

OECD  
ECONOMIC SURVEYS

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ICELAND

ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT ÉCONOMIQUES

NOVEMBER 1980

## BASIC STATISTICS OF ICELAND

### THE LAND

Area (1 000 sq. km.)	103	Unproductive area (1 000 sq. km.)	82
Productive area (1 000 sq. km.)	21	<i>of which:</i>	
<i>of which:</i>		Glaciers	12
Cultivated area	1	Other area devoid of vegetation	70
Rough grazings	20		

### THE PEOPLE

Population, December 1st, 1979	226 339	Occupational distribution 1978	
Net increase 1972-1979		(per cent):	
annual average (per cent)	1.2	Agriculture	8.6
		Fishing	5.3
		Fish processing	8.1
		Other manufacturing	17.4
		Construction, total	7.8
		Trade, finance and services	18.5
		Transport	6.2
		Other	28.1
			100.0

### GOVERNMENT AND PARLIAMENT

Government, from 1980, number of ministers:		Parliament, from 1980, number of seats:	
Peoples' Alliance	3	Independence Party (Lib. Cons.)	21
Progressive Party	4	Peoples' Alliance (Socialists, Communists)	11
Independence Party	3	Social Democrats	10
		Progressive Party (Agrarians)	17
		Outside parties	1
			60

Last general election: 1979

Next general election: 1983

### PRODUCTION AND CAPITAL FORMATION

Gross National Product in 1979:		Gross Fixed Capital Formation	
Millions of I. Kr.	841 030	in 1979:	
Per head, US \$	10 600	Millions of I. Kr.	212 940
		Per cent of GNP	25

### FOREIGN TRADE

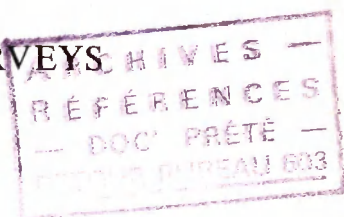
Exports of goods and services in 1979, per cent of GNP	45.9	Imports of goods and services in 1979, per cent of GNP	46.7
Main exports 1979 (per cent):		Imports 1979, by use (per cent):	
Fish products	74.8	Investment goods	27.9
Aluminium	13.4	Consumer goods	32.7
Other manufacturing products	8.2	Intermediate goods (excl. fuels)	21.3
Agricultural products	2.6	Fuels	18.0

### THE CURRENCY

Monetary unit: Krona		Currency units per US \$, averages	
(As a consequence of the monetary reform effective from 1st January 1981, 100 kronur will be set equal to 1 new krona)		of daily figures:	
		Year 1979	352.12
		September 1980	513.19

NOTE An international comparison of certain basic statistics is given in an annex table.

OECD ECONOMIC SURVEYS



# ICELAND

NOVEMBER 1980

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The Organisation for Economic Co-operation and Development (OECD) was set up under a Convention signed in Paris on 14th December 1960, which provides that the OECD shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development;
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

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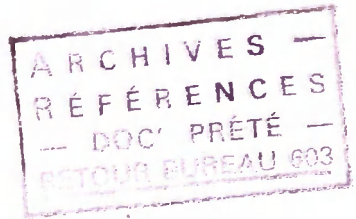


*The annual review of Iceland  
by the OECD Economic and Development Review Committee  
took place on 24th October 1980.*

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## CONTENTS

<b>Introduction</b>	5
<b>I The Icelandic economy and the second oil shock</b>	5
The size of the second oil shock in relation to the first oil crisis	7
The macro-economic environment	8
The policy response	9
The reaction of the economy in 1979 and 1980	15
Demand and output	15
Balance of payments	19
Prices and wages	21
<b>II The problem of inflation</b>	23
The origin of inflation	24
What has been done	24
The need for new policy instruments	30
<b>III The energy sector and the diversification of the economy</b>	32
Energy balance and potential resources	32
Development of power intensive industries	36
Macro-economic constraints	37
<b>IV Short-term prospects and policy considerations</b>	37
The outlook for 1981	37
Conclusions	38
<i>Annex</i> <b>Chronology of major economic policy events</b>	43
<b>Statistical annex</b>	53

## TABLES

### *Text*

1	The two oil price shocks	7
2	Changes in the current external balance	8
3	Reaction of the Icelandic economy to the two oil shocks	9
4	Fiscal and monetary policy: targets and outcome	10
5	Fiscal indicators	10
6	Output and expenditure	17
7	The external balance	18
8	Price and income developments	19

9	External and domestic price movements	22
10	International comparison of consumer price developments	23
11	Bank interest rates	28
12	Wage indexation according to the Economic Management Act	29
13	Comparison of market and reference prices of the FPEF	31
14	Final energy consumption	35
15	Power consumption by energy intensive industries	35
16	Diversification of the structure of output and exports	36
17	Official forecast for 1981	39

*Statistical annex*

A	Supply and use of resources (current prices)	53
B	Supply and use of resources (1969 prices)	54
C	Production and employment	55
D	Gross fixed asset formation (current prices)	56
E	Gross fixed asset formation (1969 prices)	57
F	Balance of payments, OECD basis	58
G	Central government income and expenditure	59
H	Fish catch, wages and prices	60
I	Foreign trade, total and by area	61
J	Foreign trade by commodity group	62
K	Money and credit	63

DIAGRAMS

1	Foreign trade volumes and average values	6
2	Monetary and credit developments	11
3	The effective exchange rate and inflation	13
4	The real wage and real demand gaps	16
5	Consumer prices – comparison with the OECD average	20
6	The impact of fish catch and terms of trade on the business cycle	25
7	Interest rates and inflation	27
8	Composition of primary energy consumption	33



## INTRODUCTION

Although the shock imparted by the massive rise in world oil prices since end-1978 was felt earlier and more strongly in Iceland than in most other Member countries, the economic performance has so far remained better on a number of fronts than after the first oil price shock of 1973/74. The current external deficit has been kept at a manageable level, not exceeding 4 per cent of GNP in 1980, largely due to better world demand conditions for fish products and a lower rate of growth of domestic demand. The fall in gross national income has also been more limited than during the earlier episode (1 ¼ per cent on average in 1979/80 against 2 ½ per cent in 1974/75) and was accompanied by a smaller widening of the real wage gap. Full employment conditions have been maintained. But the price performance, which already in 1978 was much worse than in most other Member countries, has deteriorated further over the last eighteen months with the rate of consumer price inflation currently running at an annual rate of around 55 per cent, more than in 1974/75.

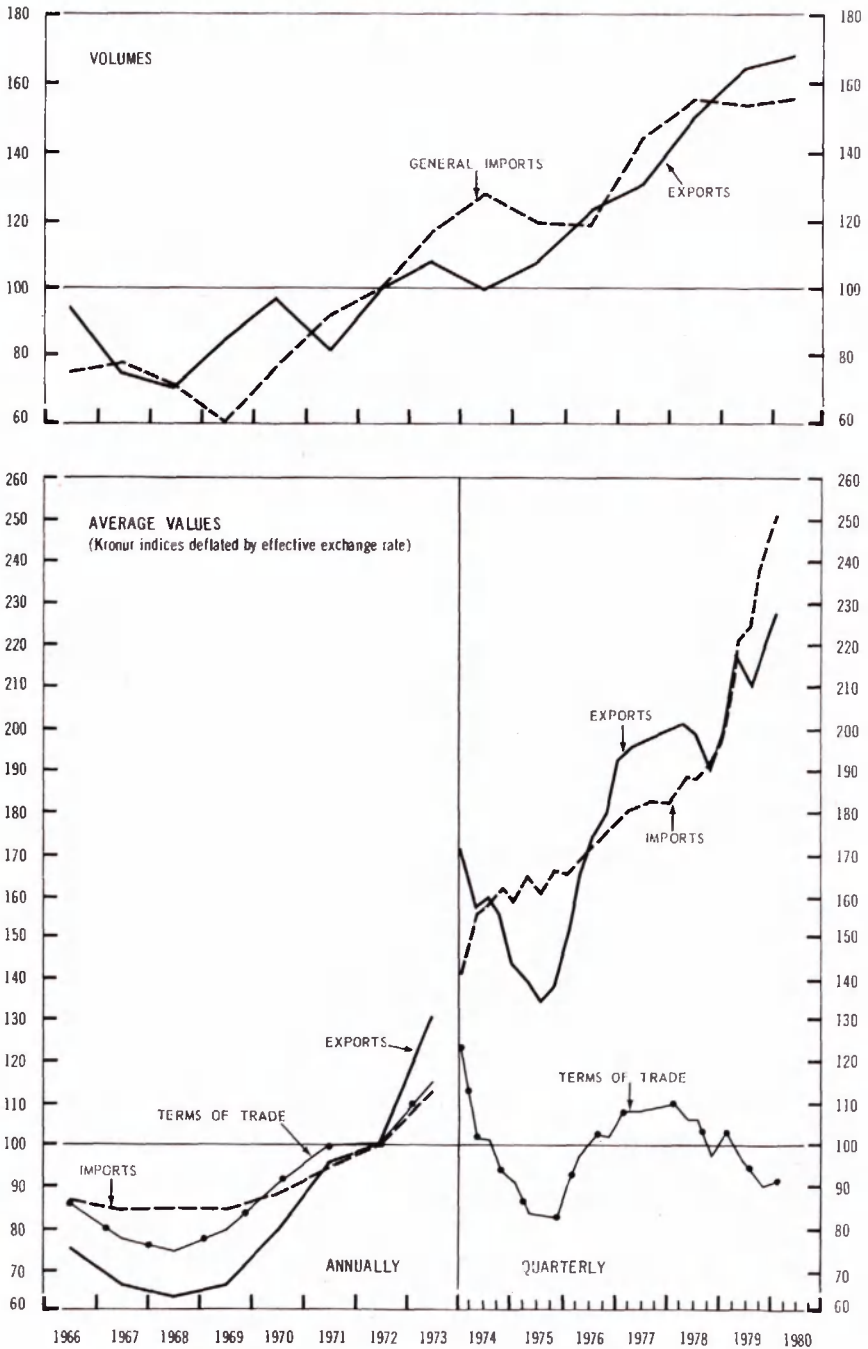
Various measures have been taken to limit the inflationary and balance-of-payments implications of the latest oil shock, of which an adjustment of the wage-regulating price index for fluctuations in the terms of trade was the most important. But despite efforts to gain better monetary control and to tighten fiscal policy, the stance of overall demand management has remained less restrictive than intended, playing only a minor role in anti-inflationary policy. At the time of writing, prospects for 1981 were extremely uncertain. Although much will depend on international economic developments, present trends and policies suggest that the current external deficit will decline somewhat in 1981 but a significant reduction in inflation seems unlikely in the absence of new policy measures.

Part I of the present Survey analyses the impact of the second oil shock on the economy, draws comparisons with the 1974/75 experience and describes the economic policy response. The origin of Iceland's exceptional inflationary experience is reviewed in Part II, together with the measures that have been taken in recent years to limit the detrimental effects of inflation on income distribution and resource allocation; this section also discusses the need for new and more appropriate instruments to cope with the inflation problem. The energy sector's role in the economy and the scope for further diversification of the industrial structure on the basis of the country's vast energy potential are reviewed in Part III. Part IV briefly outlines prospects for 1981 before discussing the main policy issues. The annex to the Survey contains a chronology of major economic policy events since 1978.

### I THE ICELANDIC ECONOMY AND THE SECOND OIL SHOCK

A small open economy with exports largely dominated by fish products, Iceland is particularly vulnerable to external influences. Even before the quadrupling of world oil prices in 1973/74, important terms-of-trade deteriorations were experienced on two occasions in the 1950's and in the late 1960's. But the terms-of-trade losses associated

**Diagram 1 Foreign trade volumes and average values**  
Indices, 1972 = 100



Source: National Economic Institute.



with the oil shocks in the 1970's have new implications. First, stemming from a boost in import prices rather than a slump in export prices they have fuelled inflation more directly, creating special policy problems in an economy with widespread indexation. Secondly, the run-up in the price of energy, which in the case of Iceland constitutes an important potential resource, has created incentives for structural changes in the economy over the medium term.

### *The size of the second oil shock in relation to the first oil crisis*

With 60 per cent of its primary energy requirements covered by oil imports in 1974, Iceland was somewhat more exposed to the first oil shock than other OECD countries on average, where oil imports covered some 42 per cent of total requirements. Since 1974, the share of oil imports in total requirements in Iceland has been reduced to some 50 per cent. Until 1979, virtually all of Iceland's oil imports were supplied by the USSR under special bilateral trade agreements. As from 1980, imports of gas oil will be partly supplied by a British oil company.

As a result of the quadrupling of world oil prices in late 1973, and despite the 5 per cent fall in imported volumes<sup>1</sup>, the oil bill rose to around \$62 million in 1974 against \$17 million in 1972. Although in dollar terms Iceland's import prices rose less than the average for the OECD area, in relation to GNP the additional oil bill (around 4½ per cent) was somewhat above the OECD average. Additional oil price effects in 1975 were not important, and there was a slight decline in the total oil bill reflecting a further fall in the volume of oil imports as activity weakened markedly.

The second oil price shock hit Iceland earlier and stronger than most other OECD countries as the price of imported oil was linked to Rotterdam spot prices as from 1978<sup>2</sup>. Oil import prices in foreign currency doubled in the first few months of

Table 1 The two oil price shocks

	1973	1974	1975	1978	1979	1980 <sup>3</sup>
Export prices in foreign currency (per cent change)	31.6	20.7	-10.3	3.6	7.8	7
Import prices in foreign currency (per cent change)	14.1	33.8	5.0	3.6	20.2	12
Terms of trade (per cent change)	15.3	-9.8	-14.6	—	-10.3	-5
Non-oil terms of trade (per cent change) <sup>1</sup>	15.7	6.5	-14.5	-0.5	-0.3	-3
Oil import bill, U.S. \$ mill. (per cent change)	26.7	61.9	59.7	78.3	143	160
(change in per cent of GNP)	(57)	(132)	(-1.7)	(3.3)	(83)	(12)
Oil import prices (per cent change in foreign currency)	(1.2)	(3.3)	(—)	(0.1)	(3.0)	(3)
Oil import prices (per cent change in foreign currency)	13.4	165	6.4	0.9	90	20
Terms of trade effect <sup>2</sup>	4½	-2½	-4½	—	-4	-2

1 Export prices in relation to non-oil import prices.

2 As per cent of previous year's GNP.

3 Estimates.

Sources: National Economic Institute; OECD.

1 This should be seen against a 31 per cent increase in imported oil volumes in 1973, reflecting high domestic activity and stockpiling.

