

Keskusteluaiheita Discussion papers

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A COMPARISON OF SOME RECENT
MEDIUM-TERM FORECASTS

19.5.1983

No 135

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A COMPARISON OF SOME RECENT MEDIUM-TERM FORECASTS¹⁾

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Introduction

This is the fourth time when recent medium-term forecasts are compared and discussed in the Working Group on Longer Term Prospects and Structural Change of AIECE (Association d'Instituts Européens de Conjoncture Economique). Previous similar comparisons have been organized in connection with the AIECE spring meetings in Budapest (1980), Hamburg (1981) and Stockholm (1982). It is the intention of the group to continue these comparisons and to distribute the comparison to the members of the association once a year. It has been decided that the comparison of spring 1984 will be prepared by Bureau d'Informations et de Previsions Economique (BIPE).

1) A report, originally prepared for the meeting of the Working Group on Longer Term Prospects and Structural Change on May 4, 1983 in connection with the spring meeting of the Association d'Instituts Européens de Conjoncture Economique (AIECE) in Athens.

As before we have supplemented the 7 forecasts of the AIECE institutes¹⁾ with some other recently published forecasts. All 15 forecasts mentioned in this comparison are listed in Table 1 (see page 3). The date of publication is given to make it possible to assess the effects of the time of drawing up the forecast. We are grateful to all institutes and persons who have provided us with the material necessary for this comparison.

Although an effort has been made here to present a summary of various projections, it should once again be emphasized that, for many reasons, the forecasts are not directly comparable with one another. Not only the dates of drawing up the forecasts and the basic assumptions, but also the forecast periods, the countries included, and so on, differ. Several of the publications included in our comparison comprise alternative scenarios, too. If not otherwise stated we have in these cases tried to compare the "basic" or "reference" alternatives, which can often be interpreted to present the most likely course of events.

All in all, it must again be stressed that different projections should not be regarded as competing unconditional forecasts, nor does this paper try to assess the value of the forecasts. It is the intention of this comparison to provide material and starting points for the discussion of various kinds of problems associated with the current situation and developments in the medium-term.

1) The NIESR figures are from their Review, 1982:4. The figures for BIPE are based on a letter describing the underlying international hypotheses of their medium-term forecast. The CPB scenarios are those used by the Central Economic Commission in the "memorandum on the socio-economic problems in the medium-term", September 1982. The WIFO figures are internal working hypotheses of the institute. The figures for the Økonomiske Råd have appeared in their "Dansk Økonomi", Oktober 1982. The figures for IfW are from a paper by Mr. Boss and Mr. Walter: "Zur Wirtschaftlichen Entwicklung in der Bundesrepublik Deutschland in dem achziger Jahren", published in the Working Papers serie (No 169) of IfW. All the above mentioned forecasts do not necessarily represent the official view of the institute in question. The figures for ETLA are from a medium-term forecast to be published at the end of May.

Table 1. List of medium-term forecasts included in the comparison, dates of publication, the forecasts periods and countries covered

Name of institute	Date of publication	Period covered	Countries included															
			Austria	Belgium	Denmark	Finland	France	Germany	Ireland	Italy	Japan	Netherlands	Norway	Spain	Sweden	Switzerland	U.K.	U.S.A.
<u>AIECE-institutes</u>																		
Bureau d'Information et de Previsions Economiques (BIPE), France	March 1983	1982-1988																x
Central Planbureau (CPB), The Netherlands	September 1982	1983-1986																x
Institut für Weltwirtschaft an der Universität Kiel (IfW), Germany	February 1983	1983-1990						x										
National Institute of Economic and Social Research (NIESR), U.K.	November 1982	1982-1987														x		x
Det økonomiske Råd, Denmark	October 1982	1982-1985			x													x
Österreichisches Institut für Wirtschaftsforschung (WIFO), Austria	March 1983	1982-1986	x															
The Research Institute of the Finnish Economy (ETLA), Finland	April 1983	1983-1987				x												x
<u>OTHERS</u>																		
Commission of the European Communities (EC)	October 1982	1983-1987																x
The Conference Board, Inc.	February 1983	1983-1987	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Data Resources, Inc. (DRI), U.S.A.	March 1983	1983-1995		x			x	x		x		x				x	x	x
International Energy Agency (IEA)	1982	1980-2000																x
International Monetary Fund (IMF)	1982	1983-1986					x	x		x	x					x	x	x
The London Business School (LBS), U.K.	February 1983	1983-1986														x		x
Merrill Lynch Economics Inc., U.S.A.	December 1982	1982-1992															x	
World Bank	July 1982	1983-1995																x

Output

The institutes' ideas on the future growth rate of aggregate GDP in the OECD area are given in Table 2. Compared with the forecasts included in last year's report, the medium-term outlook is very much the same or only slightly more pessimistic. The forecasts for the average growth rate are very close to each other. The AIECE-institutes do not seem to be significantly more optimistic or pessimistic than other institutes.

