungary are not included in the most recent forecasts. However, comparing the forecasts from the spring 1996 with the actual figures for 1994-95, indeed indicate that growth rates will accelerate somewhat.

In particular there seems to be a major change in public consumption growth. From being negative in 1994-95, forecasts point at positive growth rates slightly above 2 per cent for the coming years. In addition, private consumption growth is also stronger in the projection period than in the history, indicating that both private and public sector contribute to keep up overall growth in the economies. As for real investment, the relatively high growth rates at around 10 per cent is assumed to continue, while the trade balances are forecast to worsen somewhat during the period towards the end of the decade.

The figures for inflation are very favourable. Consumer price inflation has been declining since 1991 and the Czech Republic and Slovenia had annual inflation below 10 per cent in 1996, while consumer prices in Poland and Hungary increased by more than 20 per cent. The inflation rate is expected to move on a downward trend towards the turn of the century. Increasing competition and appreciating currencies contribute to this development. Liberalisation of administered prices, which has contributed to the very high inflation rates seen during the early 1990s will be completed and will not contribute to upward price pressure to the same extent. The labour market situation will, however, not improve much in the coming years according to the forecasts.

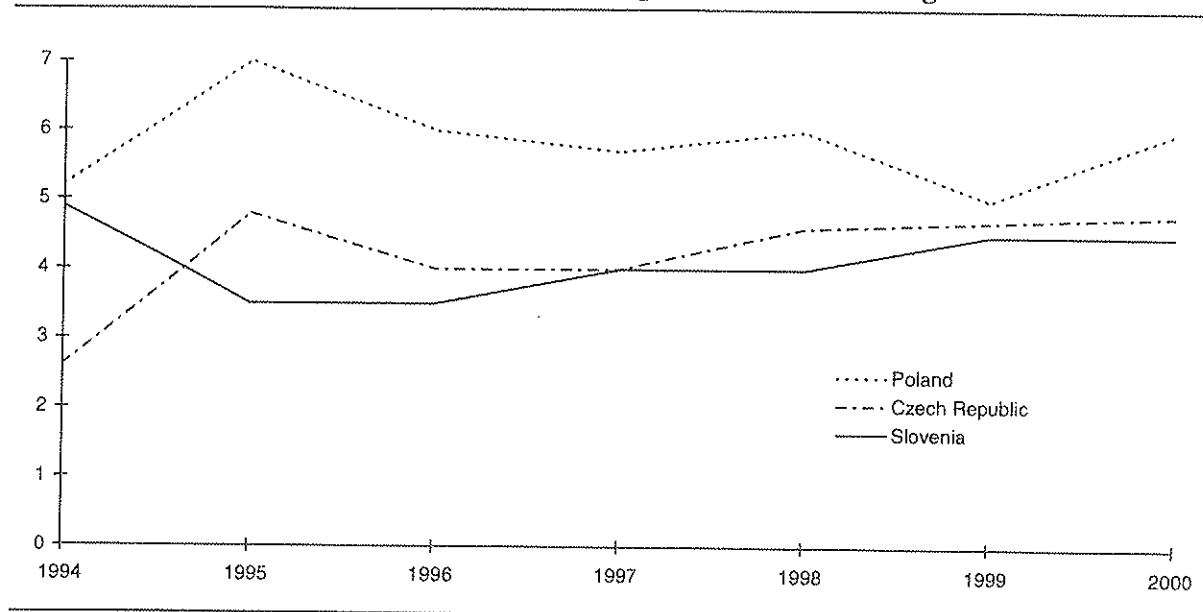
**Table 3.3. Central and eastern european countries. Average growth rates**

	1994-95 <sup>1</sup>	1996-2000 Institutes Spring 1997 <sup>2</sup>	1996-2000 Institutes Spring 1996
GDP	4.7	5.1	4.7
Private consumption	3.2	5.2	3.1
Public consumption	-1.6	2.3	2.2
Gross fixed investments	13.0	16.4	10.2
Exports of goods and services	12.9	9.8	9.1
Imports of goods and services	13.5	14.4	7.8
Consumer prices	24.0	14.3	-
Unemployment rate (%) <sup>1</sup>	10.8	9.6	-

1 Weighted average of Poland, Hungary and Czech Republic

2 Weighted average of Poland, Slovenia and Czech Republic

Source: OECD (historical figures) and forecasts from the institutes.