2 The supplies from the USSR have always been based on spot market quotations. In the 1950s prices were based on Mexican Gulf quotations but after 1960 prices were linked to Aruba and Curacao quotations and finally the Curacao quotations alone. After the oil price increase in 1973/74 the Curacao quotations were generally higher than those of the Rotterdam market. The price linkage was therefore renegotiated in 1975 and prices were subsequently linked to both Curacao and Rotterdam quotations (on a 50/50 basis). As of 1978 prices were fully linked to the Rotterdam market. The supplies from the United Kingdom starting in 1980 are based on mainstream (contract) prices.

Table 2 Changes in the current external balance  
Million U.S. \$

	1973-74	1974-75	1978-79	1979-80 <sup>1</sup>
Exports (fob)	39.1	-20.5	141.4	123
Imports (fob)	151.2	-33.7	147.0	163
of which: Oil	34.5	-1.0	75	17
Non-oil	116.7	-32.7	72	146
Non-oil balance	-77.5	12.2	69.4	-23
Total trade balance (fob)	-112.1	13.2	-5.6	-40
Volume effect	-85	88	68	-10
Terms of trade effect	-27	-75	-74	-30
of which: Oil price effect	-37	-31	-67	-29
Net invisibles	-29.8	2.0	-45.8	-37
Current balance	-141.9	15.2	-51.4	-77

<sup>1</sup> Estimates.

Sources: National Economic Institute; OECD.

1979, and by the first quarter of 1980 exceeded their average 1978 level by around 150 per cent. In 1979 the rise in the oil bill amounted to \$65 million or 3 per cent of GNP, i.e. somewhat less than in 1974. By the second quarter of 1980, the difference between Rotterdam spot prices and the average OECD import price had practically disappeared. Thus, the above average rise in Icelandic oil import prices following the second oil shock was a matter of timing rather than extent<sup>3</sup>.

### *The macro-economic environment*

The immediate demand effects of the two oil shocks would thus seem to have been fairly similar, but the overall economic situation in which they took place was different. The onset of the first oil shock roughly coincided with an all time peak in Iceland's terms of trade and extreme domestic demand pressures partly related to special factors<sup>4</sup>. Export unit values, in particular of marine products, rose steeply throughout 1973 until the first quarter of 1974, but then fell for seven successive quarters, adding significantly to the terms-of-trade deterioration stemming from higher oil prices and accelerating import prices of manufactured goods. Year-on-year, the terms-of-trade loss amounted to 10 per cent in 1974 and 15 per cent in 1975. The deterioration in 1974 was fully due to the rise in oil prices with the non-oil terms of trade actually improving. In contrast, the loss experienced in 1975 was largely accounted for by declining export prices of marine products. Real disposable incomes in the household sector rose by more than 20 per cent over the two years 1972/73 and continued to increase strongly in the first part of 1974. As a rough indicator of the cyclical position in 1973 and 1974 real GNI was, respectively, 13 and 9 per cent

<sup>3</sup> Oil prices moved as follows (1978 = 100) in US\$:

	1979 I	1979 II	1980 I
Average OECD oil import prices	113	159	216
Rotterdam crude oil price	191	236	233
Icelandic oil import prices	152	215	251

<sup>4</sup> The Vestmannaeyjar volcanic eruption, which lasted from January until June 1973, placed considerable strain on the country's resources due to the initial rescue work, the rehousing of the displaced population and the subsequent resettlement operations.

above its long-term trend. At the outset of the first oil shock inflation was running at an annual rate of more than 20 per cent and had begun to accelerate.

In 1978, developments in the real economy were much more balanced. Final domestic demand rose by only 2 per cent, half the rate of growth in real gross national income, which in turn was slightly below its long-term trend. The current account showed a slight surplus for the first time since 1970, as exports were increasing strongly in response to buoyant market conditions for fish products, especially in the United States. The terms of trade deteriorated by around 10 per cent in 1979, wholly on account of the oil price increase. In 1980, the terms of trade may deteriorate further by some 5 per cent. Inflation was, however, more firmly entrenched in the system than in 1973 with the cost of living index increasing by 44 per cent in 1978 on average and wage rates by as much as 55 per cent.

Table 3 Reaction of the Icelandic economy to the two oil shocks  
Percentage change from previous year

	1973	1974	1975	1978	1979	1980 <sup>4</sup>
Cost of living index	22.2	43.0	49.0	44.0	45.5	58
Real wage rates <sup>1</sup>	0.9	3.9	-14.3	7.4	-0.8	-6½
Real disposable income per capita <sup>2</sup>	7.9	7.1	-11.2	8.0	-0.5	-4
Real GNI per capita	10.0	-1.3	-7.0	3.6	-2.7	-1½
Total domestic demand	12.9	10.4	-7.8	0.8	1.1	1½
Real GNP	7.7	3.5	-2.0	4.4	2.3	1
Employment (in man years)	2.7	3.5	1.6	3.0	2.2	1½
Average hours worked	..	..	-2.9	0.8	-0.6	..
Trade balance <sup>3</sup>	-1.5	-12.0	-4.2	5.0	0.1	-1½
Current balance <sup>3</sup>	-1.1	-13.4	-4.2	4.6	-2.6	-3½

1 Wage and salary rates for the whole labour force deflated by the cost of living index.

2 Deflated by the private consumption deflator.

3 Change in relation to GNP of previous year.

4 Estimates.

Sources: National Economic Institute; OECD.

### The policy response

The policies adopted by the authorities to deal with the second oil shock presents both differences and similarities with those followed in 1974-75. This time a more rapid and fuller passing-on of higher oil import prices to final users was allowed, but in line with earlier experience, the stance of fiscal and monetary policies has remained less restrictive than intended, calling for the use of other measures.

Throughout 1973 monetary and fiscal policies did not exert a significant restraining influence on the growth of demand or inflation, although the need for restrictive action was officially acknowledged<sup>5</sup>. Thus, as in other Nordic countries, the shift towards less expansionary policy took place later in Iceland than in the majority of Member countries. The budget for 1974 was intended to be mildly restrictive while the Central Bank's credit policy aimed at a tightening of monetary conditions. In the event, however, both fiscal and monetary policies contributed to supporting domestic demand in 1974 and, to a lesser extent, also in 1975. In each year the budgeted current surplus on the government account turned into an actual deficit of some 3 per

5 The special reconstruction needs following the volcanic eruption in Vestmannaeyjar earlier in the year probably explains in part why firm restrictive policies were not feasible.



Table 4 Fiscal and monetary policy: targets and outcome

	1976		1977		1978		1979		1980	
	Target	Out- come	Target	Out- come	Target	Out- come	Target	Out- come	Target	Out- come
Rate of inflation	25	32 $\frac{1}{2}$	24	30 $\frac{1}{2}$	31	44	33	45 $\frac{1}{2}$	40	
<i>Fiscal policy:</i>										
Budget revenue balance of central authorities (Kr. bill.)	1.49	0.82	0.81	-2.54	1.00	-1.61	6.7	-1.1	3.0	
Change in outcome as percentage of previous years' GNP		4.4		-1.3		0.2		0.1		
<i>Monetary policy:</i>										
Money supply (M1; per cent change)	1	23 $\frac{1}{2}$	24 $\frac{1}{2}$	44 $\frac{1}{2}$	29 $\frac{1}{2}$	36 $\frac{1}{2}$	25	50	31	
Real money supply (M1; per cent change <sup>2</sup> )	1	-7 $\frac{3}{4}$	3	10 $\frac{3}{4}$	-1 $\frac{1}{4}$	-5	-6	3	-6 $\frac{1}{2}$	
Deposit money bank credit (per cent change)	14 $\frac{1}{2}$	26 $\frac{1}{2}$	26 $\frac{1}{2}$	42 $\frac{1}{2}$	30	40	30 $\frac{1}{2}$	57	37	

1 Not available.

2 Deflated by "target" and "outcome" inflation rate respectively.

Sources: National Economic Institute; OECD.

Table 5 Fiscal indicators

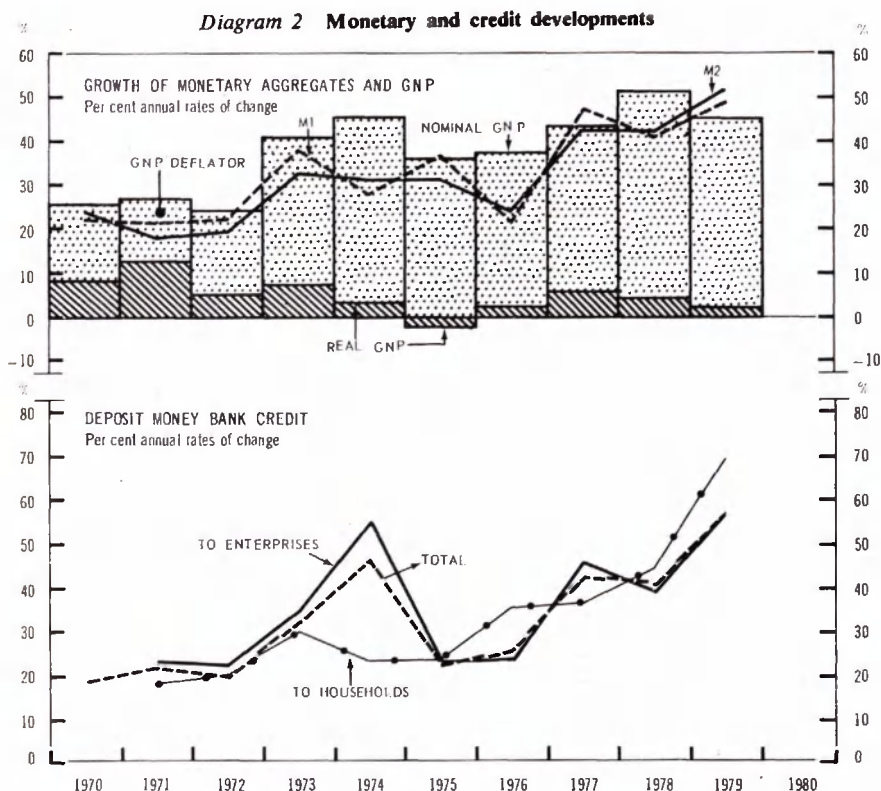
	Central government deficit as per cent of GNP	Central government expenditure as per cent of GNP	Direct tax revenue as per cent of total central government revenue	Consumer subsidies as per cent of total central government expenditure
1970	0.9	21.8	17.6	6.4
1971	-0.5	24.6	18.5	11.9
1972	0.2	26.9	26.6	9.2
1973	-0.3	26.0	25.9	8.4
1974	-2.3	29.1	18.9	9.0
1975	-4.3	30.4	15.5	9.5
1976	-0.6	26.5	16.1	7.4
1977	-1.4	26.9	14.0	5.6
1978	-1.2	28.7	19.7	7.1
1979	-0.4	29.6	21.8	9.0
1980 <sup>1</sup>	2 $\frac{1}{4}$	26 $\frac{1}{2}$	20 $\frac{3}{4}$	7.0

1 Budget.

Sources: National Economic Institute and Central Bank.

cent of GNP, as revenues lagged behind nominal incomes<sup>6</sup>, and expenditure on subsidies, pensions etc. increased with the rate of inflation. The monetary targets, partly based on a credit ceiling understanding with the deposit money banks, also proved unrealistic as credit demand responded to strong activity and increasingly negative interest rates and as banks continued to have access to the Central Bank's overdrafts and rediscounting facilities<sup>7</sup>.

In the circumstances, the authorities had to resort to exchange rate policy as well as to direct income and price controls to check the widening of the external deficit and the rundown of foreign reserves. As from the beginning of 1974, the exchange rate was rapidly adjusted downward and by March 1975 the effective depreciation amounted to 45 per cent. However, the depreciation of the krona and higher indirect taxes reinforced the rise in prices. This policy was combined with a temporary suspension (which in fact lasted throughout 1975) of the automatic wage indexation system, and the introduction of an import deposit scheme. A special export levy on certain fish products was imposed in January 1974, the proceeds of which were



Sources: Central Bank of Iceland; OECD.

6 This was partly the result of a deliberate effort to facilitate a labour market agreement through a cut in direct taxation and a rise in indirect tax rates. Since private consumption fell significantly, indirect tax revenue also fell, acting as an automatic stabilizer.

7 The interest rates on the commercial banks' overdrafts with the Central Bank were raised from 18 to 24 per cent in August 1974, but given credit demand pressure the banks had no difficulties in passing the costs on to their customers. The automatic rediscounting of export produce bills increased strongly in response to inflation and heavy stockbuilding.

channelled into subsidies on fuel oil for the fishing fleet<sup>8</sup>. A special sales tax was introduced a few months later, the proceeds of which were used to reduce the effects of the oil price rise on the heating costs of oil heated dwellings.

Unlike the situation in 1973/74, there was no inclination among policy-makers to regard the second oil shock as a temporary phenomenon, and, in consequence, the immediate policy response was somewhat stronger. So far, however, the stance of policy has remained less restrictive than initially intended. A surplus of Kr. 6¼ billion was foreseen in the initial 1979 central government budget implying a major tightening of fiscal policy. In the event, as had been typically the case throughout the 1970's, the budget showed a small deficit and was more expansionary than intended; the overall demand impact may have been broadly neutral<sup>9</sup>. Besides a much higher rate of inflation than initially expected, the weaker budget outcome was due to two factors: the intended reduction of subsidies was not carried through; and a 3 per cent rise in basic wage rates, which the Government had hoped to avoid, was agreed by the social partners early in the year.

The initial 1980 budget again aimed at a revenue surplus - of some Kr. 3 billion. Recent indicators of the Treasury's financial position suggest that a tightening has indeed taken place, notably in the first half of the year. Revenues have increased faster than projected. The general sales tax was raised further in April (by 1½ per cent), and the advance collection of income taxes (payable in the first half of 1980) was set at 65 per cent of the previous year's assessment for the state income tax. Another factor behind this improvement seems to have been a temporary postponement of major expenditure items as a result of the unsettled political situation which delayed the approval of the budget by the Althing. Finally, subsidy payments have remained unchanged in nominal terms during most of the year. In view of developments expected in the later months of the year, the budget is officially expected to be in approximate balance in 1980.

Monetary targets, both for 1979 and 1980 reflected the authorities' declared intention to fight inflation. But as the rate of price increases turned out to be higher than assumed in the Credit Budgets, and as the Central Bank was lacking proper instruments to regulate liquidity in the banking system, the targets were bound to be exceeded. Following the adoption by the Althing of an "Economic Management Act" in April 1979 a system of general price indexation of savings deposits and bank credit has been gradually implemented<sup>10</sup>, with the aim of achieving positive real interest rates on time deposits by the end of 1980. Nominal interest rates have increased markedly since June 1979<sup>11</sup>, but in view of the current high inflation rate the aim of achieving positive real interest rates is not expected to be reached until mid- or late 1981. It is difficult to quantify the impact of these changes in interest rates on financial savings but partial indicators seem to suggest that they have had a positive effect.