Table 2. Growth of real GDP in the OECD area¹⁾, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ²⁾
BIPE	n.a.			2.0			2.0 ³⁾ (1988/82)
CPB	0.0	2.0		2.5		n.a.	2.4 (1986/82)
NIESR	-0.3	1.9		2.8			2.6
Det Økonomiske Råd	0.2	1.0		2.5	n.a.	n.a.	2.0 (1985/82)
ETLA	-0.4	1.7	3.0	3.5	2.5	1.5	2.5
EC	0.3	1.1		2.8			2.5
The Conference Board	-0.4	1.9	2.9	2.7	2.4	2.7	2.5
DRI ⁴⁾	0.2	1.0	3.0	3.0	1.9	2.5	2.3
IEA ⁵⁾	1/2	2 1/2		3.9/4.4	2.7/3.2		2.9/3.7 (1990/82)
IMF	0.8	2.5		3.2		n.a.	3.0 (1986/82)
LBS	-0.7	0.8	2.2	1.9	1.9	n.a.	2.2 (1986/82)
World Bank	0.2	2.7		3.7			3.6 (1990/82)

1) Besides OECD-countries other definitions, viz., 'industrial countries' or 'world' are used.

2) Five-year period 1987/82 if not stated otherwise.

3) Six most important trading partners of France.

4) Forecast for 4 big European countries.

5) Low/high demand scenarios; respectively. Assumptions on GDP growth for the period 1983/80 are the same as those included in OECD Economic Outlook (no 31), July 1982.

The unexpected worsening of short-term developments in the course of last year has not had any noticeable effect on the trend growth expectations. On the other hand, as the dates of publication (see Table 1) indicate, most of the forecasts presented here do not take into account the effects of recent falls in oil prices. However, some institutes (e.g. NIESR and IfW) have later revised their short-term forecasts. Whether or not the increased optimism is going to be reflected in the medium-term scenarios will be seen in the future.

The institutes that give a time profile see 1983 as a year of slow economic recovery, the forecasts for growth ranging from 1 to 2 $\frac{1}{2}$ per cent. The years 1984 and 1985 are then seen as years of faster economic growth, the growth rates varying between 2 and 4 $\frac{1}{2}$ per cent. Thereafter some slowdown is again expected. A number of institutes project, it is true, some deceleration in growth already in 1985. As the peak growth rates even in the "boom years" 1984 and 1985 are forecast to be rather modest, the average growth rate for the next five-year period is expected to be lower than in the late 1970's.

The average growth rates during the forecasting period for individual countries are presented in Table 3 (see page 6; more detailed forecasts for some countries are presented in the Appendix tables). Differences between various forecasts concerning individual countries are relatively small. Most AIECE-institutes' ideas for their home countries are in line with the views of the outsiders; NIESR and IfW are somewhat more pessimistic regarding their respective economies than the others. The differences between countries are expected to be similar to those observed in the past.

Table 3. Forecasts for GDP by countries, average annual growth, 1983-1987

Institute	U.S.A.	Japan	Germany	France	U.K.	Italy	Netherlands	Belgium	Austria	Denmark	Finland	Norway	OECD
BIPE (1982-88)				1.4									2.0
CPB (1983-86)													2.4
IfW			1.8										
NIESR					1.4								2.6
Det Økonomiske Råd (1983-85)										2.7			2.0
WIFO (1982-86)									2.5				
ETLA											2.8		2.5
EC													2.2 ¹⁾
The Conference Board	2.4	3.8	2.2	2.2	1.6	2.1	1.5	1.6	1.8	2.4	2.4	2.0	2.5
Data Resources	3.7 ³⁾		2.3	1.8	1.8	3.4		2.0					2.3 ²⁾
- Industrial production (1983-87)	(5.0)	(4.6)	(2.2)	(1.3)	(1.9)	(3.0)	(2.3)	(2.3)					(4.0)
IMF (1983-86)	2.7	4.4	3.0	3.4	1.9	3.0							3.0
LBS (1983-86)					1.9 ⁴⁾								2.2
Merrill Lynch	3.5												
Average of the forecasts	3.1	4.1	2.3	2.2	1.7	2.8							2.4

1) Forecast for EC-countries.

2) Forecast for 4 big European countries.