**Figure 3.3. Poland, Slovenia and the Czech Republic. GDP annual growth rates**

### 3.4. Forecasts from Project LINK

In this section we present forecasts for all the AIECE-member countries, given by the Project LINK in March this year. For the countries with own projections discussed in the previous section, we mainly compare the GDP and inflation figures, while we comment in some more detail on the remaining countries.

In general there seems to be a large degree of consensus between the AIECE and the LINK forecasts. For most of the countries the discrepancies are small, and there is only in the case of the Czech Republic, France and Ireland that the difference in GDP-growth rates exceeds 0.5 percentage points. For the two former countries LINK is more optimistic than the AIECE institutes while for Ireland the growth rate is lower, though still above 4 per cent. The differences also seem to be purely random, with no tendency in either direction. For Austria and

Germany the GDP-growth rates are equal. For inflation rates much of the same picture emerges, given that the number of comparable forecasts are reduced by two. The largest discrepancies are once again seen for Ireland and the Czech Republic.

For EU-countries not included in section 3.3 the GDP-growth rates expected by LINK are all above the average AIECE-forecasts for the EU4-countries. Sweden and Denmark have the lowest growth rates with 2.3 and 2.4 per cent. Spain, Belgium and the Netherlands all lie in the interval 2.5 to 3 per cent, while GDP growth in Greece is expected to be 3.4 per cent on average for the projection period. For Hungary the GDP growth rate given by LINK is clearly lower than the average of the three countries included in table 3.2.

Forecasts for inflation for the member countries not having own projections can be grouped into three; Belgium with the lowest forecast of 1.3 per cent, a group of countries with expected inflation rates around 2 per cent and Spain with 3.5 per cent and Greece with 5.1 per cent. With exception for the latter country these figures fit well in with the inflation forecasts for the other EU-countries.

**Table 3.4. Growth and inflation in European countries. Average for the period 1996-2000**

	GDP/GNP	Inflation
Austria	1.9	2.2
Belgium	2.7*	1.3
Czech Republic	5.1	5.6
Denmark	2.3	2.1
Finland	3.6	2.2
France	2.7	1.6
Germany	2.3*	1.3
Greece	3.4*	5.2
Hungary	3.0	..
Ireland	4.1*	2.9
Italy	1.9*	3.2
Netherlands	2.9*	2.0
Norway	2.8	2.3
Poland	5.4	..
Slovenia	4.2	..
Spain	2.6	3.5
Sweden	2.4	2.4
United Kingdom	2.8	2.4

Source: Project LINK World Outlook, March 1997.

\* indicates GNP

### 3.5. Main risks

Most of the risks attached to the forecasts are according to the institutes related to the possible implementation of the EMU. There are several risks involved in this process. One is that we might see turbulence in financial markets before the fixing of conversion rates. A possible postponement of the EMU could also lead to instability in financial markets. Currency turmoil may induce higher savings rates and less than expected business investments.

Another risk factor mentioned by several institutes is the effects of a restrictive stance of fiscal policies in Europe, which could possibly lead to a protracted stagnation period. In particular institutes in central and eastern Europe seem to be very aware of this possible outcome that is likely to worsen the sales possibilities for export companies in these countries.

As a consequence of economic stagnation the risk of a continued rise in unemployment has to be pointed at. Social unrest may turn out as a result if unemployment continues to increase. A stronger than anticipated reaction of investment to the low interest rates is put forward as an upward risk by one institute. As representing one of the very few countries with strong growth, ESRI points at rising wage expectations and bottle neck problems as domestic risks in Ireland.

Externally higher interest rates in the US may spill over to European markets, in particular if long term interest rates go up. This could hamper the prospects for growth, as it did in 1994. One institute also focuses on political risks in East Asia and in Russia that might affect financial markets in Europe.