Along with the stimulation of financial savings, regaining better control of the increase in monetary aggregates has been the main objective of the Central Bank in recent years. In 1979, the automatic rediscounting of produce bills, sensitive to higher

8 Late in the year the export levy was extended to cover all fish exports and an "Oil Fund for Fishing Vessels" was set up, which continued to provide subsidies until 1976.

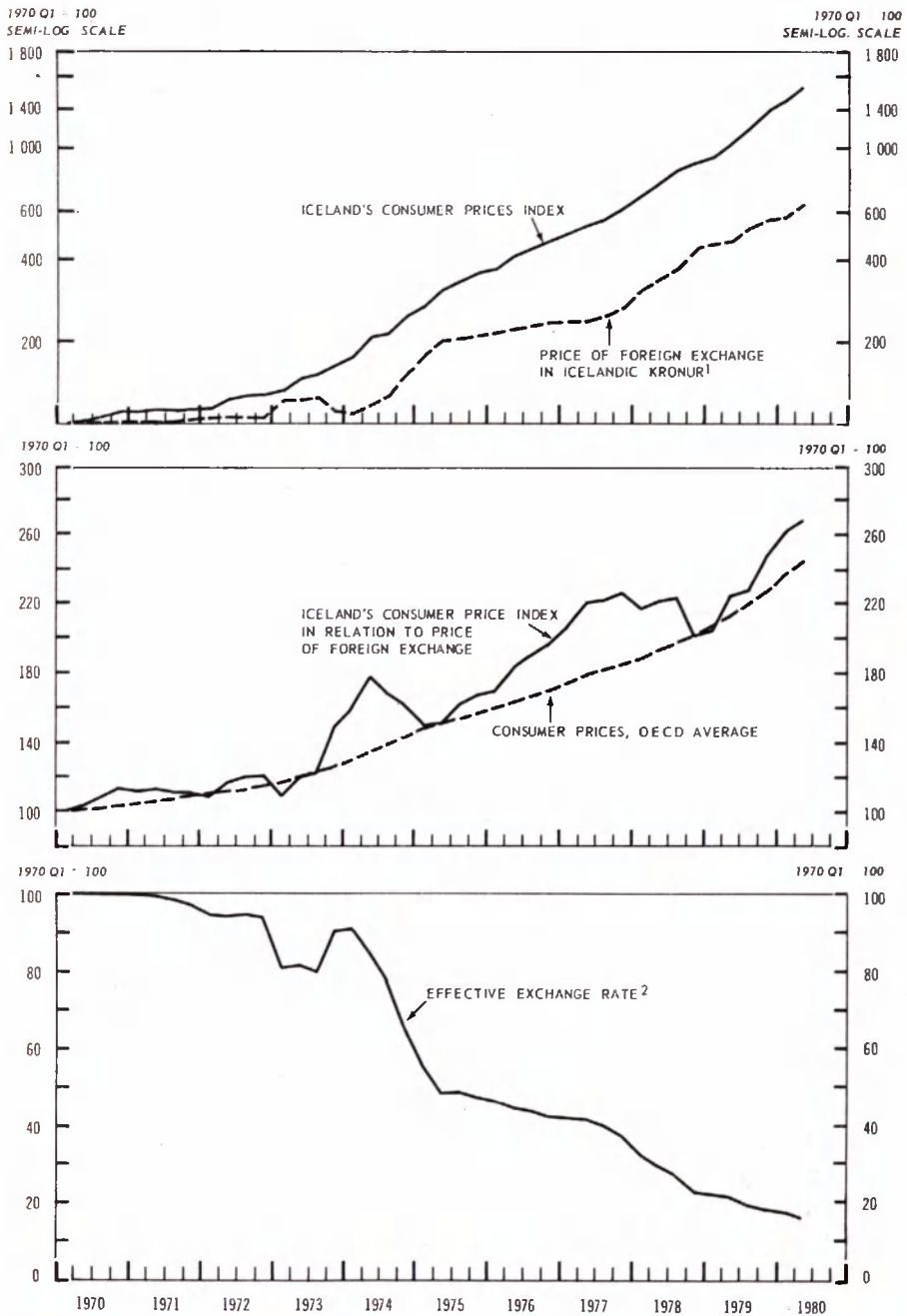
9 As measured from the average annual change in the budget balance over the previous year. The strong seasonality in the budget balance makes, however, the assessment of the demand impact of budget operations difficult. The seasonal deficit of the Treasury was particularly marked in the first half of 1979, reflecting i.a. the raising of subsidies and the abolition of the sales tax on food items adopted in the autumn of 1978.

10 Until April 1979 indexation of financial assets and liabilities had been applied only to long-term credit outside the banking system. See Part II.

11 In the year to June 1980 interest rates on saving deposits rose by 16 percentage points to 35 per cent.



**Diagram 3 The effective exchange rate and inflation**  
Indices, 1st quarter 1970 = 100



1. Inverted effective krona exchange rate.

2. The effective krona rate is a trade weighted average of krona spot rates vis-à-vis currencies of Iceland's trading partners (expressed in units of foreign currency per krona).

Source: OECD.

inflation and stockbuilding, expanded rapidly in spite of the lowering of rediscount ratios<sup>12</sup>, and the increase in the minimum reserve requirement ratio was not enough to neutralise this boost to bank liquidity<sup>13</sup>. The seasonal fluctuations in Treasury funds also gave rise to ample liquidity in the first part of the year, resulting in accelerating bank lending. This was followed by a marked tightening of the liquidity position in the latter part of the year, which the banks were meeting by drawing on the overdraft facility with the Central Bank, rather than by limiting lending activity. The commercial banks have experienced a substantial deterioration in their liquidity position in the first half of 1980, as the growth of lending has exceeded the increase in deposits, and a slowdown in the rate of credit expansion is probably now under way. In this respect the rundown of stocks of exportable goods during the late summer should also pull in the same direction as will the measures taken in September to dampen credit expansion<sup>14</sup>.

In 1979/80 as in 1974/75, the authorities relied heavily on incomes and price policies to slow down the growth of disposable incomes. As the most important measure, the Economic Management Act introduced a change in the wage indexation system, whereby movements in the terms of trade had to be taken into account in the calculation of the price compensation index<sup>15</sup>. The adjustment was first applied on 1st June 1979, and in the period to mid-1980 the deduction from the price compensation index due to deteriorating terms of trade amounted to roughly 6 per cent.

In Iceland, management of the exchange rate has traditionally pursued the double aim of maintaining the profitability of the "exposed" industries, while constituting a major weapon of stabilization policy. In recent years, the krona has been adjusted downwards in order to offset the difference between the increase in foreign prices and domestic costs, but the movement has not always been regular. Following relative stability in the early months of 1979, the krona depreciated markedly from the beginning of May until the end of August. However, the rate of depreciation slowed down considerably in the last quarter of the year, and in spite of mounting inflationary pressure the effective depreciation during 1979 was about half that recorded in 1978 (around 26 per cent compared with 56 per cent). The effective exchange rate of the krona remained almost unchanged during the first quarter of 1980, a depreciation against the dollar being offset by an appreciation vis-à-vis various European currencies. But the krona resumed its downward slide in the subsequent months, in response to increasing pressure on the exporting industries faced with rising domestic costs and stagnating or falling export prices. In the first nine months of the year it depreciated by around 25 per cent.

As far as energy pricing is concerned the Icelandic authorities this time have allowed the oil price hike to be fully reflected in the economy. Measures to alleviate heating costs in houses heated by oil have been introduced, taking the form of direct grants to households rather than price subsidization. The increase in costs to the fishing fleet was partly offset by redistributive measures. With regard to petrol prices, taxes were raised to further strengthen the impact of rising import prices on petrol consumption.

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12 The Central Bank's rediscount ratios for export produce bills have been lowered on several occasions over the last few years. The last changes were made in January 1979 with a 3 percentage points reduction, and in February 1980 with a 1½ percentage points reduction to 52 per cent. These measures were accompanied by a corresponding rise in commercial bank financing, leaving total financing unchanged at 75 per cent of product value.

13 The Economic Management Act raised the legal maximum primary reserve requirement from 25 to 28 per cent. The Central Bank immediately raised the reserve requirement to 27 per cent in April, and further to 28 per cent in May.

14 The penalty rate on banks' overdrafts was raised from 4¾ per cent to 5½ per cent and interest rates on bank deposits with the Central Bank were raised. The deposit money banks also committed themselves to reduce the rate of growth of credit.

15 For details see Part II.

### *The reaction of the economy in 1979 and 1980*

The reaction of the economy to the second oil shock has so far been somewhat different from the 1974-75 experience and in some important aspects also atypical in relation to developments in the rest of the OECD area. As described in detail in earlier Surveys, the first oil crisis had an immediate impact on prices and the current external account, but its effects on incomes, demand and output were somewhat delayed, partly reflecting the delayed policy response. In 1974 price inflation accelerated rapidly to an annual rate in excess of 40 per cent. Export volume remained flat as most other Member countries were sliding into recession, whereas import volume rose by 13 per cent due to strong demand pressures. Unfavourable volume developments coupled with a 10 per cent terms-of-trade deterioration resulted in a current account deficit of \$155 million or some 11 per cent of GNP. In spite of mounting inflation, real disposable incomes rose strongly reflecting rapid nominal wage increases following the inflationary wage settlement reached early in the year. Total domestic demand grew in volume by more than 10 per cent sustained by buoyant private consumption and gross fixed investment, in particular public investment in two major hydro-electric power projects. The full reaction of the economy to this external shock was only felt in 1975, when the adjustment was more abrupt than in any other Member country, partly due to a significant fall in export prices. In that year, real disposable income of the household sector fell by 12 per cent as inflation peaked at close to 50 per cent and domestic demand contracted sharply, led by private consumption and private non-residential investment. Exports remained sluggish and, although import volumes fell by around 20 per cent, real GNP declined by 2 per cent. With a terms-of-trade deterioration of around 4½ per cent of GNP, real gross national income decreased by some 6½ per cent. The current account deficit remained very high (at some 11 per cent of GNP), but the basis for an adjustment on the external side had been laid<sup>16</sup>.

The initial phase of adjustment to the second massive rise in world oil prices (up to the early months of 1980) has been smoother than after the first oil shock. In spite of a worsening of the terms of trade similar to that in 1974, the balance of payments has been much more resilient than earlier as fish catches rose considerably and exports expanded. More recently, however, international demand for frozen fish has weakened while prices for these products have tended to stagnate or even fall. In contrast with the 1974 experience, real wage and demand developments have remained more in line with the movement of real national income thus limiting the widening of the real wage gap and the building-up of excessive pressure on the current external balance. A high level of employment has been maintained (see Table 3). Contrary to the experience of most other Member countries, however, the current wave of inflation has been worse than last time, partly reflecting a deliberate decision of the authorities to allow a more rapid and full passing-on of imported energy prices to final users, but also influenced by more permanent and institutional factors.

#### *Demand and output*

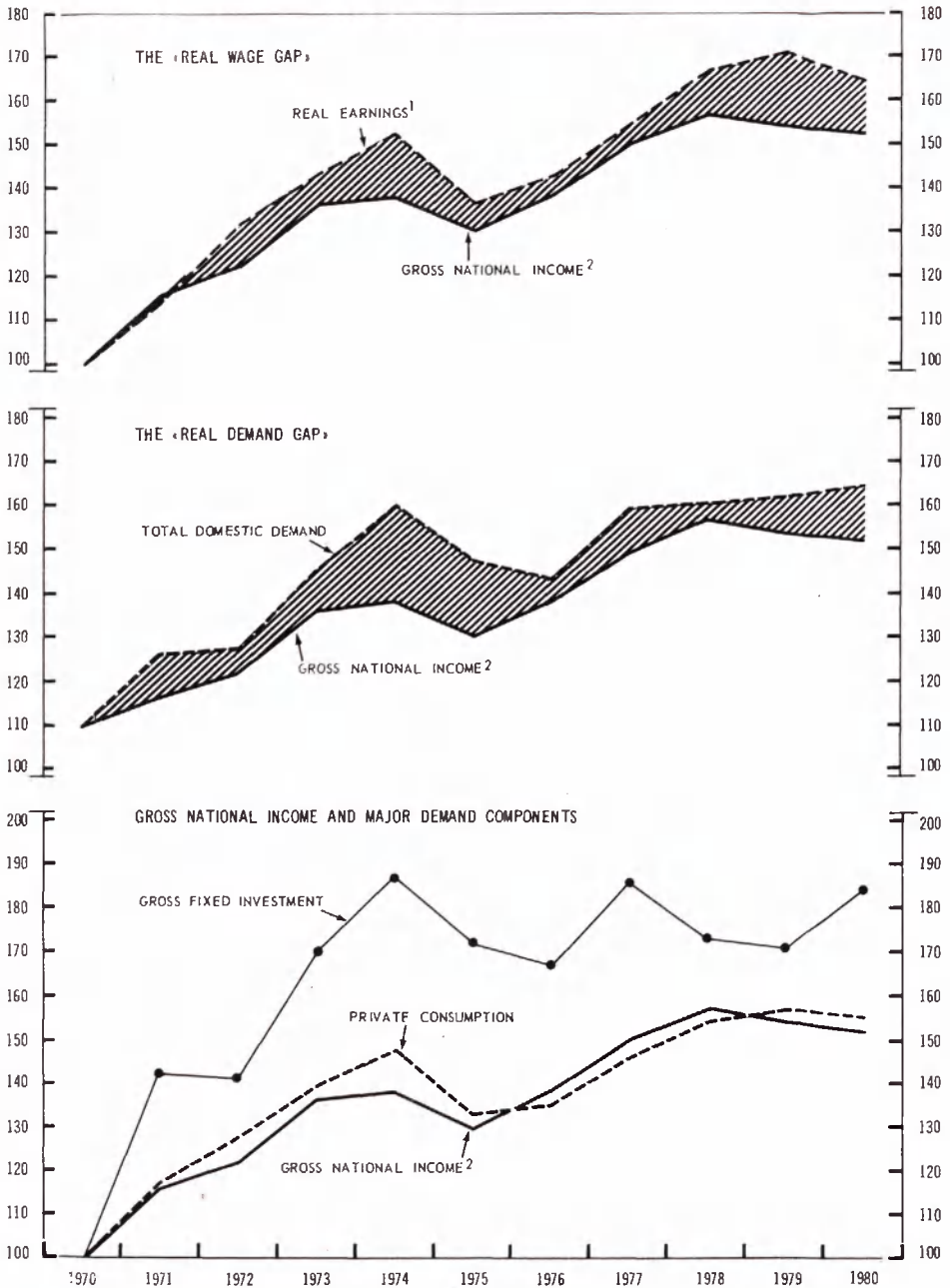
According to official estimates, in 1979 real gross national product expanded by 2¼ per cent. Fish catches amounting to 1 644 thousand tons were the largest ever made within one year, exceeding their 1978 level by around 15 per cent<sup>17</sup>. In spite of the starting up of the ferrosilicon plant at Grundartangi, manufacturing output increased somewhat less, dampened by a slight fall in the production of aluminium<sup>18</sup>.