3) 1982-85

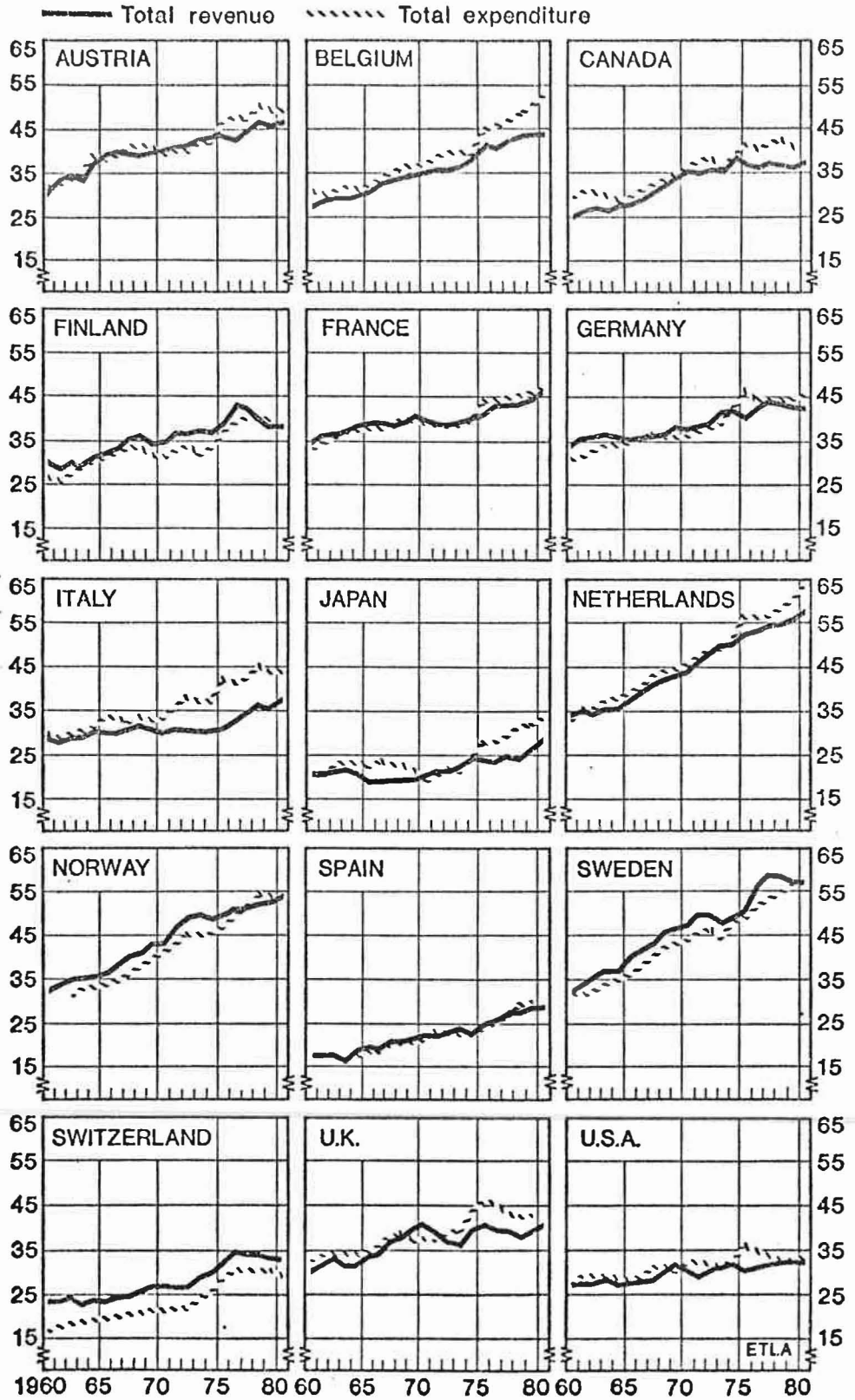
4) Current policies - scenario.

Upturn in economic activity is seen to be based mainly on private consumption and on the inventory cycle. The problem whether investment activity will or will not follow suit is discussed in many reports. However, high interest rates, insufficient demand, a significant degree of idle capacity, low profitability, protectionist fears, various supply-side considerations and uncertainties in general are pointed out as major reasons for a bleak outlook for productive investment. Some of these factors will lose importance if recovery proves strong enough, but the pick-up in investment is anyhow expected to be modest by historical standards. The investment ratio is thus expected to remain low and the capital/employment ratio and labour productivity will rise only slowly.¹⁾

Expansionary demand management policies are seen to be strongly constrained by persistent inflationary tendencies, high public deficits and external balance. Public sector has grown very rapidly during 1960's and 70's (see Fig. 1, page 7) and deficits in public finance have

1) This and other reasons for a productivity slowdown were discussed in last year's comparison.

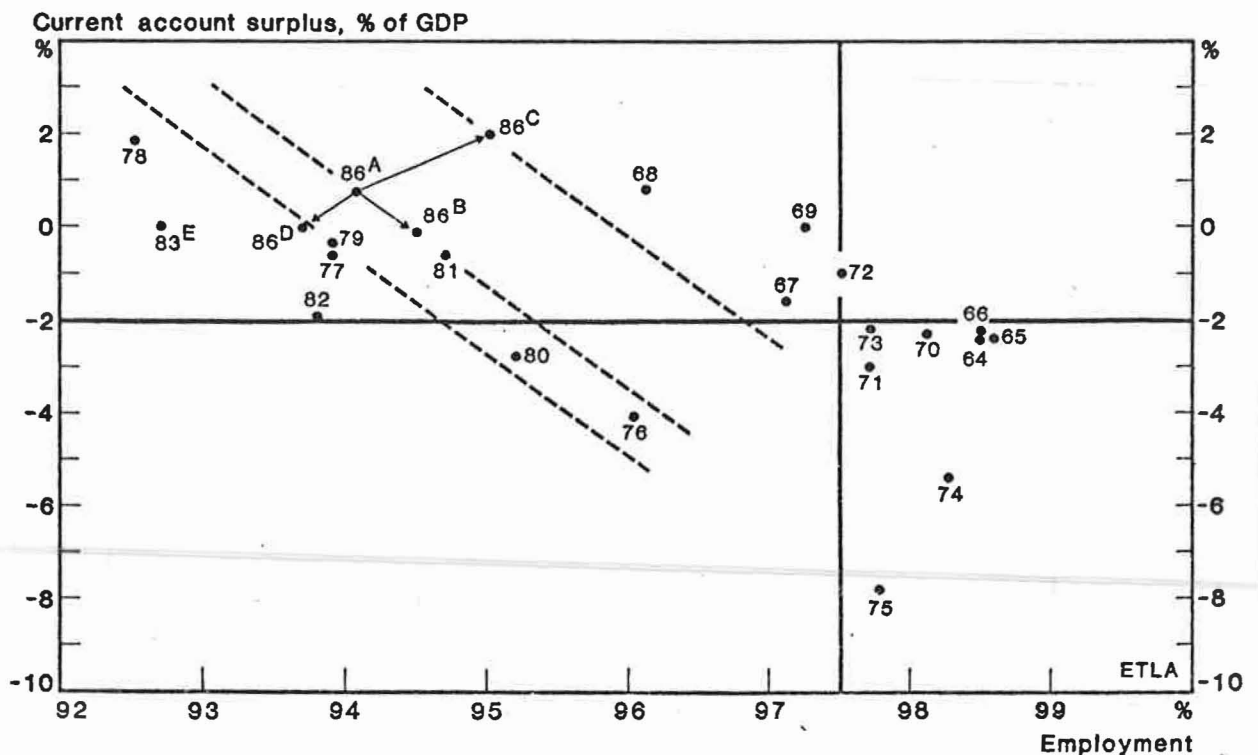
Fig. 1. Ratio of general government expenditure and revenue to GNP/GDP, at current prices, 1960-80



