

Keskusteluaiheita Discussion papers

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MEDIUM-TERM INTERNATIONAL
PROSPECTS

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MEDIUM-TERM INTERNATIONAL PROSPECTS

This discussion paper includes two separate reports. The first contains a small comparison of some recently published medium-term forecasts on international economic developments. The second paper, written by Pekka Almi alone, summarizes the prospects of international developments as included in the recently medium-term forecast of the Research Institute of the Finnish Economy. The reports were presented at the meeting of the working group on longer-term prospects and structural change of the Association d'Instituts Européens de Conjoncture Economique (AIECE) in Budapest in May 1980.

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A CONCISE SUMMARY OF SOME MEDIUM-TERM FORECASTS
by the Research Institute of the Finnish Economy (ETLA)

At the AIECE-meeting in Brussels in October 1979 some institutes, which were interested in creating a working group on longer-term prospects, decided to organize, in connection with the Budapest meeting, a meeting at which recent medium-term forecasts were to be compared. In the following some forecasts very different from one another are presented. Some of them have been published, whereas others are under work.

Although an effort has been made here to construct a rough summary of these forecasts regarding the course of oil prices and economic developments in the OECD area, it should be emphasized that, for several reasons, the forecasts are not comparable with one another. The dates of drawing up the forecasts, the forecast periods and the economies included may differ considerably. Some forecasts have attempted to outline the cyclical path, whereas others have been content with merely predicting the average course of development. The background and starting-point assumptions underlying the forecasts have not always been clearly specified. The time devoted to the forecasts and the resources available for them in different institutes also considerably differ, no doubt.

Thus, the primary aim of the following rough summary is not to compare the various institutes' views of the course of development of the world economy in the 1980s. It is intend-

ed, rather, as an aid for the discussion of the difficulties connected, in principle, with medium-term forecasting, on the one hand, and of various groups of problems associated with the current situation on the other.

In seeking to asses the significance of medium-term forecasts we may ask, first of all, for whom are they meant: for firms, government authorities, etc.? And, what are the needs of the users of these forecasts? We may also ask: Has medium-term forecasting obtained a role of its own or are medium-term forecasts regarded either as lengthened short-term forecasts or shortened long-term forecasts? In formulating medium-term forecasts, should an effort be made to present predictions concerning cyclical developments or only average growth figures? How far one go to conjecture and publish figures on matters which one clearly does not know?

The making of medium-term forecasts is experienced as more problematic today than it was experienced, say, 10 years ago. In the following, three problem groups mentioned in various forecasts in this context will be sketched.

First, it has not yet been established to what extent the deceleration in the growth rate of production and the acceleration in the rate of inflation observed during last decade were due to lasting structural changes, as a result of which economic growth will also stay slower in future. Such structural changes are considered to include, e.g., permanent changes in the movements of commodity prices, the

partial exhaustion of the benefits provided by the integration of western economies, the slow-down of productivity growth, and the disappearance of the technology gap between the United States and Western Europe.

Secondly, the world economy has precisely now to adjust itself to the "second oil shock", which has already clearly affected the course of prices and trade balances in the western economies but has not yet led to any really significant decline in their productive activity. At this juncture the determination of the cyclical path of the world economy and individual economies and the timing and nature of the expected recession is difficult. It is unknown, e.g., what kind of economic policy stance will in future be adopted toward the higher inflation rates and larger current account deficits. Nor is it clear how quickly and efficiently would any particular degree of deflationary economic policy succeed in slowing down the pace of inflation and how strong would be its impacts on output and employment.

It should again be stressed that comparisons between the various forecasts concerning real economic developments can only be made subject to very great reservations, if at all. However, in Table 1 an attempt has been made to form, on the basis of the forecasts in question, a picture of the course of total output in the OECD area during the first half of this decade. Each of the forecasts sees 1980 and 1981 as years of recession - or at least years of quite slow growth.

As for the duration and depth of the recession, the most pessimistic views are perhaps those of BIPE, ETLA and the London Business School, whereas Wharton, Henley and Econ. Models would seem to be more optimistic. Nevertheless, the various forecasts do not seem to diverge greatly.