16 In the following two years the current account deficit was gradually reduced, helped by favourable terms-of-trade developments, and in 1978 a surplus was recorded.

17 Catches of particularly cod, capelin and herring were significantly greater than anticipated.

18 Dry weather necessitated minor cutbacks in electricity supply to the aluminium smelter.

**Diagram 4 The real wage and real demand gaps**  
Volume indices, 1970 = 100



1. Deflated by implicit deflator for private consumption.

2. Gross national product at constant 1969 prices adjusted for changes in terms of trade.

Sources: National Economic Institute; OECD.



Total export production rose in volume by around 13 per cent but since sales abroad expanded less (around 10 per cent), there was an accumulation of inventories of both fish products and manufactures. The volume growth of final domestic demand remained very modest (around 1 per cent). The growth of real private consumption slowed down markedly, reflecting the sharp deceleration in the rise of household real income brought about by the deterioration in the terms of trade. There was in particular a significant reduction in imports of consumer goods, with a marked fall for motor-cars and other household durables. Gross fixed investment actually fell in real terms, reflecting weaker trends in the private sector. The share of investment in relation to GNP amounted to 25.3 per cent, in line with government aims as stated in the Credit and Investment Budget, and down from the peak of 33 per cent reached in 1977.

Real GNP growth may reach around 1 per cent in 1980. Fish production continued to expand in the first half of the year, but in view of the accumulation of stocks of frozen fish in the wake of falling demand and marketing difficulties in the United States, some contraction may take place in the second half. For the year as a whole fish production is thus expected to rise by 4 to 5 per cent. In spite of shortfalls in deliveries of electricity made necessary by exceptionally dry weather, the production of power intensive industries (aluminium and ferrosilicon) may continue to rise, reflecting the coming on stream of new capacity<sup>19</sup>. Overall, taking into account a marked increase in the output of other manufactured products, total export production may grow by about 5½ per cent, with a roughly similar expansion of exports. Developments in the second half of the year suggest indeed only a small increase in inventories of export products.

Despite a considerable increase in real gross fixed asset formation, final domestic demand is not expected to rise much this year, due to the weak trend of private consumption. Available information on the development of incomes, prices and turnover in the first half of the year, point to a slight fall in the volume of consumers' expenditure. However, the decline was smaller than that of real disposable income,

Table 6 Output and expenditure

	1978 Kr. billion	Per cent change at constant 1969 prices					
		1975	1976	1977	1978	1979 <sup>2</sup>	1980 <sup>4</sup>
Private consumption	354.6	-10.0	1.0	8.0	6.0	2.0	-1
Public consumption	68.3	4.8	7.0	0.8	3.8	2.0	2
Gross fixed investment	150.5	-8.4	-2.6	11.5	-7.1	-1.6	8½
Final domestic demand	573.4	-8.4	0.5	8.4	1.9	0.9	1½
Changes in stocks <sup>1</sup>	-3.9	0.6	-4.2	2.7	-1.4	0.1	—
Total domestic demand	569.6	-7.8	-3.1	10.9	0.8	1.1	1½
Foreign balance <sup>1</sup>	7.9	7.6	6.2	-5.9	3.5	1.0	-1
Exports, goods and services	249.8	1.4	11.9	10.3	14.6	5.5	1½
Imports, goods and services	241.9	-10.3	-1.2	18.7	6.2	3.1	2½
GNP at market prices	577.4	-2.0	2.6	6.0	4.4	2.3	1
Terms of trade effect <sup>2</sup>		-3.8	3.4	3.0	—	-4.0	-2
Gross national income		-5.8	6.0	9.0	4.4	-1.7	-1

1 Changes in stockbuilding and foreign balance in per cent of GNP of the previous year.

2 For definition, see note to Table B in Statistical Annex.

3 Preliminary estimates.

4 Official forecasts.

Source: National Economic Institute.

19 The cutbacks notably occurred in the early months of 1980 when electricity generation was reduced. Further cuts have taken place in the autumn but, in spite of these disruptions, production of aluminium may still rise by 2 per cent while that of ferrosilicon may almost double.

partly due to an expansion of consumer credit. This pattern may be reversed in the second half of the year, as increases in interest rates could affect the saving behaviour of households. For the year as a whole, and for the first time since 1975, private consumption may fall (by perhaps 1 per cent). Although residential construction is likely to decline further, the volume of gross fixed investment may expand by around 8 ½ per cent, reflecting buoyant public investment, particularly in energy installations.

### Balance of payments

Given the size of the oil shock and the 10 per cent deterioration in the terms of trade, the external position remained relatively strong in 1979. The current account shifted into a deficit of some \$23 million (or around 1 per cent of GNP) but this was due entirely to the sharp deterioration of the services account, while the trade surplus hardly changed reflecting favourable volume developments. As noted, export volume expanded strongly (10 per cent) while import volume only grew very slightly. Purchases of investment goods and raw materials other than oil stagnated whereas imports of consumer goods fell, partly offsetting a 2 per cent rise in the volume of oil imports. The marked deterioration in the services account was largely due to rising interest payments on foreign debt, difficulties encountered by the air transportation industry and a significant increase of travel expenditure abroad by Icelandic residents.

Table 7 External balance

	Million current U.S. dollars			Percentage volume change		
	1978	1979	1980	1978	1979	1980
<i>Export production</i>	634.3	796.6	921	6.0	13.0	5½
Marine products	490.3	608.9	671	7.5	15.0	4
Aluminium	83.2	100.2	127	5.0	-2.5	1½
Other	60.8	87.5	122	-5.0	27.0	24
Changes in export stocks <sup>1</sup>	15.1	-5.6	-7	..	..	..
<i>Merchandise exports, fob</i>	649.4	791.0	914	16.0	9.5	5½
Imports of special investment goods	25.6	39.4	58	-61.0	25.5	33
Ships and aircraft	23.5	36.1	47	-61.0	24.0	18
Special projects <sup>2</sup>	2.1	3.3	11	-62.0	40.0	..
Imports for aluminium smelter	48.1	57.2	75	7.5	10.5	7
Imports for ferrosilicon plant	12.7	13.8	20	..	-4.0	35
General merchandise imports	531.1	654.1	774	7.4	-1.0	4
<i>Merchandise imports, fob</i>	617.5	764.5	927	1.2	1.3	6
Trade balance	31.9	26.5	-13			
Balance of services	-2.9	-46.8	-84			
Exports	270.8	304.3	295	16.0	1.0	-10
Imports	273.7	351.1	379	16.0	5.3	-5½
Transfers net	-0.9	-2.8	-3			
<i>Balance on current account</i>	28.1	-23.1	-100			
Balance on current account as per cent of GNP	1.3	-0.9	-3.5			
<i>Memorandum item:</i>						
Conversion factor, kronur per U.S. dollar	271.47	352.12	475.00			

1 — = increase in stocks.

2 National Power Company, Krafla geothermal power plant and ferrosilicon plant.

Source: National Economic Institute.



Table 8 Price and income developments  
Per cent change

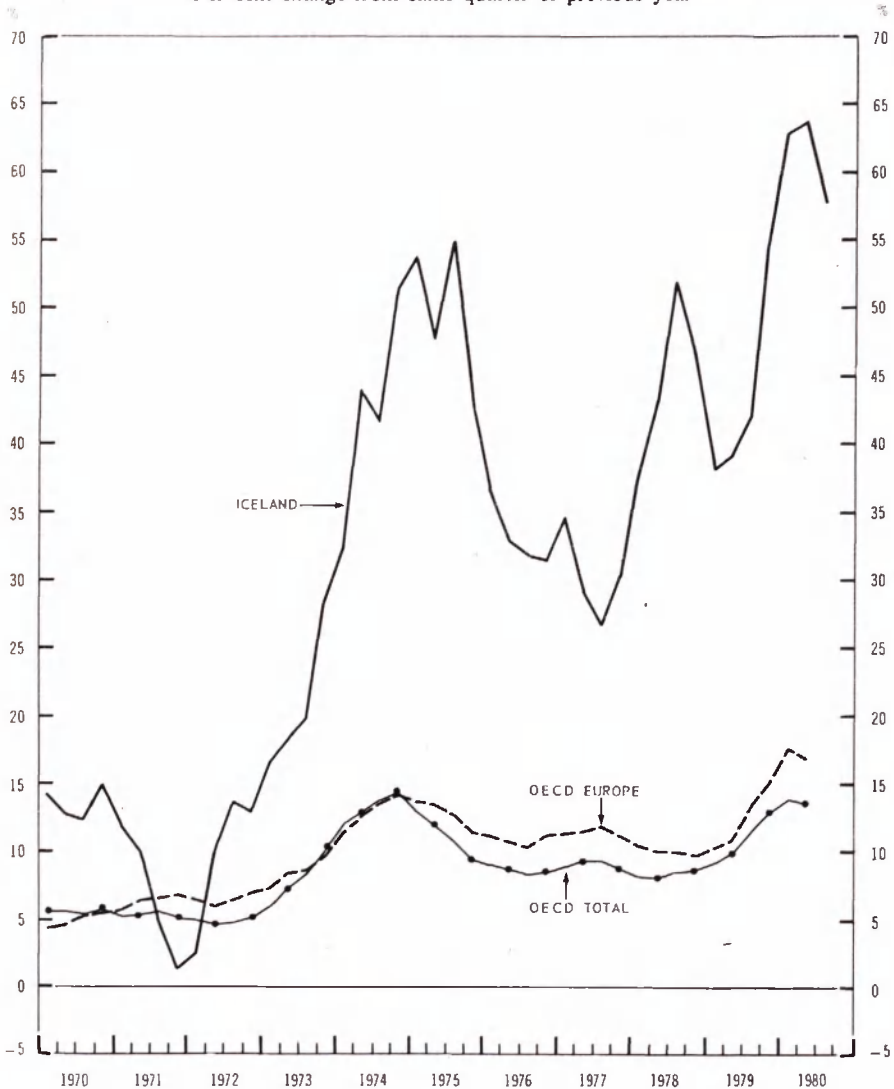
	1974	1975	1976	1977	1978	1979	Forecast 1980
<i>Implicit deflators:</i>							
Total domestic demand	42.8	48.0	30.1	30.5	44.5	47.5	55.2
Imports, goods and services	40.4	64.0	18.9	18.7	47.3	57.5	52.5
Exports, goods and services	29.5	48.1	30.6	24.8	50.1	46.3	47.5
GNP	44.5	38.9	34.4	35.4	44.9	42.4	54.6
Cost of living index	43.0	49.0	32.2	30.5	44.1	45.5	58
Consumer goods index	42.5	50.2	33.5	30.5	44.3	45.7	58
Building costs in Reykjavik	52.0	42.1	23.5	30.0	47.2	47.0	55
Hourly wage rates, unskilled workers	47.6	32.1	26.5	42.0	55.0	43.0	48
Hourly pay rates, all employees	48.4	27.1	26.0	46.0	55.0	44.0	48
Weekly earnings, all workers	55.9	25.1	34.0	42.0	53.0	44.5	..
Household income, including transfers	51.0	33.0	35.0	47.0	58.5	50.0	52
Disposable household income	52.6	32.3	34.5	48.0	57.0	47.5	52
Real pay rates, all employees <sup>1</sup>	4.1	-15.4	-5.6	11.9	7.4	-1.2	-6.3
Real earnings, all workers <sup>1</sup>	9.4	-16.7	0.4	8.8	6.0	-0.8	..
Real disposable income <sup>1</sup>	7.1	-12.0	0.7	13.4	8.8	1.2	-3.2

<sup>1</sup> Deflated by consumer goods index.  
Source: National Economic Institute.

The current deficit was more than covered by net capital inflows on account of foreign borrowing, which led to an improvement of the foreign reserve position.

A significant deterioration of the current external balance seems likely in 1980 reflecting a further worsening in the terms of trade and less favourable developments in trade volume. In the early months of the year, general merchandise imports rose much more in volume than initially expected by the authorities<sup>20</sup>, probably influenced by the temporary stability of the exchange rate of the krona. A slackening of general imports has probably taken place in the second half, partly due to a further fall in oil

**Diagram 5 Consumer prices — Comparison with the OECD average**  
Per cent change from same quarter of previous year



Source: OECD, *Main Economic Indicators*.

20 There was in particular a substantial increase in car imports.

imports<sup>21</sup>. For the year as a whole their growth may approach 4 per cent. Since imports of special investment goods<sup>22</sup> and raw materials for power-intensive industries are likely to continue to expand rapidly, total import volume could still rise by some 6 per cent, or somewhat more than the anticipated growth of total export volume (around 5½ per cent). With an average terms-of-trade loss in the neighbourhood of 5 per cent, according to official estimates the trade balance may shift into a deficit of some \$13 million. As the invisibles balance is expected to deteriorate further on account of rising interest payments on foreign debt and due to a strong reduction in earnings of the Icelandic air carrier, the current external deficit may reach some \$100 million or about 3½ per cent of GNP. The net external debt<sup>23</sup> is projected to rise to about \$900 million by the end of 1980, or around 34 per cent of GNP, with the debt service burden (amortization and interest payments) amounting to between 15 and 16 per cent of export revenue.

### *Prices and wages*

Inflationary pressures, already strong in 1978, have been further exacerbated by the hike in oil prices, with the cost of living index rising by more than 60 per cent in the course of 1979, or 45½ per cent on average from the year earlier. Despite the slower rise of import prices — reflecting a softening of oil prices in dollar terms — consumer prices have continued to advance very rapidly in the first eight months of 1980 (at an annual rate of between 50 and 55 per cent). In view of existing indexation procedures and the need to maintain the profitability of export industries through a steady downward adjustment of the exchange rate, inflation is unlikely to abate much in coming months. The consumer price index may thus rise by around 55 per cent in the course of 1980, entailing a year-on-year increase of nearly 60 per cent over 1979. On the basis of present price compensation mechanisms wages and salaries may advance in nominal terms by around 50 per cent between 1979 and 1980.