increased in many countries since the mid-70's. Many institutes regard stimulation of investment as a means to raise short-run demand on the one hand and, on the other hand, to solve structural problems when investment projects for, e.g., energy conservation mature. Because of difficulties in creating extra demand, innovation and autonomous investment rather than induced investment are called for.

The external constraint is felt particularly in small open economies, where the attainment of a better employment situation by traditional demand management will lead to large costs in the form of current account disequilibrium. Furthermore, the idea that even big countries are small in this respect has found more and more support. Fig. 2. demonstrates this trade-off in the case of Finland.

Fig. 2. The trade-off between external and internal equilibrium



Source: ETLA

In this figure the trade-off lines corresponding to the expansion of public demand have been drawn.¹⁾ Point 86A corresponds to a position where the economy would be in 1986 on certain assumptions concerning international developments and economic policies. With 1 % p.a. extra public demand growth the economy would be moved to point 86B. Current account would show an unbearable deficit long before the attainment of full employment. Two important shifts are considered in the figure: If industrial production in the OECD area grew 2 % a year faster than in the basic alternative, the demand management line of 1986 would be shifted upwards to the right to pass through point 86C. If domestic wages and prices increased by 2 % a year more than in the basic alternative and exchange rates were kept fixed, the demand management line would pass through point 86D.²⁾

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- 1) The trade-off lines have been calculated with a revised version of an econometric model presented in Vartia (1974) "An Econometric Model for Analyzing and Forecasting Short-term Fluctuations in the Finnish Economy". The steepness of the trade-off lines also depends, of course, on the time span during which the effects of the policy measures are observed. If, e.g., one believes in a vertical Phillips curve, then also these trade-off lines would in the long-run be vertical. The position of the demand management trade-off lines varies in principle with changes in all predetermined variables, and its slope depends on all the parameters of the simultaneous equation model.
 - 2) Because in small countries changes in the competitive position lead to considerable shifts in the trade-off line presented above, the possibility of influencing the cost and price movements relative to other countries either by reducing the inflation rate or by devaluing the currency is often suggested. According to this view the small share of a small country in world trade can even under unfavourable demand conditions be increased by changing its competitive position sufficiently.

Unemployment

Unemployment continued to grow rapidly in industrial countries in 1982, and in many countries it has reached levels not seen since the Great Depression (Table 4). There have been, however, significant differences between various countries. In Europe, unemployment has increased steadily since the first oil shock, whereas unemployment in the United States has fluctuated more or less cyclically. Japan and some small countries in Europe, e.g. Sweden, Norway, Switzerland and Austria, have been able to keep unemployment at low levels.

As discussed last year in this comparison, the growth of labour supply (the growth of working-age population, together with the increase in the average participation rates due to the composition of the working-age population and to increasing participation in some groups) has contributed markedly to the increase in unemployment. On the basis of

Table 4. Standardized unemployment rates in selected OECD countries

	1965-69	1970-74	1975-80	1981	1982
USA	3.7	5.2	6.9	7.5	9.5
Germany	0.8	1.0	3.5	4.4	6.1
France	2.0	2.6	5.1	7.3	8.0
U.K.	2.9	3.4	5.8	11.0	12.7
Japan	1.2	1.3	2.0	2.2	2.4
Italy	5.5	5.7	6.9	8.3	8.9
OECD	2.7	3.4	5.3	6.7	8.2

Source: OECD Economic Outlook and Main Economic Indicators.

past trends in employment/output ratios, a very strong and lasting recovery would be necessary to reduce unemployment rates even to 5-6 per cent. Unfortunately, as reported, only a modest recovery is expected. Therefore, it is not surprising that the gloomy employment prospects have kept up the policy debate on various measures, e.g., shorter working hours, dealing directly with the labour markets.