On the other hand, 1982 and 1983 are generally forecast to be years of faster growth. It would seem, however, that growth percentages in these "boom years", too, are likely to remain below the trend growth percentages for the OECD economies in the 1950s and 1960s. No country, except Japan, is likely to attain - in any of the forecast years and according to any of the forecasts considered - a growth rate of total output exceeding 5 per cent. This reflects, it would seem, a notable deterioration in the growth potential of the western industrial countries, unless it is due to forecasters' traditionally cautious attitudes and an erroneous extrapolation of last years' slow growth.

The third problem group is formed by the increasing international political tension and by internal disturbances in several countries. Efforts have generally not been made to anticipate essential political changes in formulating medium-term economic forecasts, but it may be justifiable to ask if the increasing utilization of political knowledge among those making economic forecasts could be considered advisable.

The uncertainty due to political factors, particularly in connection with the price of oil, is emphasized in nearly all of the forecasts under consideration. The rise in the

real price of oil is unanimously forecast to be this year 30-40 per cent, but, on the other hand, it is generally believed that the real price of oil will not rise any longer either this year or next (Table 2.). In the later years its real price is generally forecast to rise at an average annual rate of 3-6 per cent. Of the member institutes of AIECE, only B.I.P.E. has had the courage to formulate a more detailed assumption of the course of the price of oil.

Because of lack of sufficient time and resources it has in the foregoing been possible to roughly compare only one of the crucial assumptions underlying the forecasts, namely, the assumption concerning the price of oil, and one single crucial "result", the growth of total output. Other interesting aspects worth comparison would have been, e.g., the assumptions made concerning monetary and fiscal policies, the rates of foreign exchange, the commodity markets, inflation, etc. If the co-operation now begun between the institutes of AIECE is continued, it will be possible to develop the analysis just in these directions.

Table 1.

"OECD" GDP*
Volume change, per cent

Institute	1980	1981	1982	1983	1984	1985	Otherwise specified*
NIESR		←	3.5			→	
B.I.P.E.	-0.1	1.2	-0.0	4.5	3.4	2.3	excl. France & Japan
CPB		←	2.5			→	"OECD-countries"
Økonomiske Råd	2.0	1.75	3.0	3.0			"weighted with shares in Danish industrial exports"
ETLA	0.9	1.5	←	3.5	→		
HENLEY	1.5	2.5	3.8	3.2	2.7	2.1	excl. USA & Japan
Econ. Models	0.5	2.5	3.2	4.1	4.4	3.8	"World summary"
Wharton	0.6	2.7	3.4	3.5			
World Bank	1.6	←		3.6		→	
London Business School	-0.8	0.7	4.3	3.8			"World Gross National Product"

* Unless otherwise stated, "OECD" includes United States (43.5 %), Japan (18.9), Germany (14.0), France (10.5), United Kingdom (7.2) and Italy (5.9). Weights are GDP-shares at 1979 prices and exchange rates. The combined GDP of these countries was about 80 % of the OECD-total in 1979.

Table 2.

Real Price of Oil*
Annual change, per cent

Institute	1980	1981	1982	1983	1984	1985
NIESR	24	←	A=2 B=6 C=10			→
B.I.P.E	36	15	0	5	15	0
CPB		←	5			→
Økonomiske Råd		←	3	→		
ETLA	38	0	5	5	5	
HENLEY		←	5-10			→
Econ. Models	29	0	5	6	5	4
Wharton	41	4	5	6		
World Bank	27	5	3	←		3 → 1990
London Business School	41	1	4	4		

* relative to export prices of manufactures

List of Medium - term Forecasts

Name of Institute	Abbreviation	Date	Period	Countries included								Average growth
				Germany	France	UK	Italy	Nether-lands	Belgium	USA	Japan	
<u>AIECE-Institutes</u>												
National Institute of Economic and Social Research	NIESR	Nov./1979	1980-85	x	x	x	x			x	x	
Bureau D'Informations et de Previsions Economiques	B.I.P.E.	Dec./1979	1980-85	x		x	x	x	x	x		
IFO-Institut für Wirtschaftsforschung	IFO	March/1980	1981-90	x								
The Economic Council-De Økonomiske Råd	Økonomiske Råd	April/1980	1980-83									x
Central Planbureau	CPB	April/1980	1981-85									x
The Research Institute of the Finnish Economy	ETLA	April/1980	1980-84	x	x	x	x	x	x	x	x	
<u>OTHERS</u>												
The Henley Centre for Forecasting	Henley	Febr./1980	1980-85	x	x	x	x	x	x			
International Forecast Service Economic Models Limited	Econ. Models	Febr./1980	1980-85	x	x	x	x	x	x	x	x	
Wharton Econometric Forecasting Associates, SRI International	Wharton	Jan./1980	1980-83	x	x	x	x	x	x	x	x	
World Bank, Commodities & Export Projections Division	World Bank	Jan./1980	1980-85	x	x	x	x			x	x	
The London Business School Centre for Economic Forecasting	London Business School	Febr./1980	1980-83									x