## 4. Special issues

### 4.1. Public old-age pensions and fiscal consequences in Europe

Demographic projections show that the number of pensioners relative to the work force is set to grow considerably in most European countries in the first part of the next century. The main reason for the ageing process is low birth rates over a long period, but also higher life expectancy has been an important factor behind this development. Projections show that the percentage of population above 60 will increase by around 10 percentage points from 2000 to 2030, see table 4.1<sup>5</sup>. There are some differences between the countries; The Netherlands, and Germany will face the largest increase in elderly, while Hungary, Poland and the Czech Republic have the smallest increase in pensioners. Nevertheless, for most countries the financial challenges connected to ageing populations will be considerable, and this topic will probably be high on the political agenda in the beginning of the next decade. In this section we briefly discuss possible consequences and measures that can be taken, drawing on some results from the rapidly growing literature in this field.

Ageing will in Europe imply huge burdens on government budgets if the present public old-age schemes are retained unadjusted. Most countries have to a large extent based the public schemes on current tax income, so called pay-as-you-go (PAYG) systems. When the labour force relative to pensioners declines, a substantial financial deficit will arise, see the baseline scenario in table 4.2. An increase in the number of elderly will in addition also increase the need for health care. Since most European countries at present have a large public debt and budget deficits, it will become very important to achieve cost effective reforms of the pension schemes before the ageing process starts. For most of the countries, the old-age dependency ratio will not start rising considerably before 2010, which enhance the possibilities to implement reforms in advance of the old age boom.

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<sup>5</sup> A more relevant measure is the old age dependency ratio, i.e. the number of pensioners in per cent of the working population. This ratio may be more doubled over the same period.



**Table 4.1. Percentage of population over 60 years old, 2000-2030**

	2000	2015	2030
Austria	24.2	25.5	33.5
Belgium	21.9	25.3	31.3
Czech Republic	17.8	23.3	25.2
Denmark	19.5	25.1	29.6
Finland	19.4	26.1	30.3
France	20.1	24.8	29.7
Germany	23.0	27.8	36.6
Greece	22.8	26.4	32.3
Hungary	20.0	23.6	24.7
Ireland	15.0	17.9	22.6
Italy	23.8	28.7	36.3
Netherlands	18.9	26.0	33.6
Norway	19.6	24.1	29.8
Poland	16.1	19.6	22.9
Slovenia	18.8	24.5	30.1
Spain	21.0	24.7	32.9
Sweden	21.9	26.5	29.4
United Kingdom	20.8	24.5	30.0

Source: World Population Projections 1994-95, A world bank book.

Two main measures can be taken to reduce the costs of ageing. One is to alter existing PAYG-schemes, the other is to transfer to other systems with a larger degree of funding. If the latter system is chosen, implementation before the ageing starts would be an advantage. Changes in schemes might, however, imply large transition costs and some experience indicates that the administrative costs could be much higher for funded systems than for PAYG-pensions. However, funded pensions are likely to become an important option for several countries.

If PAYG-pensions are retained, costs can be reduced in several ways. Pension payments may be lowered by reducing the number of recipients or the overall benefit level. If such changes are announced well in advance, they may give future pensioners incentives to shift to private pension schemes. A rationale for reducing benefit levels could be that public pensions should mainly be an insurance, guaranteeing a minimum pension to everyone. Such reductions could nevertheless be difficult to get through since they directly undermine the welfare of the elderly.

Another option is to increase pension contributions or other taxes. The advantage of this policy is that taxes can be raised in advance of the ageing process and used to establish pension funds, thereby forcing future pensioners to participate in financing their own pensions. The most obvious disadvantage is that taxes are distorting and therefore reduce economic efficiency. If funding is not possible, it can also be difficult to levy a large tax burden on a shrinking work force.

A third option is to implement measures for rising the effective retirement age, which often is far below the official retirement age. Several arguments can be put forward for the case of an increase in the retirement age. The overall life time expectancy has increased and prolonged

the expected number of pension years. In addition, the number of working years has been reduced in many countries both due to longer and more widespread education among the population, and to the reduction of the effective retirement age, which again is related to e.g. increases in the use of disability pensions. Many European countries have already planned increases in the retirement age.