A general and rapid reduction of working time does not seem possible, however, without a reduction in incomes or at least a reduction in the growth rate of incomes. Declining long-term trends in working time have been due to rising income levels. The strong income effect has led to a higher demand for leisure even though real wage rates (per time) have increased. Thus, a simultaneous reduction in working time and incomes does not (given unchanging tastes and attitudes) seem to correspond to past income-leisure trade-offs. Enforced measures carry the risks of creating new rigidities in the labour markets, of not being cost neutral and, thus, of being inflationary.

On the other hand, the labour market situation might be eased somewhat by introducing more variability into working time and thus creating possibilities for work sharing with acceptance of the corresponding income and fringe benefit sharing. Flexible work/non work choices would probably better correspond to individual preferences and lead to some reduction in the labour input from the existing labour force. However, the new job seekers from outside the labour force who would be attracted by the new arrangements might diminish the effect on unemployment.

Inflation

The decline in industrial countries' inflation rate has continued more rapidly than generally expected a year ago. Even declining prices have been common in many countries during the recent months. The development has been characterized by historically low levels of non-oil commodity prices, falling rates of nominal wage increases and substantial reductions in the price of crude oil. Despite exceptionally high levels of unemployment, economic policies in major countries have remained cautious. Control of inflation and inflationary expectations are seen as a major part of the economic policy strategy in the medium-term.

Taking these developments into account it is not surprising that the forecasts for inflation rates have again been revised downwards (Table 5, page 13).¹⁾ The rate of inflation (consumer prices) is expected to decelerate substantially this year and somewhat further next year. For the years 1985-87 the average annual inflation rate in industrial countries is projected to settle down at $5\frac{1}{2}$ - $6\frac{1}{2}$ per cent. Nevertheless, compared with the performance before the first oil shock, the results in the fight against inflation seem rather modest. In the

1) Inflation forecasts will perhaps be further revised downwards at least when recent falls in the price of crude oil will be incorporated into the forecasts. Some idea of the magnitudes involved is given by the OECD Secretariat's estimate (The July 1982 issue of Economic Outlook) that a 10 per cent reduction in the price of internationally traded oil will decrease inflation rate (as measured by the GDP deflator) by 1 - $1\frac{1}{2}$ percentage points during a two-year simulation.

Table 5. Consumer prices in the OECD area, percentage rate of change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
BIPE	n.a.				6.5		6.5 (1988/82)
NIESR	8.0	7.0			5.4		5.7
ETLA	8.0	6.0	6.0		6.0		6.0
EC	10.5	8.6			7.6		7.8 ²⁾
The Conference Board	9.5	8.1	6.7	7.4	7.0	6.3	7.1
Data Resources	7.6	6.3	6.4	6.3	6.8	6.6	6.5
IMF	7.6	6.9	6	5.1	5	n.a.	5.8 ³⁾ (1986/82)
LBS	8.1	6.7	6.6	7.1	7.3	n.a.	6.9 (1986/82)
World Bank	7.8	7.4			6.4 ⁴⁾		6.4 (1990/82)

1) Five-year period 1987/82 if not stated otherwise.

2) EC-countries' GDP-deflator.

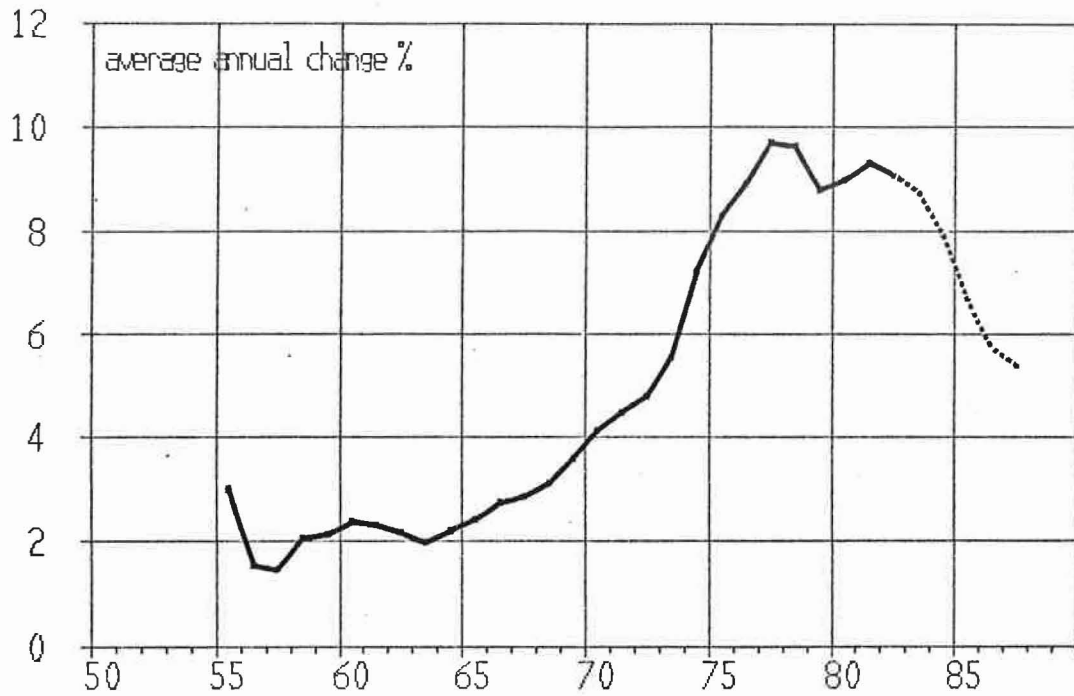
3) GNP-deflator.