Country: GERMANY

Gross National Product, change of volume, %

Institute	Date	1979	1980	1981	1982	1983	1984	1985
NIESR	Nov./1979	4.2	2.5	←		3.0		→
B.I.P.E.	Dec./1979	4.0	2.5	2.0	2.5	4.0	3.5	3.0
IFO	March/1980		2.0	←				3.1 → 1990
ETLA	Apr./1980	4.4	2.0	←	3.5	→		
Henley	Febr./1980		2.5	3.0	4.0	3.5	3.0	2.5
Economic Models	Febr./1980	4.1	2.4	2.9	3.4	3.2	4.4	3.9
Wharton Econometric	Jan./1980	4.2	1.7	2.6	3.1	3.4		
World Bank	Jan./1980	4.0	2.8	←		3.7		→

Country: FRANCE

Gross National Product, change of volume, %

Institute	Date	1979	1980	1981	1982	1983	1984	1985
NIESR	Nov./1979	2.8	2.3	←		3.25		→
B.I.P.E.	Dec./1979							
IFO								
ETLA	Apr./1980	3.3	2.2	1.5	←	3.7	→	
Henley	Febr./1980		2.0	3.0	3.5	3.1	2.7	2.3
Economic Models	Febr./1980	2.5	2.0	2.4	3.3	4.6	4.3	2.7
Wharton Econometric	Jan./1980	2.9	1.6	2.2	2.7	3.6		
World Bank	Jan./1980	2.8	2.2	←		3.6		→

Country: UNITED KINGDOM

Gross National Product, change of volume, %

Institute	Date	1979	1980	1981	1982	1983	1984	1985
NIESR	Nov./1979	0.4	0.2			1.5-2.0		
B.I.P.E.	Dec./1979	0.4	-1.0	0.5	1.5	2.5	3.0	2.5
IFO								
ETLA	Apr./1980	0.6	-1.5	1.0		2.3		
Henley	Febr./1980		-1.9	0.8	3.8	1.8	1.8	0.7
Economic Models	Febr./1980	-0.1	-2.0	1.4	3.2	2.1	1.7	1.2
Wharton Econometric	Jan./1980	-0.7	-1.4	1.6	2.4	3.2		
World Bank	Jan./1980	1.0	0.0			2.4		

Country: ITALY

Gross National Product, change of volume, %

Institute	Date	1979	1980	1981	1982	1983	1984	1985
NIESR	Nov./1979	4.0	2.0			3.5		
B.I.P.E.	Dec./1979	4.2	2.0	2.0	3.0	4.5	3.5	3.0
IFO								
ETLA	Apr./1980	4.5	2.1	1.5		3.7		
Henley	Febr./1980		2.1	2.6	3.7	4.3	3.2	2.5
Economic Models	Febr./1980	4.4	1.5	1.8	2.5	3.3	4.3	2.8
Wharton Econometric	Jan./1980	3.6	2.0	1.8	1.3	1.4		
World Bank	Jan./1980	4.0	2.3			3.6		

Country: USA

Gross National Product, change of volume, %

Institute	Date	1979	1980	1981	1982	1983	1984	1985
NIESR	Nov./1979	2.0	0.7			3.0		
B.I.P.E.	Dec./1979	1.7	-1.0	1.0	-1.5	5.0	3.5	2.0
IFO								
ETIA	Apr./1980	2.3	-0.5	1.0		3.0		
Henley	Febr./1980							
Economic Models	Febr./1980	2.2	-0.9	2.0	2.6	4.0	4.4	3.9
Wharton Econometric	Jan./1980	2.2	-1.0	2.7	3.7	3.3		
World Bank	Jan./1980	1.3	0.5			2.9		