Analyses by the IMF and OECD show that there exists a large potential for reducing pension costs by raising the retirement age. In table 4.2 results of raising this age to 70 years is shown and in particular for countries such as Italy and France there are large gains to be achieved. Many other countries would also benefit from higher effective retirement ages. According to table 4.2, only Denmark, Norway, Belgium and Spain would still have large negative pension balances. The reason for the two former countries is that the existing retirement age is as high as 67 years.

**Table 4.2. Net present value of pension balances (contributions minus expenditures).  
Per cent of 1994 in GDP**

	Baseline	Retirement age 70 years
Austria	-92.5	-27.8
Belgium	-152.6	-96.5
Denmark	-234.5	-179.4
Finland	-64.8	31.5
France	-102.1	-15.0
Germany	-61.6	-7.6
Ireland	-17.8	4.0
Italy	-59.7	29.8
Netherlands	-53.3	-9.8
Norway	-124.1	-92.0
Spain	-108.6	-72.2
Sweden	-132.3	-8.8
United Kingdom	-23.8	2.6

Source: OECD, Economic Department, Working Paper no. 168, 1996.

#### 4.2. Effects of lower German interest rates: a NIGEM-simulation

At present the German economy seems to be in a difficult state, not least with regard to the plans for EMU to start from the beginning of 1999. GDP-growth for 1996 turned out to be lower than the two previous years, and this winter a severe increase in the unemployment rate took place. Even though some of the hike in the number of unemployed was reversed when the weather improved, the high unemployment rate is worsening the prospect for the budget balance this year. The tight fiscal policy in both Germany and other EU-countries have dampened both domestic and foreign impulses to growth. Low and declining inflation rates seem to be one of the few clearly positive economic indicators.

Without any room for a more expansive fiscal policy, one has to look for other possibilities for stimulating the economy. Of course structural reforms of the labour market might be most appropriate in order to improve the labour market situation, but in the very short run, such reforms will probably not be able to reduce the fiscal burden of unemployment. A more expansive monetary policy therefore seems to be a possible option in this situation. It can, though, be argued that monetary policy is lax already, due to the weakening of the DM vs. the dollar and the low short term interest rates. Direct impulses to the domestic economy is, however, better obtained by lowering interest rates further. A reduction of interest rates would also help keeping the DM weak (relative to the dollar) in the period to come. The question is though whether the conditions for a reduction of interest rates are appropriate at the moment.

In line with the business cycle development, Bundesbank has gradually lowered interest rates during some years. The discount rate, which peaked at 8.75 per cent in August 1992, had come down to 2.5 per cent a year ago. With exception for the first half of 1988, the rate has never been at such a low level after 1970. In much the same way as the German reunion pushed interest rates upwards in 1992, the EMU-plans and the tight fiscal policy could be used as arguments for still lower interest rates. Neither the growth in the German money stock, nor the inflation rates should be of concern in the present situation. In fact the inflation rate seems still to be on downward trend, and is at present around 1.5 percent. The prospects for very low wage increases both this year and the next should also help securing a low inflation rate in the period to come.

To illustrate possible effects of lower interest rates, we have simulated the NIGEM model (National Institute Global Econometric Model), developed by National Institute of Economic and Social Research. As a point of departure we have taken the forecast base from January this year which implies a flat German interest rate in 1997 and a gradual upward adjustment in 1998. From this base we performed a rapid and strong reduction of money market rates down to 0.5 per cent during the course of 1997. This level was maintained during 1998 and 1999, then rates were increased gradually. The interest rate assumptions must be seen as highly illustrative, we do not view such a large cut as likely, even though e.g. Japanese rates were reduced to the same level in the beginning of the 1990s.

Long rates are forward looking in the NIGEM-model, reflecting future short rates 10 years ahead. Short rates in other European countries are assumed to follow the German and exchange rates are determined both by the relative interest rate development and by a long term condition, saying that the current account balance in per cent of GDP, should return to its level at the start of the simulation.