Given the dynamics of the inflationary process, it is difficult to distinguish the impact of domestic factors from that of external shocks — whether they originate from higher import or export prices. Nevertheless, an attempt is made in Table 9 to provide a rough indication of the relative importance of the two sets of factors. Measured by the weighted average of export and import prices in foreign currency, the direct external price pressures would seem to have been on the whole somewhat weaker in 1979/80 than in 1973/74. External price pressure subsided in 1975, whereas domestic inflation, measured by the deflator for domestic consumption of inland production (DCIP), continued at a high rate in response partly to the lagged effects of the increase in import prices in 1974 and to the authorities' price policies (raising indirect taxes). During the recent period, the high and stable rate of increase of the DCIP deflator as from 1977 is particularly striking. But whereas external pressures remained relatively weak in both 1977 and 1978, they strengthened markedly in 1979 as a result mainly of the oil price increase. A comparison of the movements of the various indices throughout the 1970's suggests that external price pressures feed into domestic inflation with a lag of less than one year — a fairly steep rise in the DCIP deflator can, therefore, be expected in 1980.

21 Oil consumption has fallen substantially in the first half of the year, reflecting the continued extension of geothermal heating systems to replace oil in space heating. Official estimates suggest a 7 per cent fall in oil import volumes in 1980.

22 Ships, aircraft and goods for power plant construction.

23 Funded official and private debt plus net trade credits, less foreign exchange reserves.

Table 9 External and domestic price movements  
Annual percentage changes

	Import prices	Export prices	Indicator of external price pressures <sup>1</sup>	Effective exchange rate change	GNP deflator	Final domestic demand deflator	Deflator for domestic consumption of inland production <sup>2</sup>	Foreign trade deflator <sup>3</sup>
	Corrected for change in effective exchange rates							
1971	3.4	8.5	5.7	-1.4	12.8	9.6	10	7.2
1972	0.8	1.8	1.2	-4.3	17.7	16.6	26.8	5.7
1973	10.9	20.6	13	-7.8	31.2	25.3	31.5	22.5
1974	26.5	16.7	21	-10	41.4	43.4	46.6	34.5
1975	4.9	-5.4	-0.6	-36	39.4	49.1	36	54
1976	4.6	15	9.6	-12	34.4	28.6	41	24.5
1977	4.5	9.8	7.7	-12	35.3	30.4	45	22.5
1978	3.7	5.7	4.4	-29.6	44.8	46.4	49	48
1979	17.6	9.3	13.3	-25.3	42.4	45.8	42	51½
1980 <sup>4</sup>	12	7						

1 Average increase of the first two columns, with export prices weighted by the share of exports in GNP, and import prices by the share of imports in total domestic demand.

2 Domestic consumption of inland production is equal to GNP minus exports.

3 The average increase of export and import prices in local currency, applying the same weighting scheme as set out in footnote 1.

4 Forecasts.

Note: Given the roughness of the methodology, the last three series should be interpreted with great caution. Final domestic demand includes imports but excludes exports, while domestic consumption of inland production excludes both imports and exports. The deflator for the latter will include i.a. margins (profit and taxes) on imports and a large share of services and non-traded goods.

Source: OECD.



## II THE PROBLEM OF INFLATION

Price increases have typically been higher in Iceland than in most other OECD countries, although apparently without serious detrimental impact on the "real" economy. But current developments involve greater difficulties in controlling the situation. The stickiness of inflation in Iceland is in part related to the structure of the economy and the instability of foreign trade, both volume and price developments. It may also be related to the pursuit — so far with great success — of an ambitious employment policy. Indeed, Iceland is one of the very few Member countries that has been able to maintain full employment conditions in recent years. But the overall approach to the problem of inflation and the lack of efficiency of demand management policy, partly linked to the absence of proper instruments, would also seem to have played an important role. After briefly reviewing the origin and mechanisms of the country's exceptional inflationary experience, this section analyses the most recent measures taken to limit the detrimental consequences of high inflation. It concludes with a discussion of how economic policy could be better adapted to cope with the problem.

Table 10 **International comparison of consumer price developments**  
Percentage changes from previous period at annual rates, not seasonally adjusted

	Average		1977	1978	1979	12 months to August 1980
	1961-70	1971-76				
United States	2.8	6.6	6.5	7.7	11.3	12.8
Japan	5.8	11.1	8.1	3.8	3.6	8.7
Germany	2.7	5.9	3.7	2.7	4.1	5.5
France	4.0	9.0	9.4	9.1	10.8	13.6
United Kingdom	4.1	13.6	15.9	8.3	13.4	16.3
Italy	3.9	12.2	17.0	12.1	14.8	22.0
Canada	2.7	7.4	8.0	9.0	9.1	10.7
Total of above countries	3.3	8.1	7.8	6.8	9.3	12.0
Austria	3.6	7.3	5.5	3.6	3.7	7.3
Belgium	3.0	8.5	7.1	4.5	4.5	6.3
Denmark	5.9	9.2	11.1	10.0	9.6	11.2
Finland	5.0	12.1	12.2	7.8	7.5	12.3
Greece	2.1	12.5	12.1	12.6	19.0	24.4
Iceland	11.9	26.0	29.9	44.9	44.1	57.7
Ireland	4.8	14.0	13.6	7.6	13.3	18.8
Luxembourg	2.6	7.6	6.7	3.1	4.5	6.4
Netherlands	4.1	8.7	6.4	4.1	4.2	7.0
Norway	4.5	8.5	9.1	8.1	4.8	11.4
Portugal	3.9	16.0	27.2	22.6	23.6	16.0
Spain	6.0	13.0	24.5	19.8	15.7	15.2
Sweden	4.0	8.3	11.4	10.0	7.2	12.3
Switzerland	3.3	6.7	1.3	1.1	3.6	4.2
Turkey	5.9	18.4	26.0	61.9	63.5	88.2
Australia	2.5	10.8	12.3	7.9	9.1	10.7 <sup>1</sup>
New Zealand	3.8	11.3	14.3	12.0	13.8	17.9 <sup>1</sup>
Total OECD	3.4	8.6	8.7	7.7	9.9	12.7
OECD Europe	3.9	9.7	10.9	9.1	10.8	14.1
EEC	3.7	9.2	9.5	6.9	9.1	12.0

<sup>1</sup> To latest month available.  
Source: OECD.

### *The origin of inflation*

As discussed at length in previous Surveys, the inflation-proneness of the Icelandic economy is not a new phenomenon. It reflects the openness of the economy — with almost 50 per cent of GNP being exported — and the heavy weight of fish products and, more recently, semi-worked industrial materials in total exports. Large fluctuations in fish catches and export prices have often coincided, generating swings in real output and national income much larger than in other OECD countries (Diagram 6). In the 1970s, as in other Member countries, oil price increases have contributed importantly to the acceleration of inflation. Although the mechanisms differ, it is interesting to note that both improvements and deteriorations in the terms of trade as well as fluctuations in the level of export production tend to accelerate the rate of inflation.

If the value of exports increases as a result of higher export prices and/or greater fish catches, incomes of fishermen and fish processing plants rise quickly. Due to the practice of automatic rediscounting of produce bills, such income increases are largely accommodated by the banking system even if the production is not exported immediately. In a situation of near full employment conditions, the better income developments in fisheries and fish processing industries are quickly transmitted into higher wage claims in other sectors, leading to generalized wage and salary increases. The subsequent price-wage spiral, influenced by widespread indexation, eventually leads to a decline in profitability in the fisheries and other export industries. A corrective depreciation is, therefore, soon needed, both to restore the profitability of exports and to deflate real incomes through an increase in relative import prices in order to avoid an excessive growth of private consumption and imports. Higher import prices add fuel to the inflationary spiral as they are fully reflected in the wage-regulating price index. Once a shock has been imparted to the economy, the indexation mechanisms make it extremely difficult to arrest or reverse the acceleration of inflation. And even when the impact of incomes policy is strongly felt — as in 1975 when real disposable income fell by some 12 per cent — there is always the risk of a release of pent-up wage and income claims at a later stage. This happened indeed in 1977, and the consequences of excessive wage increases in that year were still being felt in 1979.

Since nominal wage rates in the fish processing industries, the prices governing the sharing of catches between fishing vessel owners and fishermen, and the settlements between the fishing fleet and the processing industry are inflexible in a downward direction, a reduction of export prices and/or fish catches also has inflationary consequences. The Fisheries Price Equalization Fund<sup>24</sup> might be able to support revenues for a while, but experience shows that it has only been able to accumulate relatively small reserves during boom periods. With both the profitability of the fisheries as well as the current external balance deteriorating, a depreciation of the exchange rate is soon needed and this, in turn, leads to higher import prices and stronger inflationary pressures. The impact of a marked rise in import prices stemming from an external shock such as an oil price increase is even more direct.

### *What has been done*

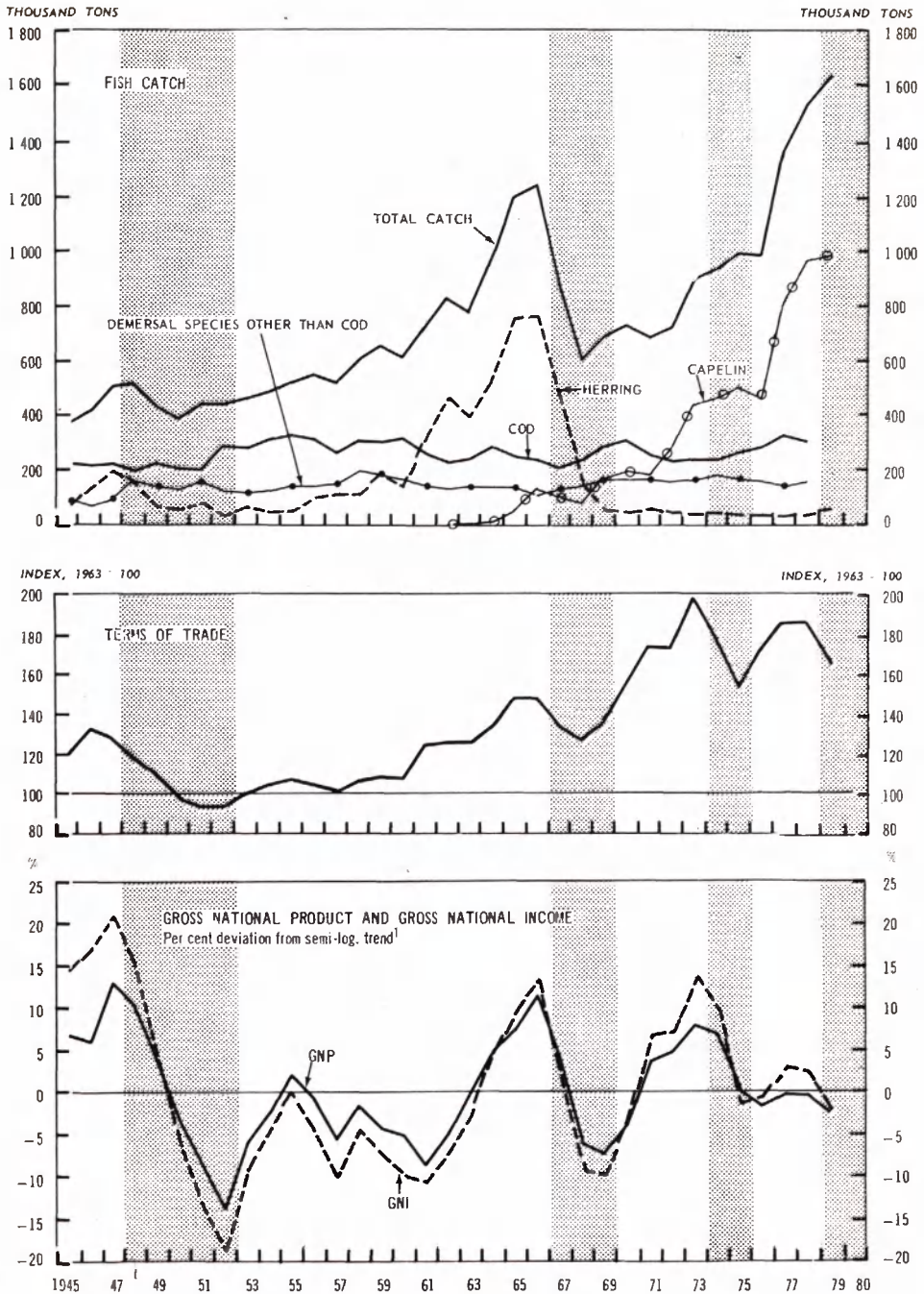
Concern with the high rate of inflation and its potentially harmful effects on income distribution and resource allocation has increasingly coloured the economic

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24 The Fisheries Price Equalisation Fund (FPEF) was established in 1969 with the aim of reducing fluctuations in prices actually received by the sector. On the basis of a reference price fixed by the Board of the FPEF at the beginning of each production period, part of price increases are paid into the Fund, constituting the basis for partial compensations out of the Fund in periods of falling prices.



Diagram 6 The impact of fish catch and terms of trade on the business cycle



1. The estimated annual trend rate of growth of GNP and GNI respectively over the period 1945-1978 is 4.4 and 4.8%.

Sources : National Economic Institute; OECD.