Country: JAPAN

Gross National Product, change of volume, %

Institute	Date	1979	1980	1981	1982	1983	1984	1985
NIESR	Nov./1979	5.9	4.0			6.0		
B.I.P.E.	Dec./1979							
IFO								
ETIA	April/1980	6.0	3.3	3.0		5.0		
Henley	Febr./1980							
Economic Models	Febr./1980	5.9	4.1	4.9	5.4	6.0	5.5	5.3
Wharton Econometric	Jan./1980	6.0	3.0	4.4	4.6	4.6		
World Bank	Jan./1980	5.5	3.2			5.5		

AN ENGLISH SUMMARY OF THE SECTION ON INTERNATIONAL ECONOMY,
MEDIUM-TERM FORECAST OF THE RESEARCH INSTITUTE OF THE FINNISH
ECONOMY

Framing a forecast of the course of the international economy through the next five years is at present problematic for several reasons. First, the extent to which the decline in the growth rate of production and the rise in the rate of inflation observed during the last decade were due to lasting structural changes that will keep economic growth slower in the future also has not yet been satisfactorily assessed.

Secondly, the world economy has just now to seek to adjust itself to the "second oil shock", which has clearly had an impact on the course of prices in the western industrial economies and on their trade balances but has not yet led to any significant slackening in their productive activity. At this juncture the determination of the cyclical path of the international economy and the prediction of the timing and nature of the expected recession are difficult. It is unknown, e.g., how economic policies will in the future get adapted to the higher inflation rates and current account deficits. And even if the responses of economic policy to these could be anticipated, it is not clear how quickly, e.g., deflationary policies could reduce the pace of inflation and what would its costs be in terms of output and employment. In order to be able to forecast the point in time when growth begins to accelerate anew, however, one must have some kind of conception of these factors.

A third problem group is formed by the international policital tension and by internal disturbances in certain countries. If this tension found an outlet in more open conflicts, this could influence international economic developments in several ways, but the forecasting of essential political changes has been experienced as presenting insuperable difficulties.

Production and international trade

The rates of economic growth slowed down in the western industrial countries in the 1970s considerably in comparison with those achieved during the preceding two decades. However, this slowing down was only in part directly attributable to the rise in the prices of oil and other raw materials and the deflationary policies pursued following these price rises, or to factors that were cyclical in nature. The fast economic growth experienced in Western Europe in the 1950s and 1960s was also due to special factors which do not affect developments any longer, at least not as strongly as they used to do, and thus the assumption is justified that economic growth has slowed down even permanently.

The post-war reconstruction in Europe and the beginning of transfer of technology from the United States meant a powerful growth impulse, reinforced by the gradual liberalization and integration of international trade. The rapid growth of demand for mass consumption goods promoted industrialization, which was made possible, on the other hand, by the labour force freed

from agriculture. Productive activities, and the activities of entire society, were based in large measure on the availability of cheap oil. Similar strong structural growth impulses are not in prospect for the western economies during the period under consideration. For example, the technology gap between the United States and Europe has already mainly closed. Moreover, the rise in productivity in the OECD countries has clearly slowed down, partly as a result of the slow growth of demand but also because of changes that have occurred in attitudes to work, in the composition of the labour force and in schooling. The potential offered to the western industrial countries by co-operation with, and utilization of modern technology in, the developing countries will in the long run be big, but as far as the near future is concerned, the social structure of, e.g., certain oil producing countries will hardly permit developing them at the rate they have been developed in the recent past.

A great deal of uncertainty attaches to the forecasting of the duration and depth of the next recession. In several countries deflationary economic policies, such as restricting the growth rate of money supply and raising the rates of interest, have been resorted to in combating inflation. Economic activity is assumed to markedly slacken in many countries during the second half of 1980. Thus the first year of the forecast period would generally be one of slow economic growth. The recession will perhaps not prove as steep as that in the years 1974-75, since, i.a., the western industrial countries have not this time

experienced any strong, uninterrupted upswing preceding it and also because the unintentional growth of inventories has not been of the same order of magnitude as it was then. Also, the price of oil has this time risen gradually, over a longer period of time, so that adjustment to its rise may also take place more smoothly on this occasion.