Results show that the DM is depreciating considerably against the dollar already in 1997, while the effective exchange rate is only marginally affected. This is of course due to the fact that the relative interest rates vs. other European countries is not much altered. The weakening of DM contributes to a certain growth in German exports, which together with an upturn in domestic demand lifts GDP-growth by 1.4 percentage points this year and by 1.7 points in 1998. The unemployment rate is somewhat reduced this year, but the effect grows stronger over time. Inflation is hardly affected by the low interest rate the first two years, but the effect is clearly larger in 1999. The public sector deficit is reduced by 0.4 percentage points this year, which can be enough to meet the Maastricht criterion of the 3 per cent limit.

**Table 4.3. Effects on the German economy of lower interest rates. Difference from base in percentage points**

	1997	1998	1999
Short term interest rates	-2.2	-3.2	-3.9
Long-term interest rates	-0.9	-0.6	-0.4
DM vs. USD <sup>1</sup>	11.4	8.9	5.6
Unemployment rate	-0.2	-1.0	-1.7
GDP-growth	1.3	1.7	0.7
Consumer-price grow	0.2	0.1	0.8
Budget deficit, percent of GDP	-0.4	-0.9	-1.7

<sup>1</sup> Percent difference. Positive effect means depreciation of DM.

Lower German rates will not only stimulate the German economy. With our assumptions, other European countries will also benefit from a more expansionary monetary policy in Germany. In table 4.3 we present effects on GDP and inflation for the three other major European economies. As expected GDP-effects are smaller than for Germany in all countries. The strongest effect is found for the UK economy, the explanation being that short term interest rates are more important for British households than for consumers in the continental economies. The smallest GDP-effects are found for the Italian economy.

**Table 4.4. Effects on European economies of lower German interest rates. Difference from base in percentage points**

	1997		1998		1999	
	GDP	CED <sup>1</sup>	GDP	CED <sup>1</sup>	GDP	CED <sup>1</sup>
France	0.8	0.4	1.2	0.7	0.1	0.9
UK	1.0	0.6	1.2	0.7	0.5	1.0
Italy	0.4	0.5	0.4	0.4	0.0	0.3

<sup>1</sup> Consumer Expenditure Deflator

## Annex: Institute forecasts

Institute: OFCE

Date of forecast: March 1997

	1996	1997	1998	1999	2000
GDP	1.2	2.4	2.8	1.9	1.4
Private consumption	2.7	2.2	2.1	1.5	1.1
Public consumption	1.0	0.6	0.3	0.3	0.4
Gross fixed investments	-0.2	2.0	5.7	4.3	2.1
Exports of goods and services	2.0	4.9	5.4	3.9	3.6
Imports of goods and services	1.5	4.9	5.3	3.1	2.2
Compensation of employees	1.7	1.5	1.6	1.8	2.0
Consumer prices	1.7	1.4	1.3	1.6	1.8
Savings ratio (households)	10.5	10.0	9.6	9.5	9.5
Employment	0.4	0.4	0.8	0.7	0.5
Unemployment rate (%) <sup>1</sup>	12.4	12.7	12.7	12.8	13.0
Short-term interest rate (3 months)	3.8	3.4	4.2	3.7	3.0
Long-term interest rate	6.4	6.1	5.7	6.2	5.8
Current account balance (% of GDP)	1.2	1.1	1.3	1.4	1.7
Public sector deficit (% of GDP)	3.7	3.4	3.1	2.8	2.9

Institute: BIPE

Date of forecast: March 1997 / October 1996

	1996	1997	1998	1999	2000
GDP	1.3	2.5	3.0	2.9	2.3
Private consumption	2.3	1.9	2.5	2.4	2.2
Public consumption	1.5	1.0	0.3	0.5	0.7
Gross fixed investments	-0.6	3.1	4.3	4.2	3.5
Exports of goods and services	3.6	6.4	6.9	6.0	6.5
Imports of goods and services	2.2	5.9	6.5	5.3	4.7
Compensation of employees	2.5	2.9	3.9	-	-
Consumer prices	1.3	1.9	2.0	2.0	2.2
Savings ratio (households)	12.7	12.5	12.4	13.1	12.8
Employment	0.1	0.7	0.9	-	-
Unemployment rate (%) <sup>1</sup>	12.7	12.2	12.0	11.6	10.9
Short-term interest rate (3 months)	3.9	3.2	3.4	4.0	4.0
Long-term interest rate	6.3	5.5	5.7	5.5	6.0
Current account balance (% of GDP)	1.1	1.0	1.0	-	-
Public sector deficit (% of GDP)	-4.0	-3.2	-2.9	-2.6	-2.1