4) OECD-countries USD-GDP deflator on average for 1983/90.

1950's and 60's the average annual inflation rate for different five-year periods never exceeded 4 per cent and it was not until the five-year period 1969-73 when it exceeded 5 per cent (Figure 3, see page 14).

However, in assessing inflation prospects in the medium-term one should keep in mind numerous risks and uncertainties. First, the average growth of hourly earnings in manufacturing industry has moderated relatively quickly compared with the adjustment period after the first oil shock. Unit labour costs, however, rose by approximately 7 per cent in 1982, - a rate of rise far above the average for the 60's. The unfavourable course of productivity, reflected in these figures, might be an impediment to bringing down inflation further. Second, many non-oil commodity prices are at unsustainably low levels with respect to production costs and even the modest recovery projected in the industrial countries might lead to considerable increases in real prices of such commodities. And third, current signals from the oil market might prove misleading, since, e.g., political disturbances may always rapidly change the picture.

Fig. 3. Average annual rates of change in consumer prices in industrial countries for different five-year periods, 1950-87



1) Figure for the year 1980, for example, corresponds to the average annual rate of change in the five years 1976-80.

Source: IMF, International Financial Statistics.

Oil prices

As indicated (see Table 6), the dates of drawing up the forecasts for oil prices vary considerably. Most reports have not been able to assess the consequences of the decisions taken at the OPEC meeting of last March. In any case, major downwards revisions have been made for the price of oil compared with the projections included in last spring's report. Institutes expect the real price of crude oil to fall somewhat in the near future, after which strengthening demand should again bring about some rise in it. There are considerable differences between the institutes. For example, LBS expects that real prices will have fallen by one third by the mid 80's.

Table 6. Assumptions on the increase of real oil prices, percentage changes

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
BIPE (March 1983)	n.a.			0			0.0 (1988/82)
CPB (September 1982)	-4	-5		1		n.a.	-2.0 (1986/82)
NIESR (November 1982)	-3	0		0			0
WIFO (March 1983)	n.a.			0			0
ETLA (April 1983)	0	-12.0	-8.5	0			-4.0
EC (October 1982)				0.3			0.3 (1987/80)
DRI ²⁾ (March 1983)	-10.3	-10.0	-6.6	1.4	0.7	2.8	-2.5
IEA (1982)			-3.9/-3.3 ³⁾			0.0/3.0 ³⁾	-2.0/-0.2 ³⁾
LBS (February 1983)	-6.7	-20.4	-7.6	-3.3	3.0	n.a.	-7.5 (1986/82)
World Bank (July 1982)	-7.5	-3.0		2.4	n.a.	n.a.	2.3 (1990/82)

1) Five-year period 1987/82 if not stated otherwise.

2) Nominal price of crude oil (USD/barrel) deflated by consumer price index in 9 major industrialized countries.

3) High/low demand scenarios for the periods 1985/80, 1990/85 and 1990/80, respectively.

Short-term factors in oil markets include weak demand and destocking in consumer countries. When demand strengthens and destocking ends, longer-term adjustment efforts will predominate. In this respect, too, there are grounds for cautious optimism. The 25 per cent annual average rise in the real price of imported crude oil from 1972 to 1980 has triggered off conservation measures which will produce significant effects tending to reduce the demand for energy in the coming years. As an illustration of what has been achieved so far and of the expected developments one can consider the ratio of total energy consumption to total GDP¹⁾.

Energy efficiency in OECD countries²⁾

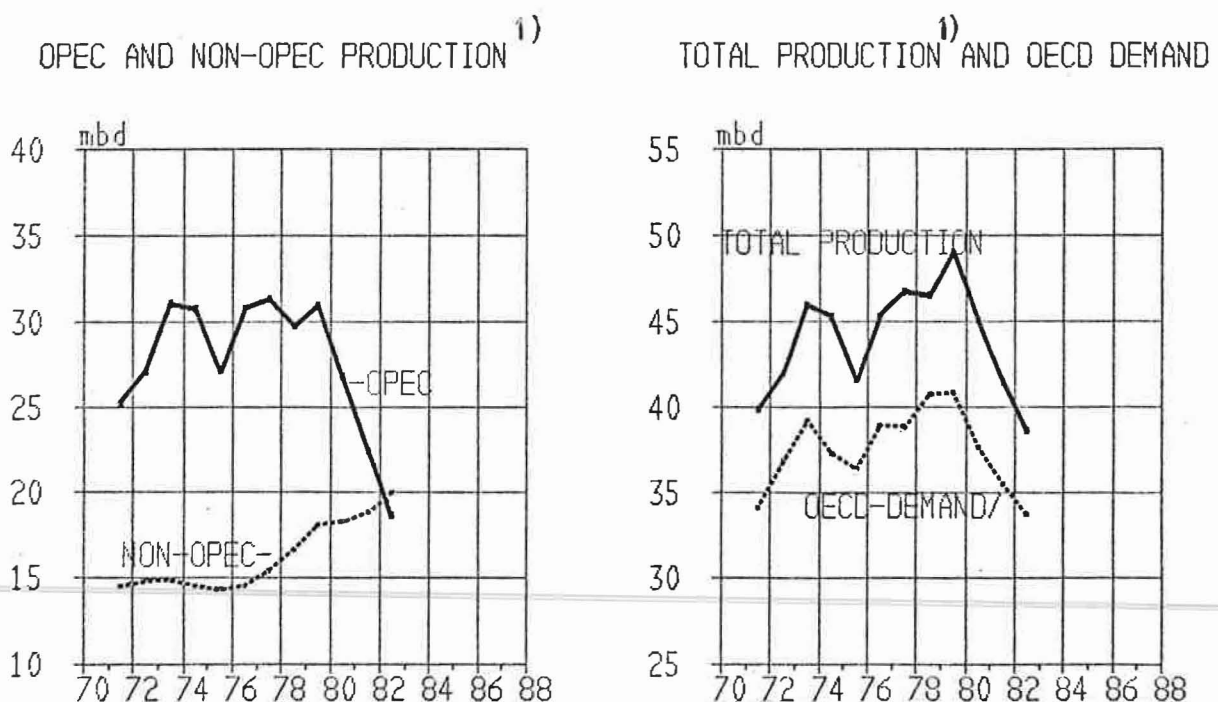
	1980	1985	1990
Total primary energy requirements/GDP (1973=100)	87.9	80.4	77.4
Oil consumption/GDP (1973=100)	80.2	64.8	57.0