According to the short-term forecast of ETLA, however, a rather slow growth is expected to continue for a considerable length of time even in 1981. In combating inflation, there may next year be a shift of emphasis to fiscal policy measures, whereas monetary policy will perhaps be relaxed in order to support productive investment. Despite the fact that economic activity is expected to pick up during the second half of 1981, the year-on-year growth of total output may in many West-European countries prove less in 1981 than this year.

On the basis of international medium-term forecasts we have estimated here that, in 1982-84, total output in the western countries important to Finland's export trade is likely to grow by 3 per cent and industrial production by 4 per cent per year on average. These historically comparatively low growth rates are partly explained by the fact that economic developments in the United Kingdom, which is one of the most important of Finland's customer countries, has been estimated to be weaker than the average for other countries. As is also evident from the appended figure the peaks of the weighted

industrial output volumes in Finland's customer countries have shown an almost trend-like decline for the past three decades. Total output in the developing countries is estimated to grow during this decade by 5.5 per cent a year, which presupposes a substantial improvement of agricultural production in the poorest developing countries.

The slow-down in the growth of production in the 1970s has also been reflected in international trade. Growth in the volume of world trade decelerated also in relation to output growth. This trend may continue in the 1980s, owing to protectionistic measures and because efforts will be made to reduce individual economies' dependence on international economic fluctuations. The volume of world trade grew at an annual average rate of 8 per cent in 1960-73, whereas in 1973-79 the corresponding figure was only 4 1/2 per cent. Trade in oil and petroleum products grew by less in volume than the volume of trade in manufactures.

Because of the international recession, growth in the volume of world trade will also slow down both this year and next. The high growth rates of the OPEC countries' imports can also be expected to decline. Imports of non-oil developing countries, on the other hand, are restrained by these countries' on the other hand, are restrained by these countries' burdens of indebtedness. It has been estimated that their debt service ratio is likely to rise from the present 15 per cent to almost 30 per cent by the middle of this decade. On the whole, the

the volume of world trade is assumed to grow in the years 1980-84 approximately as fast as it did during the second half of the 1970s, or at an annual average rate of about 4-5 per cent.

Commodities and price movements

One crucial uncertainty factor during the period under consideration is associated with oil, the availability and price of which are determined not only by economic factors but also by political circumstances. According to the estimates made by OECD, an annual growth of 3.5 per cent in its member countries' aggregate output will, in the medium term, increase their need for energy by an average of 2.5-3 per cent a year. During the second half of the 1970s almost 40 per cent of this area's energy requirements was met by imported energy, oil accounting for 95 per cent of the area's net imports of energy. Despite the fact that, in the medium term, it will be possible to some extent both to save energy and replace oil mainly by coal, the western economies will still remain very dependent on oil imports, particularly from the OPEC countries. The OPEC countries have the technological possibilities necessary to increase their oil production sufficiently to meet the western countries' demand for it, but in practice they will hardly be willing to do so.

The real price of oil and oil derivatives, obtained by deflating its nominal price by the export prices of manufactures, declined in the years 1974-78. In our forecast we have assumed that, by regulating the supply of oil, the OPEC countries will support the price of oil, endeavouring to hold its real price unchanged when the demand for it is sluggish and seeking to raise its real price when the demand for it recovers. The real price of oil should thus follow a course similar to the course of real economic developments in western countries. As a result of slackening economic activity in the western countries in 1980 and 1981 the real price of oil should accordingly not rise from the level it reached in the spring of 1980; in other words, in these years the nominal price of oil should rise approximately in step with the export prices of manufactures. As a consequence of the increases effected in 1979 and in the first half of 1980, however, the real price of oil would this year be about 40 per cent higher than it was in 1979. In 1982-84, when output growth in OECD countries is likely to accelerate, the real price of oil is expected to rise by an average of 5 per cent a year. Through the entire forecast period the real price of oil would thus rise by an average of 10 per cent a year, while in 1972-79 the corresponding average rise was 16 per cent a year.