Institute: FTRI

Date of forecast: April 1997

	1996	1997	1998	1999	2000
GDP	6.0	5.7	6.0	5.0	6.0
Private consumption	8.2	6.5	5.0	4.5	5.0
Public consumption	3.6	4.0	3.0	2.0	2.5
Gross fixed investments	21.6	22.0	21.0	18.0	22.0
Exports of goods and services	9.3	12.2	12.9	14.0	15.0
Imports of goods and services	29.8	22.2	20.0	15.0	12.0
Compensation of employees	26.7	21.7	16.0	13.5	12.5
Consumer prices	19.9	15.5	11.0	9.5	8.0
Savings ratio (households)	10.0	10.0	11.0	11.5	11.0
Employment	0.9	0.8	0.7	0.7	0.9
Unemployment rate (%) <sup>1</sup>	13.6	12.8	12.0	11.0	11.0
Short-term interest rate (3 months)	22.5	18.5	14.0	12.5	10.5
Long-term interest rate	-	-	-	-	-
Current account balance (% of GDP)	-1.0	3.5	5.0	-5.0	-4.0
Public sector deficit (% of GDP)	-2.5	-2.8	-2.7	-2.5	-2.1

Institute: CNB

Date of forecast: March 1997

	1996	1997	1998	1999	2000
GDP	4.0	4.0	4.6	4.7	4.8
Private consumption	5.9	5.3	4.0	4.0	4.0
Public consumption	0.0	0.5	0.0	0.5	0.5
Gross fixed investments	15.0	9.0	6.0	5.0	5.0
Exports of goods and services	5.8	3.0	4.5	4.5	5.0
Imports of goods and services	7.6	4.2	3.9	3.9	4.1
Compensation of employees	18.0	15.0	13.0	12.0	10.5
Consumer prices	9.1	8.0	8.0	7.0	6.0
Savings ratio (households)	7.5	8.0	8.5	9.0	9.0
Employment	-	-	-	-	-
Unemployment rate (%) <sup>1</sup>	3.3	3.8	4.2	4.5	5.0
Short-term interest rate (3 months)	12.9	12.5	12.0	11.0	10.5
Long-term interest rate	13.5	13.0	12.5	11.5	11.0
Current account balance (% of GDP)	-10.1	-10.6	-9.9	-9.3	-8.7
Public sector deficit (% of GDP)	-0.2	0.0	0.0	0.0	0.0

Institute: WIFO

Date of forecast: October 1996

	1996	1997	1998	1999	2000
GDP	0.7	1.0	2.2	3.0	2.5
Private consumption	1.0	0.3	1.0	1.9	1.5
Public consumption	-	-	-	-	-
Gross fixed investments	0.7	1.2	3.7	5.5	4.9
Exports of goods and services	4.0	5.5	7.0	7.5	7.0
Imports of goods and services	2.8	3.0	6.0	7.0	6.5
Compensation of employees	-	-	-	-	-
Consumer prices	1.7	1.7	1.6	1.8	2.0
Savings ratio (households)	-	-	-	-	-
Employment	-0.5	-0.2	0.2	0.9	0.5
Unemployment rate (%) <sup>1</sup>	4.0	4.2	4.3	4.2	4.2
Short-term interest rate (3 months)	3.3	3.1	3.9	4.4	4.7
Long-term interest rate	6.4	6.2	6.1	6.0	5.9
Current account balance (% of GDP)	-1.8	-1.0	-0.8	-0.7	-0.7
Public sector deficit (% of GDP)	-4.6	-3.0	-2.9	-2.2	-1.9