1) The analysis of energy demand is more meaningful at the sectoral than at the aggregate level. For example, the transport sector, which accounted for about 30 per cent of the total final consumption of energy in OECD countries in 1980 requires special analysis. Almost all energy used in this sector consist of oil with little substitution possibilities in the short-term. However, conservation has proceeded also here. The gasoline consumption per car ratio (this ratio reflects both individual car efficiency and the intensity with which each car is used) declined almost 3 per cent annually over the period 1974-80. This is a rather encouraging achievement considering that new annual car registration constitute only 10-15 per cent of the total car stock.

2) Source: IEA, World Energy Outlook, 1982; high demand scenario.

Assuming no political difficulties, a reasonable supply of non-oil energy and a slightly growing net demand for oil by non-OECD countries, one can indeed combine a very pessimistic assumption on further oil conservation with a rapid economic recovery, and this will not lead to a fundamental imbalance on oil markets before the end of next five-year period. If consistent energy policies are continued in industrial countries, the possibility exists that the OPEC cartel will be unable to tighten its grip on the OECD countries even in the longer run. Very much will, of course, depend on Saudi Arabian policy, as it could, as a swing producer, almost alone satisfy even a very fast-growing demand for oil for some time. Figure 4 provides a rough idea of the present situation on oil markets.

Fig. 4. Supply and demand of crude oil: Key indicators



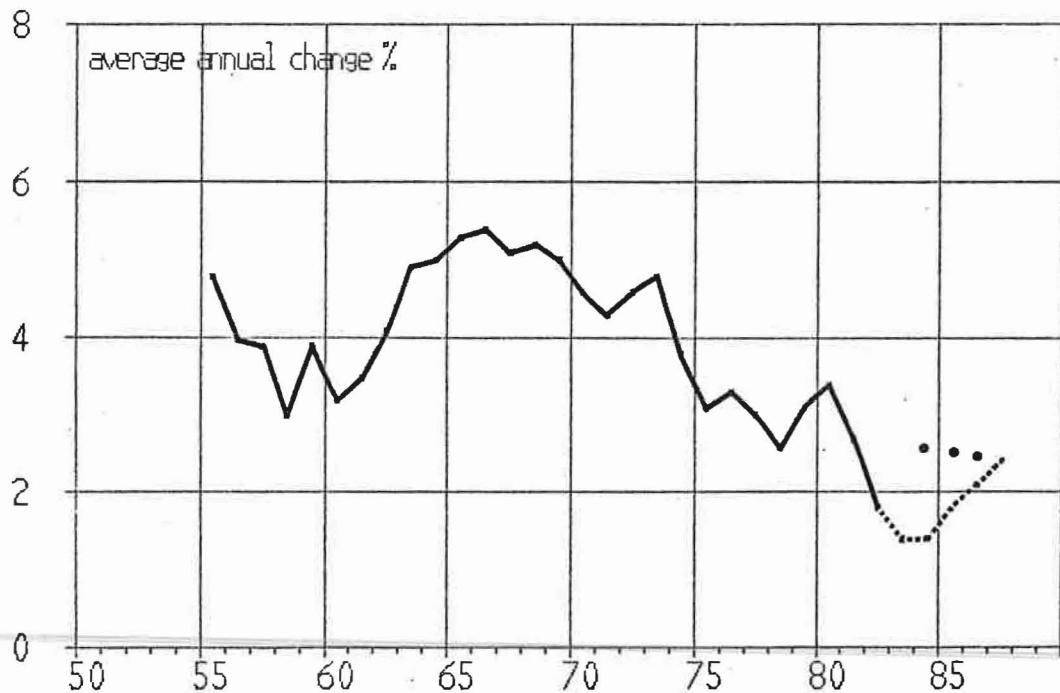
1) Excluding production of Centrally Planned Economies

Source: OECD, Economic Outlook, December 1982

Conclusions

The institutes included in this comparison project only modest economic growth in the OECD countries for the five-year period 1982-87 (about 2.5 % p.a. on average). Some slight downward revisions have been made compared with the forecasts made a year ago (Figure 5). Unemployment is expected to stay on a high level. The average inflation rate is expected to decline this year to 6-7 % and then settle down around 6 %. Uncertainties concerning the real price of crude-oil seem to be far greater than a year ago: the average annual change forecast for the period 1982-87 varies between -7.5 and +2.5 %.