It is clear that actually the price of oil will fluctuate more strongly than the above schematic assumptions suggest, yet these fluctuations will be due to factors whose timing and impact we have been unable to predict. If the OPEC countries'

production and pricing policies will not prove uniform, the real price of oil may even fall temporarily. Internal disturbances in the oil-producing countries and possible stoppages in production or an aggravation in the international political tension may, on the other hand, lead to price rises considerably exceeding those forecast above.

The real prices of commodities other than petroleum fluctuated considerably in the 1970s. They rose sharply in 1973-74 but declined notably in 1975 and 1978. On average these real prices increased by about 2 per cent a year. During the anticipated recession of 1980-81 the real prices of non-oil raw materials are assumed to stay approximately unchanged but during the next recovery of economic activity they are supposed to rise somewhat. In the short run, however, the prices of individual commodities vary sharply because of, i.a., weather conditions, disturbances in production and distribution as well as because of political upheavals.

The nominal export prices of western manufactures in international trade stayed almost unchanged in the 1950s and 1960s but rose in the 1970s at an annual average rate of about 12 per cent. In our forecast we have assumed that in 1980 and 1981 export prices continue to rise comparatively fast, as attempts will be made to shift the rise in production costs on to the prices of final products. On the assumption postulating a peaceful course of development, the rise in the export prices of manufactures is likely to decelerate during the closing years

of the forecast period and it should thus be 2-3 percentage points lower than it was in the 1970s, or about 9 per cent a year.

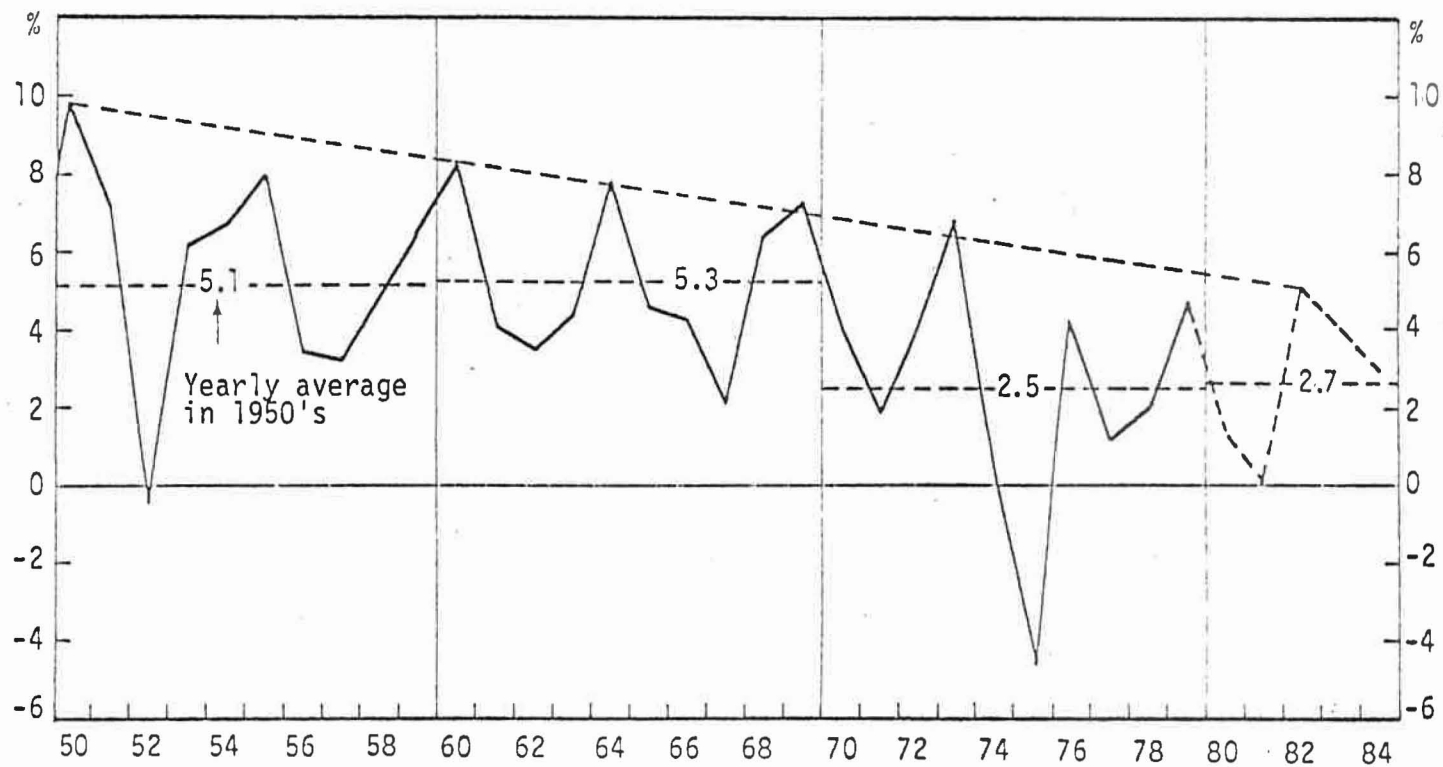
In the 1970s the rate of rise in consumer prices in the western industrial countries was about twice the rate for the 1960s. During the forecast period the course of consumer prices in western countries is assumed to follow that of the export prices of manufactures. In the countries important to Finnish exports, consumer prices are predicted to rise this year by about 11 per cent and in the closing years of the forecast period by an average of 7-8 per cent a year.