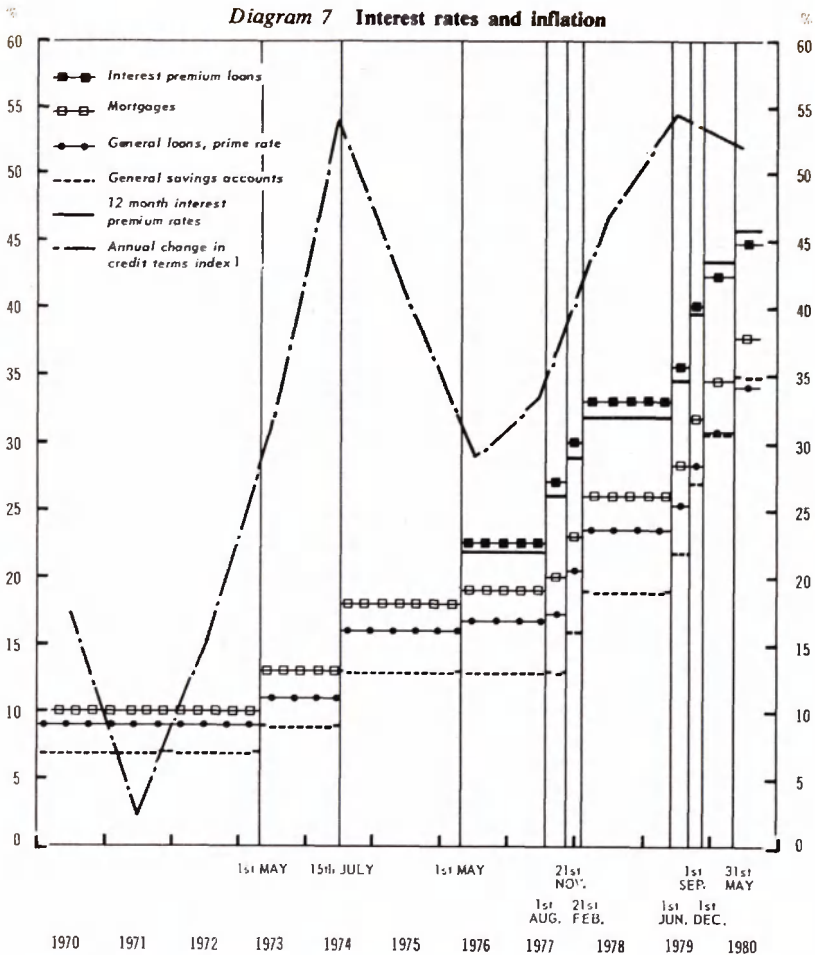
policy debate, and a multitude of measures to cope with the problem has been taken. However, political disagreement and vested interests have typically meant that more effort has been devoted to interventions of a "defensive" character, i.e. measures to limit the most harmful effects of inflation rather than to a reduction of inflation *per se*. As a result, Iceland has become one of the most fully indexed economies in the OECD area, with indexation clauses regulating not only wages, pensions and other transfers but also farmers' incomes through an imputed wage element in food prices. The extensive use of price controls with standard mark-up rules implies that profits are also effectively indexed. Moreover, the nominal value of financial instruments has increasingly become subject to partial or full indexation. Financial indexation (of the principal) is now generally applied to long-term lending by Investment Credit Funds and on bonds issued by these funds (typically purchased by pension funds) as well as Treasury savings bonds. A system of partial indexation of short-term bank deposits and lending has been gradually introduced since 1976 and a decision to introduce full indexation of all bank loans and time deposits was announced in 1979 as a key element of the Economic Management Act. With the exception of the latter, which is presented in the following paragraphs, the various indexation schemes have been described in detail in previous OECD Surveys.

The purpose of indexing financial assets in an inflationary economy like Iceland is obvious. It is impossible to anticipate future inflation rates, and the determination of interest rates has always been administered and rather inflexible. Typically, therefore, real interest rates have been negative. This has of course constituted an important disincentive for households to save; it may have stimulated private investment excessively, and in projects which may not always have been financially sound. The ultimate effect of negative real interest rates is thus excess demand and pressure on the external balance. The full indexation of all loans and deposits envisaged in the Economic Management Act could, therefore, improve the possibility of managing overall demand under conditions of inflation and should limit the potentially harmful effects on income distribution and resource allocation.

The Economic Management Act provides for two different kinds of indexation, either full and direct indexation of loan principals, or in the form of a supplement — a *price compensation factor* — to the interest rate. Whereas the former mainly aims at longer term assets — as of June 1979 banks were given permission to grant fully indexed loans carrying a real interest rate of 2 per cent — the price compensation supplement to the nominal interest rate aims at short-term debt obligations where direct indexation of the principal was thought to be difficult to administer and felt likely to give rise to speculative behaviour. Full indexation of the principal follows a *credit terms index*, calculated monthly since June 1979 (see Diagram 7) by the Central Bank on the basis of the cost-of-living index (with a weight of two-thirds) and the building cost index (one-third).

Although a price compensation factor<sup>25</sup> has been added to bank lending and deposit rates since 1977 and even if special interest premium accounts have existed since 1976 — with interest premiums to be reconsidered regularly in view of the development of inflation — these arrangements only provided for partial adjustments of interest rates on an ad hoc basis. The new system introduces automaticity and stipulates a gradual closing (in 7 stages) of the gap between nominal interest rates (composed of rather low base rates and the price compensation factor) and the rate of inflation in order to achieve small positive real rates of interest on all bank lending and time deposits accounts. It was the plan to complete this adjustment before the end of

25 The reference indices are the same as for the credit terms index, i.e. the cost-of-living index (weight of two-thirds) and the building cost index (one-third). The price compensation factor is computed quarterly on the basis of a moving average of past and projected inflation rates.



1. Proxy for the rate of inflation; weighted average of cost of living index (weight of two-thirds) and the building cost index (one third).

Source: Central Bank of Iceland.

1980 but the formation of a new government early this year has delayed the implementation. Nevertheless, by June 1980 most deposit rates had increased by some 12 to 13 percentage points compared with a year earlier, and lending rates by some 9 to 10 percentage points (see Table 11). But a considerable gap still exists compared with the rate of inflation. Thus, for 3-month premium deposits, the interest rate as from June 1st amounted to 40½ per cent, compared with an "actual" inflation rate, as shown by the credit terms index, of 60 per cent over 12 months earlier and an anticipated rate for the third quarter of around 50 per cent. Although the adjustment scheduled to take place in September 1980 was postponed, the authorities have, nevertheless, declared their determination to continue the adjustments until the gap is closed; their task would of course be facilitated if the rate of inflation were to decelerate. As to the cost impact, it is clear that in the short-run, at least, the recent increase in interest rates has tended to worsen the rate of inflation through an increase in financial costs, and this probably constitutes the most important constraint on the movement towards positive real interest rates.



Table 11 Bank interest rates

	Base rate from June 1979	June 1-August 31 1979		Sept. 1-Nov. 31 1979		Dec. 1-May 31 1980		From June 1980	
		Price compensation factor <sup>3</sup>	Total interest rate	Price compensation factor <sup>3</sup>	Total interest rate	Price compensation factor <sup>3</sup>	Total interest rate	Price compensation factor <sup>3</sup>	Total interest rate
<b>DEPOSITS</b>									
General savings deposits	5.0	17.0	22.0	22.0	27.0	26.0	31.0	30.0	35.0
6-month time deposits	6.0	17.0	23.0	22.0	28.0	26.0	32.0	30.0	36.0
12-month and 10 year time deposits	7.5	17.0	24.5	22.0	29.5	26.0	33.5	30.0	37.5
3-month interest premium accounts	5.5	22.0	27.5	27.0	32.5	31.0	36.5	35.0	40.5
12-month interest premium accounts	7.5	27.0	34.5	32.0	39.5	36.0	43.5	38.5	46.0
Checking and overdraft accounts	—	—	5.5	11.0	11.0	15.0	15.0	19.0	19.0
<b>LOANS</b>									
General loans	5.5	20.0	25.5	23.0	28.5	25.5	31.0	28.5	34.0
Overdrafts	5.0 <sup>1</sup>	22.0	27.0	25.5	30.5	28.0	33.0	31.0	36.0
Export produce loans <sup>2</sup>	—	—	8.5	—	8.5	—	8.5	—	8.5
Other produce loans	3.5	17.0	20.5	20.0	23.5	22.5	26.0	25.5	29.0
Treasury guaranteed securities	5.5	22.0	27.5	25.5	31.0	28.0	33.5	31.5	37.0
Mortgages	6.5	22.0	28.5	25.5	32.0	28.0	34.5	31.5	38.0
Interest premium loans	8.5	27.0	35.5	31.5	40.0	34.0	42.5	36.5	45.0
Indexed securities <sup>3</sup>	—	—	2.0	—	2.0	—	2.0	—	2.0
Penalty interest rate <sup>4</sup>	—	—	4.0	—	4.5	—	4.5	—	4.75

1 Base rate is discount rate.

2 As of January 1, 1979, the principal is linked to the exchange rate of the U.S. dollar.

3 Maturity period of four years or more.

4 Per cent per month.

5 See text for definition.

Source: Central Bank of Iceland, *Economic Statistics*.



The tax reform taking effect as from 1980 must also largely be seen as an accommodation of the system to an inflationary environment rather than as a basic attack on inflation. As far as wage earners are concerned, the new system represents a substantial simplification compared with the previous one due to the introduction of standard deductions. In order to stimulate savings, special deductions for interest payments are not allowed, with the exception of housing loans, which are, however, subject to a ceiling. The reform is intended to prepare the ground for the introduction of the Pay-As-You-Earn system, the decision on which remains to be taken. For the business sector, the new rules introduce inflation accounting for tax purposes, higher property taxes and a tightening of taxation on capital gains as an incentive to invest in productive capital rather than real estate not directly required in the production process. Rules for deducting interest costs will also be changed in order to encourage financial savings and the formation of equity capital.

As part of the Economic Management Act measures have also been taken to reduce imported inflation—for instance as a consequence of oil price increases—and to facilitate the adjustment of the economy to downward fluctuations in export prices. This has been achieved through a correction of the wage-regulating price index for fluctuations in the terms of trade. If the terms of trade deteriorate, 30 per cent of the percentage change in the terms of trade are deducted from the increase in the wage regulation index. The opposite adjustment will be made if the terms of trade improve. As already noted, between June 1979 (when the new method was first applied) and September 1980, the total deductions from the cost-of-living index have amounted to 6 percentage points. Together with other deductions introduced with the Economic Management Act (mainly alcohol and tobacco prices and the wage component of agricultural prices) the total change in the wage-regulating index over the 18 months to September 1980 amounted to 74 per cent as compared with a 100 per cent rise in the cost-of-living index (see Table 12).

Whereas changes in indexation procedures have helped keeping the development of real earnings more in line with that of real national income after the most recent oil shock—thus limiting the generation of a major “real wage gap”—the impact on the rate of inflation has probably been relatively modest. Firstly, one of the most important sectors as far as wage determination is concerned, the fisheries, is not

Table 12 Wage indexation according to the “Economic Management Act”  
Percentage changes over three months earlier

	June 1979 <sup>1</sup>	Sept. 1979	Dec. 1979	March 1980	June 1980	Sept. 1980
Increase in cost of living index	12.38	13.57	15.86	9.14	13.23	10.12
Deduction for wage component of agricultural prices	0.58	0.96	0.91	0.98	0.61	0.83
Deduction for tax increases for oil subsidies	0.40	0.81	—	—	0.20	—
Deduction for price increases on alcohol and tobacco	—	0.81	0.52	0.63	0.72	0.61
Deduction for deterioration in terms of trade	2.63	1.36	1.22	0.85	—	0.11
Deduction for deterioration in terms of trade above 2 per cent carried over from June regulation	—	0.46	—	—	—	—
Increase in wage regulating index	8.77	9.17	13.21	6.67	11.70	8.57

<sup>1</sup> Wages under Kr. 210 000 a month were adjusted by 11.4 per cent on June 1, 1979 as no deductions were made for the deterioration in terms of trade at that date. On September 1, 1979 wages for such wage earners were adjusted by the same percentage as for other wage earners.

Source: National Economic Institute.

covered by the formal indexation procedures. In addition to wage developments in other sectors, the rising cost of fuel for the boats has probably also had an important role to play in recent decisions to increase the raw fish price. Secondly, if a terms-of-trade loss is the result of falling export prices, there will continue to be a need for depreciating the currency in order to preserve profitability of the fishing sector since remunerations are inflexible downwards. And, finally, if the terms of trade improve, the adjustment will immediately accelerate wage inflation throughout the economy with a risk that additional claims will exceed the extra export revenue; it might thus intensify the need for currency adjustments in order to check the growth of imports. Since the extra wage increases in non-export sectors probably cannot normally be absorbed by profits, the new system could entail a worsening of the inflationary spiral. No adjustment of the wage-regulating index will be made if export and import prices rise in step.

### *The need for new policy instruments*

Two basic observations must be kept in mind if a sustainable reduction of the inflation rate is to be achieved.

- i) The system is very inflation-prone in the sense that once it has been exposed to a once-and-for-all inflationary shock it is very difficult to arrest the cost/price spiral.
- ii) The openness of the economy and the composition of exports mean that the exposure to external shocks is greater than for most other OECD countries.

The *lack of price stability* would appear to be an inevitable consequence of the widespread use of indexation procedures necessitated by concern over income and wealth distributional effects and consequences for future growth. The *exposure* means that economic policy must prevent the shocks from entering the economy. Effective non-inflationary instruments to this end seem to be lacking or, when existing, not properly used.

The present functioning of the economy obviously implies that an effective anti-inflationary strategy would have to resort to exceptional measures to wind down the current rate of inflation. In the past, such efforts have typically consisted in a temporary suspension of indexation clauses or ceilings on quarterly wage adjustments. The experience with such interventions has been rather disappointing: the real income loss generated by reducing wage inflation before the cost of living has been brought under control carries a risk of pent-up wage claims building up, eventually releasing new waves of wage inflation (as in 1977). Strict, but temporary, mandatory price and wage controls might better succeed in breaking into the inflationary spiral. Such controls could limit both the degree of passing-on of wages and other costs into prices and the compensation of wage earners for increases in the cost of living. The impact on real wages might be partly offset by appropriate tax concessions, preferably in the field of indirect taxation. But full indexation would still have to cover all financial assets while inflationary impulses stemming from movements in the exchange rate would have to be minimized. Import price increases should be allowed to be passed on to the general price level. The planned monetary reform in early 1981 would appear to provide an opportunity to make such an attempt. This strategy would have to be supported by an appropriate stance of demand management to ensure as smooth a re-entry as possible. This would presumably imply some degree of fiscal restraint and less accommodating monetary policy while keeping in mind that the need for restraining domestic demand in the current situation is smaller than after the first oil crisis.