Fig. 5. Average annual rates of GDP growth in the OECD area for different five-year periods, 1950-87



- 1) Figure for the year 1980, for example, corresponds to the average annual rate of change in the five years 1976-80.
- 2) Forecasts are those of ETLA (see Table 2) except for the small dots above the line in the years 1984, 1985 and 1986 which correspond to some kind of average forecast made by the institutes included in earlier comparisons (see Introduction).

Despite the disappointments met with longer term projections in recent years (see Fig. 5), the forecasts again expect that "normal" trend growth rates of a kind will be achieved in the coming years. The expected trend growth rates regarded as "normal" have continually declined, it is true, but they still are higher than the growth rates actually recorded in recent years. This phenomenon is typical of the formation of adaptive long-term expectations in general. Thus is explained the fact, e.g., that the long-term inflationary expectations come down more slowly than the short-term ones. The inherent optimism in the growth projections seems to be based on the idea that some of the structural constraints to growth facing our economies today will gradually be removed and there will be more room for expansion in the longer run.

Appendix tables

Forecasts for real GDP in the following countries

- U.S.A.
- Japan
- Germany
- France
- United Kingdom
- Italy
- Netherlands
- Belgium
- Denmark
- Norway
- Austria
- Sweden
- Finland

USA

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
The Conference Board	-1.8	2.7	2.7	2.2	1.7	2.8	2.4
Data Resources	-1.8	2.2	4.7	4.2	n.a.	n.a.	3.7 (1985/82)
IMF	-1.0	1.8	← 3.0 →			n.a.	2.7 (1986/82)
Merril Lynch	-1.7	2.3	4.8	3.9	3.1	3.2	3.5

1) For the five-year period 1982-87 if not stated otherwise.

Japan

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
The Conference Board	2.5	3.0	4.0	4.5	4.0	3.5	3.8
IMF	3.5	4.0	← 4.5 →			n.a.	4.4 (1986/82)

Germany

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
IfW	-1.2	-0.5	2.6	3.0	2.6	1.4	1.8
The Conference Board	-1.2	0.0	2.9	2.7	2.7	2.6	2.2
Data Resources	-1.2	0.3	3.5	3.4	2.0	2.3	2.3
IMF	1.0	3.0	← 3.0 →			n.a.	3.0 (1986/82)

France

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
BIPE	1.4	←		1.4	→		1.4 (1988/81)
The Conference Board	0.8	1.0	2.5	3.0	2.8	1.9	2.2
Data Resources	1.5	1.0	1.9	2.3	1.7	2.1	1.8
IMF	2.1	3.2	← 3.5 →			n.a.	3.4 (1986/82)

United Kingdom

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
NIESR	0.3	1.0	1.0	1.5	1.8	1.6	1.4
The Conference Board	1.0	1.7	1.9	1.5	1.3	1.8	1.6
Data Resources	1.2	2.0	2.7	1.7	1.1	1.8	1.8
IMF	0.8	1.6	← 2.0 →			n.a.	1.9 (1986/82)
LBS	0.5	1.8	2.0	2.0	1.6	n.a.	1.9 (1986/82)

Italy

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
The Conference Board	1.0	1.7	3.0	2.2	2.2	1.5	2.1
Data Resources	-0.2	1.2	4.3	4.7	2.8	4.0	3.4
IMF	2.3	2.9	← 3.0 →			n.a.	3.0 (1986/82)

Netherlands

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
The Conference Board	-0.8	0.0	2.0	1.6	2.5	1.5	1.5
- Industrial production	(-2.0)	(-1.0)	(2.5)	(2.0)	(2.0)	(1.5)	(1.4)
Data Resources							
- Industrial production	(-3.6)	(0.1)	(3.1)	(2.5)	(2.5)	(3.1)	(2.3)

Belgium

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
The Conference Board	-1.5	0.0	1.8	2.0	1.7	2.5	1.6
Data Resources	-0.2	0.5	2.6	2.9	2.2	1.6	2.0

Denmark

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
Det Økonomiske Råd	1.5	2.0	←	3.0 →	n.a.	n.a.	2.7 (1985/82)
The Conference Board	1.5	0.0	3.0	3.0	3.0	3.0	2.4

Norway

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
The Conference Board	0.0	1.6	2.5	1.8	2.0	2.0	2.0

Austria

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
WIFO	←		2.5	→		n.a.	2.5 (1986/81)
The Conference Board	0.0	1.5	1.8	2.0	1.2	2.5	1.8

Sweden

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
The Conference Board	0.0	1.5	2.0	2.4	1.5	1.8	1.8

Finland

real GDP, percentage change

Institute	1982	1983	1984	1985	1986	1987	Average ¹⁾
ETLA	1.1	1.8	3.8	4.3	2.6	1.5	2.8
The Conference Board	1.4	2.0	2.2	2.8	2.5	2.7	2.4