GDP volume change, per cent

Country	1980	1981	1982	1983	1984
Germany	2.0	1.0	←	3.5	→
France	2.2	1.5	←	3.7	→
United Kingdom	-1.5	1.0	←	2.3	→
Italy	2.1	1.5	←	3.7	→
Netherlands	2.0	1.0	←	3.2	→
Belgium	2.0	1.0	←	2.7	→
USA	-0.5	1.0	←	3.0	→
Japan	3.3	3.0	←	5.0	→
Average*	0.9	0.8	←	3.0	→

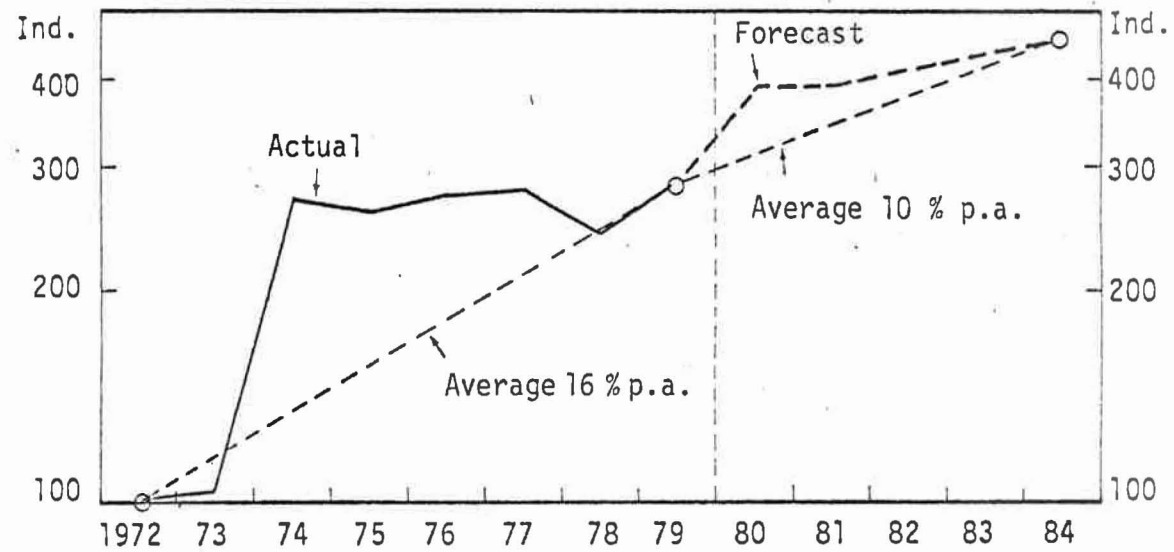
* weighted by the shares in Finnish exports in 1970.

VOLUME CHANGE OF INDUSTRIAL PRODUCTION, %*



* 10 MOST IMPORTANT WESTERN EXPORT COUNTRIES OF FINLAND,
WEIGHTED BY THEIR SHARES IN FINNISH EXPORTS

REAL PRICE OF OIL AND DERIVATIVES (1972=100)*



* ACCORDING TO HWWA-INDEX AND UN-UNIT VALUE INDEX OF MANUFACTURED GOODS EXPORTS