Institute: ESRI

Date of forecast: April 1997

	1996	1997	1998	1999	2000
GDP	6.25	6.0	5.4	5.6	4.8
Private consumption	6.25	4.75	6.5	5.7	3.1
Public consumption	3.0	2.5	3.0	3.0	3.4
Gross fixed investments	10.25	9.75	6.8	7.1	5.2
Exports of goods and services	10.0	10.0	10.3	8.2	6.6
Imports of goods and services	11.5	9.5	12.2	9.0	5.7
Compensation of employees	2.5	2.1	4.1	4.6	4.5
Consumer prices	1.6	1.8	2.0	2.0	2.0
Savings ratio (households)	11.0	10.5	9.0	9.0	10.0
Employment	3.6	3.1	3.3	2.5	1.5
Unemployment rate (%) <sup>1</sup>	12.9	11.7	11.0	10.4	10.7
Short-term interest rate (3 months)	6.0	6.0	5.8	5.7	5.8
Long-term interest rate	6.8	6.0	5.8	5.7	5.8
Current account balance (% of GDP)	1.1	0.75	0.75	0.8	0.85
Public sector deficit (% of GDP)	1.0	1.1	0.2	-0.4	-0.4

Institute: ETLA

Date of forecast: March 1997

	1996	1997	1998	1999	2000
GDP	3.2	4.0	3.5	2.4	2.7
Private consumption	3.5	4.0	3.2	3.1	3.2
Public consumption	2.9	1.0	2.0	2.0	1.7
Gross fixed investments	5.3	9.0	5.0	6.7	5.0
Exports of goods and services	3.8	6.0	5.0	4.2	4.2
Imports of goods and services	4.9	7.0	6.0	5.8	6.2
Compensation of employees	4.6	5.3	5.4	6.3	6.9
Consumer prices	0.6	1.0	1.7	2.0	2.0
Savings ratio (households)	1.1	0.9	0.8	0.5	0.7
Employment					
Unemployment rate (%) <sup>1</sup>	16.3	15.2	14.2	13.5	13
Short-term interest rate (3 months)	3.6	3.0	3.5	4.0	4.0
Long-term interest rate	6.0	5.0	5.5	6.0	6.0
Current account balance (% of GDP)	3.4	2.8	2.9	2.7	2.5
Public sector deficit (% of GDP)	-2.6	-1.5	-1.0	-0.4	0.3

Institute: NIESR

Date of forecast: January 1997

	1996	1997	1998	1999	2000
GDP	2.3	2.5	2.7	2.4	2.1
Private consumption	3.0	3.7	2.9	2.1	1.5
Public consumption	0.7	1.2	2.7	2.0	2.2
Gross fixed investments	2.8	3.7	2.3	2.1	2.5
Exports of goods and services	6.2	3.6	4.5	5.7	5.0
Imports of goods and services	7.6	6.3	4.7	4.2	3.8
Compensation of employees	3.3	4.1	4.3	4.9	4.8
Consumer prices	2.9	2.1	2.1	2.7	3.0
Savings ratio (households)	11.3	10.3	9.4	8.9	9.0
Employment	0.8	1.3	0.6	0.5	0.5
Unemployment rate (%) <sup>1</sup>	7.6	6.4	6.1	5.8	5.7
Short-term interest rate (3 months)	6.0	6.0	5.9	5.9	5.9
Long-term interest rate	8.0	7.8	7.5	7.5	7.5
Current account balance (% of GDP)	-0.1	-0.4	-0.5	-0.1	0.3
Public sector deficit (% of GDP)	4.8	3.2	2.5	1.7	1.4



Institute: IFO

Date of forecast: March 1997

	1996	1997	1998	1999	2000
GDP	1.4	2.5	2.4	2.6	2.7
Private consumption	1.3	1.2	2.5	2.4	2.2
Public consumption	2.4	1.0	0.5	1.0	1.0
Gross fixed investments	-0.8	1.0	3.0	2.5	3.0
Exports of goods and services	4.9	7.0	5.5	6.2	6.0
Imports of goods and services	2.6	5.0	4.5	5.3	5.4
Compensation of employees	-	-	-	-	-
Consumer prices	1.5	1.7	2.0	1.6	1.5
Savings ratio (households)	11.6	11.7	11.5	11.5	11.7
Employment	-1.2	-0.5	0.5	1.0	1.1
Unemployment rate (%) <sup>1</sup>	10.3	10.9	10.5	10.0	9.0
Short-term interest rate (3 months)	3.3	3.3	3.5	4.0	4.2
Long-term interest rate	6.2	6.4	6.8	7.2	7.6
Current account balance (mrd. DM)	-26.6	-12.0	-8.0	-4.0	0.0
Public sector deficit (% of GDP)	3.8	3.2	3.5	3.2	2.9