The new instruments required to prevent new inflationary shocks from penetrating the economy primarily concern the fisheries. As pointed out in past

Table 13 Comparison of market and reference prices of the FPEF

	1970	1971 <sup>1</sup>	1972	1973	1974	1975	1976	1977	1978	1979 <sup>1</sup>
<b>I Frozen fish products</b>										
Market price (Kr. per lb.)	24.77	35.29	37.36	53.75	63.13	102.89	146.86	193.46	268.88	401.25
Reference price (Kr. per lb.)	20.39	27.82	36.79	50.14	67.27	112.08	149.88	187.53	277.12	393.72
Ratio between reference and market prices	0.82	0.79	0.98	0.94	1.07	1.09	1.02	0.97	1.03	0.98
<b>II Saltfish products</b>										
Market price (Kr. per kg)	38.18	53.38	61.28	90.09	157.59	227.73	279.13	306.32	463.52	709.59
Reference price (Kr. per kg)	34.26	40.76	59.25	81.09	115.78	206.33	259.41	322.53	415.28	766.37
Ratio between reference and market prices	0.90	0.76	0.97	0.90	0.73	0.91	0.93	1.05	1.12	1.08
<b>III Oil</b>										
Market price (Kr. per kg)	17.90	19.25	11.76	21.28	38.05	53.94	57.55	85.89	126.73	160.66
Reference price (Kr. per kg)	10.57	13.82	16.69	19.62	32.36	55.78	55.54	81.35	119.50	175.98
Ratio between reference and market prices	0.59	0.72	1.42	0.92	0.85	1.03	0.97	0.95	0.94	1.10
<b>IV Meal</b>										
Market price (Kr. per kg)	17.83	18.59	16.37	39.70	41.93	38.55	64.51	95.13	128.42	159.86
Reference price (Kr. per kg)	14.94	17.80	18.28	25.99	48.26	27.75	64.58	89.70	116.74	179.18
Ratio between reference and market prices	0.84	0.96	1.12	0.65	1.15	1.24	1.00	0.89	0.91	1.12

<sup>1</sup> Preliminary.

Source: National Economic Institute.



OECD Surveys and as also recognised in the Economic Management Act of 1979 more active use of the Fisheries' Price Equalisation Fund constitutes perhaps the potentially most efficient way of coping with the problem. By absorbing *excess* earnings in prosperous periods to be used to supplement below-normal earnings in meager periods, the inflationary consequences of fluctuating fish prices could be largely neutralized. However, experience shows that the smoothing out of income fluctuations through the operations of the Fund has been extremely modest, partly due to the fact that the Board is dominated by representatives of the fisheries (see Table 13). Alternative policy instruments controlled more directly by the authorities would seem to be needed. Such instruments might include a resource tax on the sector, or an export levy which could be varied according to catch and price developments and serve the same purpose as the price and catch equalisation funds. A more restrictive use of the rediscount window for produce bills might help generating a more responsible attitude in the fisheries' price and wage decisions, and it could help to slow down the speed of inflationary shocks emanating from this sector. Appreciating the currency in periods of rapidly rising export receipts, as was temporarily done in 1973, might also reduce the flow of earnings to the fisheries while spreading the terms-of-trade gains to other sectors of the economy. Finally, exclusion of *all* import prices, or at least energy prices, from the wage-regulating price index, as recently introduced in Denmark, may be more appropriate in the case of Iceland than the current indexation procedures (which allow corrections for both improvements and deteriorations in the terms of trade).

### III THE ENERGY SECTOR AND THE DIVERSIFICATION OF THE ECONOMY

As explained in Part I, at least in the short run, Iceland did not escape the deflationary impact of soaring oil import prices in 1974 and 1979. However, in the longer run the abrupt increase in energy prices has enhanced the economic feasibility of exploiting the country's vast energy potential. This concerns both hydro-electric power and geothermal energy which are expected to increase their share in total primary energy requirements from about one-half in 1980 to three-fourths or even more by the turn of the century. Tapping these resources should not only permit a substantial reduction of the dependency on oil imports, but by generating a significant increase in total energy supply, Iceland would be well placed for developing energy-intensive industries, both export and import competing industries. These favourable prospects for the energy sector are all the more important since the scope for expanding the fish catch — the only other natural resource of importance — has become limited given the need to preserve the size of fish stocks.

#### *Energy balance and potential resources*

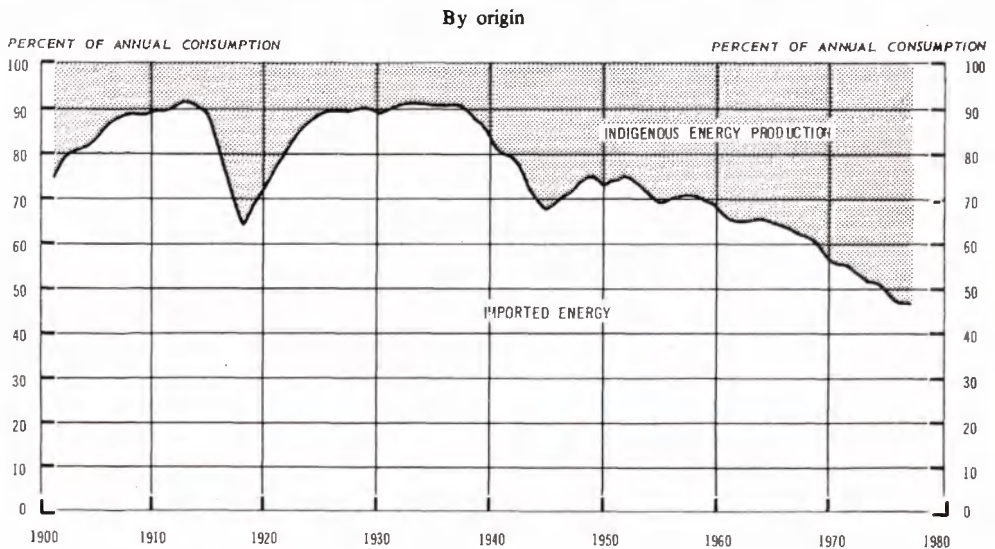
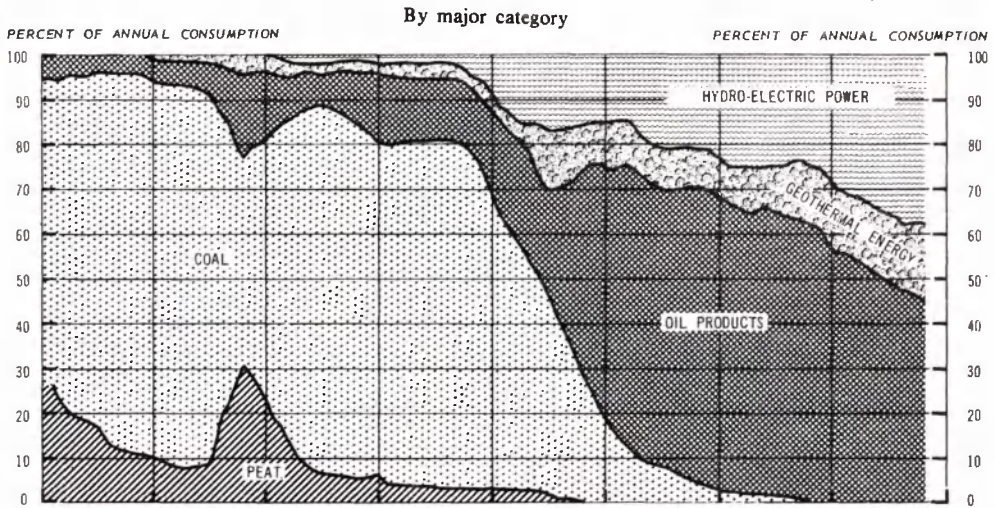
The development of indigenous energy sources started already in the late 1930s, when coal began to be replaced by geothermal heat for space heating and by hydro-electric power for electricity generation. In the 1950s abundant international oil supplies at relatively low prices slowed down the substitution process but the last two decades have again witnessed steady reductions in the share of imported energy in total primary energy requirements (more than 1 percentage point annually) (see Diagram 8). By now, half of the energy needs of the country are met by domestic energy sources. Given the sharp increase in total energy consumption — more than



3 per cent annually over the last two decades – the rising proportion of indigenous energy has not been sufficient to prevent a steady increase in imports of oil products. But this is of course partly explained by the specific requirements of the fishing fleet and of all transportation means<sup>26</sup>.

Important advantages are associated with both geothermal and hydro based energy resources in the sense that although they cannot be stored for later use, they are renewable, and pollution is minimal or non-existent. In spite of a doubling of hydro-electric capacity over the last decade, only a small fraction of potential

Diagram 8 Composition of primary energy consumption



Source: National Energy Authority.

26 There are no railroads in Iceland.

resources has been exploited so far. However, potential power generating capacity is dependent not only on economic parameters — such as interest rates, alternative energy prices, and future market conditions for energy intensive industries — but also on environmental considerations, traditionally of great importance in Iceland. Fairly cautious assumptions about these various parameters seem to lie behind the estimates made by the National Power Authority, according to which some 30 000 Gwh annually of hydro-electric power would be economically feasible at current relative prices. The development of roughly as much additional resources would be technically feasible<sup>27</sup>. Only some 3 300 Gwh is currently utilised annually<sup>28</sup>. A major project currently under way<sup>29</sup> might add another 1 000 Gwh to annual output by 1982 and a gradual development of other projects could bring total power production up to some 6 000 Gwh by the turn of the century, still only a small share of potential resources<sup>30</sup>. This estimate is based on the conservative assumption of no additional installation or extension of energy intensive industries.

Geothermal steam and hot water constitute the second major potential source of energy. Besides space heating purposes the development of geothermal energy will largely depend on conversion into electricity for which extremely high steam temperatures are required, at least on the basis of presently known technology. Geothermal power generation is, therefore, confined to the active volcanic areas, found in smaller locations in the northern and southern parts of the country (covering a total of some 400 km<sup>2</sup>). Estimates suggest that up to 20 000 Gwh might be generated annually from this source in an economically feasible way. Total potential geothermal energy, including steam and hot water at temperatures below requirements for generation of electricity, could amount to as much as 80 000 Gwh. In 1979, only 3 800 Gwh of this potential was exploited, mainly for heating purposes. A first 70 MW geothermal power plant<sup>31</sup> has recently been put into operation but a number of teething problems — mainly concerning the regularity of steam supply in an extremely active volcanic area<sup>32</sup> — has kept production at rather modest levels so far. Recent projects include combined heat exchange/power generating installations<sup>33</sup> and recovery of heat from still-molten lava from the 1973 eruption at the Westman Islands.

The space heating sector currently accounts for a large proportion of energy consumption (39 per cent in 1977). To some extent this is determined by climatic conditions but the abundant availability of cheap geothermal energy may have reduced incentives for insulation and other conservation measures<sup>34</sup>. In 1977, geothermal energy covered two-thirds of energy consumption for space heating (see Table 14). Estimates for 1980 suggest that some 70 per cent of the population is now being supplied by geothermal energy, compared with 41 per cent in 1970 and 23 per cent in 1960. In the course of the 1980s, the share of geothermal heating is expected to rise to some 80 to 85 per cent, the rest being provided by electricity. The use of oil for

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27 The entire potential energy of all running surface water in Iceland has been estimated at 180 000 Gwh.

28 The corresponding power generating capacity amounts to 660 MW.

29 Situated at Hrauneyjafoss. Estimated capacity amounts to some 210 MW.

30 Apart from expansion of total capacity, construction of high voltage power lines connecting the distribution systems in various parts of the country has greatly improved the efficiency of the system and should help to increase capacity utilisation rates.

31 Situated at Krafla in the northern part of the country.

32 A major eruption was registered in the neighbourhood of the Krafla plant in July 1980.

33 High-temperature geothermal steam cannot be used directly for heating purposes due to corrosion and depositing of dissolved solids which insulate heating systems.

34 In 1979, in the Reykjavik area, heating costs based on geothermal energy only amounted to some 15 per cent of costs of oil based heating.

heating purposes is thus expected to be more or less eliminated over the next decade or so, an achievement likely to be matched by only few other countries at a similar latitude.

The industrial use of geothermal energy has also expanded considerably although it only covers a small share of that sector's requirements. Production processes directly dependent on geothermal heat includes a diatomite plant and processing of sea-weed<sup>35</sup>. A pilot plant for the recovery of salt by evaporation is presently under operation. Geothermal energy is also used for heating greenhouses, permitting domestic production of most vegetables consumed; given the geographical location of Iceland, it is obvious that such production would to-day hardly be economical if based on oil heating.

Electric power — virtually all based on hydro — now accounts for almost one-fifth of energy consumption. Most of it (75 per cent) is consumed by industry, where it covers roughly half of the requirements. Total electricity consumption amounted to 2 900 Gwh in 1979 of which 1 600 Gwh were consumed by the three major power intensive industries, a fertilizer plant supplying the home market, an aluminium and a ferrosilicon plant (Table 15). Both of these alloy smelters export their entire output and import all raw materials.

Table 14 Final energy consumption  
1977

Consumption sectors	Energy sources			Total energy	
	Hydro-electric power	Geo-thermal energy	Oil imports	Terajoules	Percentage share
	Terajoules				
Space heating	774	11 426	5 080	17 280	39.2
Domestic consumption	983	7	36	1 026	2.3
Industry	5 634	2 880	4 694	13 208	30.0
Fisheries	—	—	6 210	6 210	14.1
Trade and services	515	4	187	706	1.6
Transportation	—	—	5 648	5 648	12.8
Total	7 906	14 317	21 855	44 078	100.0
Percentage share	17.9	32.5	49.6		100.0

Source: National Energy Authority.

Table 15 Power consumption by energy intensive industries

	Consumption	Power generating capacity
	Gwh per year	MW
Fertilizer plant	137	20
Aluminium smelter <sup>1</sup>	1 190	140
Ferrosilicon smelter (1 furnace) <sup>2</sup>	244	34
Total	1 571	194

1 The increase in the aluminium smelter's capacity in 1980 has increased requirements by 160 Gwh annually (20 MW).

2 The second furnace going into operation towards the end of 1980 will double requirements.

Source: National Economic Institute.

35 In both cases geothermal heat is used in a drying process that would not be economical if based on imported fuel.



### Development of power intensive industries

The power intensive industries constitute the most important efforts made so far towards diversification of the structure of production and exports. The aluminium smelter came into operation in 1969. This year, its capacity was extended by 10 000 tons to some 83 000 tons annually. Aluminium is expected to account for almost 15 per cent of export production in 1980. Taking into account imports of alumina, however, only some 40 to 50 per cent of the export value may be considered as domestic value added, covering wages and salaries of the 650-700 persons work force, power purchases and production levies. Since the company is wholly foreign owned, and financed in part by foreign borrowing, payments of interest and dividends to abroad are quite important, implying that net currency earnings in relation to the value of exports are unlikely to exceed one-third.

Table 16 Diversification of the structure of output and exports

Percentage shares of power intensive industries <sup>2</sup> in:	1965	1970	1975	1979	1980 <sup>1</sup>	1981 <sup>2</sup>
GNP <sup>3</sup>	0.7	2.6	2.0	3.3	3.6	4.1
Total employment	0.3	1.0	1.1	1.2	1.3	1.3
Merchandise exports	—	14.2	11.8	15.3	16.7	20.0

1 Forecasts.

2 Aluminium, ferrosilicon, diatomite, fertilizer and cement plants.

3 Direct shares in value added, excluding indirect GNP content of power supplies.

Note: Data for 1975 are affected by the impact of the international recession, notably as concerns the aluminium industry.