Institute: PROMETEIA

Date of forecast: March 1997

	1996	1997	1998	1999	2000
GDP	0.8	1.1	2.3	3.1	2.8
Private consumption	0.6	0.5	1.9	2.9	2.8
Public consumption	-0.3	-0.4	0.3	1.2	1.1
Gross fixed investments	1.7	2.0	5.5	6.2	6.0
Exports of goods and services	1.0	5.8	6.7	8.8	7.1
Imports of goods and services	-2.1	4.9	8.4	10.2	8.8
Compensation of employees	4.2	4.9	4.1	4.1	4.2
Consumer prices	3.9	2.4	2.7	2.6	2.9
Savings ratio (households)	13.4	12.7	12.9	12.3	12.1
Employment	0.1	0.0	0.5	0.7	0.7
Unemployment rate (%) <sup>1</sup>	12.4	12.5	12.3	12.3	12.2
Short-term interest rate (3 months)	8.6	6.7	5.7	5.1	5.2
Long-term interest rate	9.1	7.4	7.3	6.8	6.7
Current account balance (% of GDP)	3.4	3.2	3.4	3.0	2.9
Public sector deficit (% of GDP)	6.8	3.3	3.0	2.7	2.6

Institute: SKEP

Date of forecast: April 1997

	1996	1997	1998	1999	2000
GDP	3.5	4.0	4.0	4.5	4.5
Private consumption	2.7	2.9	3.0	3.5	3.5
Public consumption	3.0	3.2	3.0	3.0	2.8
Gross fixed investments	10.0	10.0	9.0	8.0	7.0
Exports of goods and services	3.0	5.0	5.0	5.7	5.7
Imports of goods and services	2.0	5.8	6.0	5.5	5.5
Compensation of employees	3.5	3.0	3.0	3.0	3.5
Consumer prices	9.7	7.8	6.8	6.8	6.5
Savings ratio (households)	-	-	-	-	-
Employment	0.5	0.5	0.5	0.7	1.0
Unemployment rate (%) <sup>1</sup>	7.3	7.4	7.4	7.5	7.5
Short-term interest rate (3 months)	22	19	16	15	12
Long-term interest rate	23	20	17	16	14
Current account balance (% of GDP)	0.2	-0.2	0	0	0
Public sector deficit (% of GDP)	0	0.5	0.5	0.5	0.5

Institute: DIW

Date of forecast: January 1997

	1996	1997	2010/1997
GDP	1.5	2.0	2.3
Private consumption	1.5	1.5	2.3
Public consumption	2.5	1.5	1.4
Gross fixed investments	-0.5	1.0	2.7
Exports of goods and services	4.0	4.5	4.2
Imports of goods and services	2.0	4.0	3.8
Compensation of employees	2.0	1.5	
Consumer prices	1.5	1.0	
Savings ratio (households)	11.5	11.3	
Employment	-1.5	-0.5	
Unemployment rate (%) <sup>1</sup>	10.5	11.0	6.8
Short-term interest rate (3 months)	3.2	3.1	
Long-term interest rate	5.8	5.8	
Current account balance (% of GDP)	-0.7	-0.5	
Public sector deficit (% of GDP)	3.9	3.4	-1.0

Institute: IFW

Date of forecast: March 1997

	1996	1997	1998	1999	2000
GDP	1.4	2.5	3.0	2.5	1.0

## *Uusia apuvälineitä ETLAsta talouskehityksen ennustamiseen ja seurantaan*

*ETLAn Kansainväliset Suhdanteet -katsauksesta on valmistunut elektroninen versio. Katsaus sisältää tiivistetyssä muodossa seuraavien maiden talouskehityksen ennusteineen: USA, Japani, Saksa, Ranska, Italia, Englanti, Hollanti, Belgia, Ruotsi, Tanska, Norja ja Suomi.*

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