Source: National Economic Institute.

The ferrosilicon smelter came into operation with one furnace in 1979. A second furnace has been added in 1980, bringing capacity to 50 000 tons annually<sup>36</sup>. Ferrosilicon is expected to account for 2 ½ per cent of export production this year and some 4 to 5 per cent in 1981. The company is a joint venture between the Icelandic State (which holds a majority interest) and a major Norwegian ferro-alloy producer; some 175 persons will be employed under full operating conditions and net currency earnings after deduction of interest and dividends to the foreign partner are expected to roughly match those of the aluminium smelter, i.e. about one-third of the export value. It should be noted that taking into account the cost of servicing the foreign debt associated with the power generating capacity installed to supply the smelters, the net impact on the current external balance is somewhat smaller, particularly in the early stages of the projects.

In addition to further installations of alloy smelters, the increasingly competitive Icelandic power resources offer many promising possibilities for future use. Direct exports of electricity by underwater cables to the Faroe Islands and even to Scotland is thus technically feasible although the costs involved still seem to be too important. Icelandic scientists are also studying the possibilities for producing methanol and synthetic fuel on the basis of hydrogen and coal (or even domestically produced peat) where the former is easily obtained from electrolysis of water. Such products could replace imports of oil products in part or entirely. The necessary technology is already

36. The product, "75 per cent ferro-silicon" is an alloy of silicon and iron. It is a basic raw material in the iron and steel industry, mainly used as deoxidant and as an alloying material, with a small amount going to the chemical industry. Iceland's output will be sufficient for producing 10-12 million tons of steel annually.



at an advanced stage and it cannot be excluded that the relative costs of oil products could justify a project in this field in the course of the next 10 to 20 years.

### *Macro-economic constraints*

In view of the relatively fragile basis of the economy, still dominated by the fisheries sector, the future growth of real incomes and living standards largely depend on continued diversification of the economy. But, as noted, environmental considerations play a big role in decisions concerning the development of new power projects and associated industries. The savings capacity of the economy is clearly insufficient to match the heavy investment requirements, which may easily amount to several percentage points of GNP over a period of two to three years. Foreign borrowing will, therefore, be necessary, adding to the already relatively high foreign debt and limiting for years to come the net impact of new export industries on the balance of payments. Although the capital goods required are largely imported, the impact on domestic activity will be highly expansionary. Apart from problems in finding the needed labour force, the high rates of capacity utilization typically prevailing in Iceland might imply that additional investment activity in the energy sector would add to the inflationary problems. A continued rapid expansion of the power sector would, therefore, require a much more cautious fiscal and monetary policy stance than experienced in the 1970's. Besides domestic considerations much will also depend on the development of world markets for the products of new energy intensive industries.

## IV SHORT-TERM PROSPECTS AND POLICY CONSIDERATIONS

### *The outlook for 1981*

Besides uncertainties attached to the oil market, the outlook for 1981 heavily depends on developments in foreign markets for Icelandic exports, notably on the American fish market. On the basis of unchanged policies, prospects do not point to any marked change in underlying trends. For the third consecutive year, real GNP growth is likely to remain sluggish, without much easing of inflationary pressures. The current external deficit may be reduced somewhat, but the extent of the improvement is difficult to assess in view of the uncertainties surrounding the future course of the terms of trade and the development of domestic demand.

Apart from a reduction of the capelin quota, no government policy has been announced as yet concerning the control of fishing activity in 1981. Even when restrictions are imposed, their effects on the catches are rather uncertain, as illustrated by the experience in 1980<sup>37</sup>. In the official forecast, the cod catch is assumed to remain roughly unchanged from the 380-400 000 tons expected in 1980. The total catch of other species is also expected to remain unchanged<sup>38</sup>. The second phase of the ferrosilicon plant has been completed in the autumn of this year, and the larger

37 When catches seem to have superseded quotas for certain species.

38 Revised estimates now suggest a maximum sustainable yield of the cod stock off Iceland of around 450 000 tons annually. By limiting the cod catch to 350 000 tons a year for the next five years the maximum yield could be reached as early as 1986. However, such a restriction of the catch might be difficult to reconcile with the aim of full employment, particularly in a regional context. The Icelandic Marine Research Institute is at present of the opinion that an annual cod catch of 400 000 tons will not endanger the size of the stock, assuming average recruitment into it. However, at such a current catch level, the maximum sustainable yield could not be reached until around the mid-1990s.

capacity, if fully utilised, would by itself add 2½ per cent to total export production next year. As the extension of the aluminium smelter's capacity could boost its production by perhaps 9 per cent, total export production may grow by 3½ to 4 per cent in 1981.

It is premature to assess whether the run-down of export stocks of fish products observed in the early autumn of 1980 is due to temporary factors or if a turnaround of demand is in the offing. In the US market, several short-term indicators confirm a strengthening of private consumption in the third quarter, and the possibility of a revival in demand also for fish products cannot be ruled out. On the whole, demand conditions for marine products could be somewhat better next year than in 1980. Fish prices have been lagging behind the increase in costs through 1980 both for Icelandic and other producers, and this could lead to a catch-up next year if an improvement in demand does indeed materialize. On the other hand, demand prospects for Iceland's energy-intensive products have certainly weakened with the generalized downturn in activity currently witnessed in most European countries. The output of manufactures will increase somewhat in 1981, but this could temporarily be reflected in an accumulation of inventories.

The budget proposals for 1981 indicate a small revenue surplus of the order of ½ per cent of GNP. However, at the time of writing, the Investment and Credit Budget for 1981 was not available, thus preventing any firm assessment of the policy stance for next year. An official forecast of a normative character was presented in October, the main features of which are briefly summarized in Table 17 for the sake of illustration of a possible scenario. The projections are based on the need to obtain a reduction in the current external deficit such as to avoid a substantial increase in foreign indebtedness in the medium term. The price target is for a 42 per cent increase year on year, implying an annual rate of inflation of around 30 per cent towards the end of 1981. On that basis, there might be scope for a rise in the volume of private consumption of around 1 per cent. The share of investment would be limited to around 25 per cent of GNP, which would be consistent with a significant fall in the volume of industrial investment, a slight increase in capital outlays by the public sector, and a flat trend of residential construction. With approximate stagnation of final domestic demand, the real external balance would improve somewhat and assuming only a limited deterioration in the terms of trade, the current external deficit could fall to around 2¼ per cent of GNP. Needless to say, policies will have to play an active role if such a scenario is to materialize, notably as regards the rate of inflation.

A new wage agreement with the Federation of Labour was signed in late October (after the presentation of the Budget) resulting in 9 to 10 per cent increases in basic pay and a continuation of existing indexation rules. Earlier, an agreement had been signed with the public employees, implying only a 4 per cent increase in basic pay. Given the new wage agreements and present trends any significant deceleration in the rate of inflation will be difficult to achieve. Indeed, without a major change in policies a renewed acceleration cannot be excluded. However, given the impact on costs and the subsequent accommodation of the exchange rate in order to maintain profitability in export industries, only modest increases in real disposable incomes are likely. Being primarily supply determined the real side of the forecast presented in Table 17 need not change much as a result of the changed inflation outlook.

### *Conclusions*

In terms of balance-of-payments performance the absorption of the second oil shock has been so far smoother than during the 1974/75 experience. But high and accelerating inflation constitutes a matter of serious concern. It is impossible to define a precise limit beyond which inflation becomes unsustainable. The ability of the

Table 17 Official forecast for 1981

	1979 Kr. billion	Per cent changes at constant prices	
		1980	1981
Private consumption	531.6	-1	1
Public consumption	100.6	2	1
Gross fixed investment	212.9	8½	-5½
Business	91.9	½	-15
Dwellings	49.0	-3	—
Public	72.0	21	2
Change in stocks <sup>1</sup>	3.1	—	—
<b>TOTAL DOMESTIC DEMAND</b>	<b>848.2</b>	<b>1¾</b>	<b>-¾</b>
Foreign balance <sup>1</sup>	-7.2	-1	1½
Exports of goods and services	385.6	1½	3½
Imports of goods and services	392.8	2½	-½
<b>GROSS NATIONAL PRODUCT</b>	<b>841.0</b>	<b>1</b>	<b>1</b>
Effects of changes in terms of trade <sup>2</sup>		-2	-½
<b>GROSS NATIONAL INCOME</b>		<b>-1</b>	<b>¾</b>
<i>Memorandum items:</i>			
Balance on current account (in per cent of GNP)		-3½	-2½
Underlying price assumption (cost of living)		58	42

1 Change in stockbuilding and foreign balance in per cent of GNP of the previous year.

2 In per cent of GNP.

Source: National Economic Institute.

country to live with rates of inflation much higher than in the majority of Member countries has always puzzled outside observers. Nevertheless, with a current underlying rate of inflation of more than 50 per cent and in view of the dynamics of the price-wage spiral in a highly indexed system control of the situation may become increasingly difficult.

The mechanisms of the inflationary process, of which certain key elements are listed below, are generally well known:

- i) *Vulnerability.* The high share of foreign trade in GNP and the composition of exports, dominated by fish products, imply that external shocks are both more frequent and of greater magnitude than those typically experienced by most other OECD countries.
- ii) *Accommodation.* With demand management traditionally accommodating, policy makers have frequently resorted to large currency depreciations, both as a means of redistributing national income to the benefit of export sectors and to diminish the purchasing power of excessive increases in nominal incomes.
- iii) *Adaptation.* Since high rates of inflation could not be avoided, there has been a continuing process of adaptation of the institutional setting in order to avoid harmful effects on resource allocation and growth. As a result, Iceland has become one of the most fully indexed economies in the area. But it should be realized that although indexation is unavoidable given the circumstances, it tends to fuel the inflationary spiral. And a high degree of indexation probably means that once an external shock has been imparted to the system, it is very difficult to correct the cost-price spiral, even if the shock is a once-and-for-all phenomenon.



Realizing the shortcomings of policy instruments to cope with the problem of inflation, the Althing passed an "Economic Management Act" in early 1979, on the basis of which several measures have been implemented. The most important of these are the adjustment of the wage-regulating price index for terms-of-trade fluctuations — a logical step in the wake of the soaring oil import prices experienced in early 1979 — and the decision to gradually introduce full indexation of bank credits and deposits with a view to closing the gap between nominal interest rates and the rate of inflation. Nevertheless, the arsenal of instruments at the authorities' disposal remains insufficient; more powerful tools are clearly needed.

In the short run, a major concern of policy must be to break into the present cost/price spiral which might well accelerate as a result of the recently concluded wage agreement. Given the inflationary momentum that has developed, half-hearted measures will not suffice. Any serious attack on inflation will have to include determined action both on prices and wages. Suspension of indexation clauses alone would limit any wage and income compensation, but it would probably — at least for some time — lead to a reduction in real wages and incomes and therefore entail a serious risk of a later catch-up. Another possibility would be the adoption of a comprehensive stabilisation programme largely based on mandatory price and wage control combined with tax measures, as discussed in Part II. But for any measure of this kind to succeed, it would have to be accompanied by a more appropriate stance of demand management than in recent years; otherwise the "re-entry" problem — which is always difficult — would be unmanageable. The monetary reform that will be introduced early in 1981 might provide a suitable occasion for the adoption of a new anti-inflationary strategy.

In addition to the need for exceptional measures to wind down the current high rate of price increases, a more determined attack on the problem of inflation would seem to require a new approach to policy making and more efficient instruments. The external dependence of the country can obviously not be reduced. Given the small size of the population, and even if indigenous energy may over time be substituted for oil imports, the maintenance of one of the highest living standards in the area will continue to require a high degree of specialization, and hence a high share of foreign trade in GNP. What is needed is continued diversification of the economy and better instruments to avoid the propagation of external shocks throughout the economy whether they originate from import prices or from the fisheries sector. The adjustment of the wage-regulating price index for terms-of-trade fluctuations may well cope with certain types of shocks — an oil price increase for example — whereas it may create new problems in the wake of an improvement in export prices. An alternative mechanism which corrected for energy prices or all import prices could, therefore, be envisaged; such a method would clearly be more generally useful in the Icelandic setting.

The avoidance of external shocks being propagated through the fisheries sector is clearly a key to a more satisfactory price performance. Experience shows that the potentially powerful Fish Price Equalisation Fund does not function well enough. More direct government intervention in the form of export levies or a resource tax would, therefore, appear to be required. The revenues from such instruments could then be used roughly along the same principles as from the Equalisation Fund, and they would also allow a spreading of the considerable wealth generated in this sector to the rest of the economy in a non-inflationary way. Such tax instruments could also help regulating activity in the fishing sector. Alternatively, a less accommodating exchange rate policy might succeed in imposing a greater degree of self-discipline on the fisheries sector, discouraging raw fish price increases unless the profitability of the processing industries permit. In case of large export price increases, the use of appreciations could also be envisaged.



As argued in previous Surveys of Iceland there is also a need to strengthen the efficiency of traditional demand management policy. It is essential that the planned adjustment of interest rates to close the gap between interest rates and inflation is being completed; and the attempt to introduce a secondary reserve requirement system this year could be formalized in order to facilitate the management of bank liquidity. A more flexible use of the rediscount window with the Central Bank for export produce bills could be particularly conducive to slowing down the degree to which external shocks are being accommodated by the banking system. Budgetary instruments could also be improved: lesser reliance on indirect taxes might help to reduce inflation and the introduction of PAYE taxes would greatly enhance the built-in stabilizing properties of the tax system in an inflation-prone economy.

In the field of energy, Iceland is much better placed than the majority of OECD countries, with vast energy reserves in the form of hydro-electric power and geothermal steam and hot water. Energy from these sources already cover about half of total primary energy requirements. The expansion of indigenous energy supply has primarily been used for heating — where geothermal energy has almost replaced oil — and as an input in new industries, helping to diversify the structure of output and exports, and thereby reducing terms-of-trade fluctuations. The energy intensive industries constitute an important addition to potential output. Compared with potential energy resources, generally characterized by renewability, only a fraction is currently being exploited and the scope for installation of new power intensive industries or for further substitution of oil imports is considerable. However, it is important to realise, that the saving potential of a small economy represents an important constraint on the speed with which the energy sector can be developed, and that an accelerated expansion of this sector could strengthen inflationary pressures. If energy investments are to be financed by foreign borrowing, the energy sector's impact on demand and activity would seem to require a much more cautious stance of demand management policy than has typically been the case over the last decade.

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*Annex***CHRONOLOGY OF MAJOR ECONOMIC POLICY EVENTS****1978***January*

Tariffs reduced in accordance with EEC and EFTA agreements and the tariff legislation of December 1976.

Treasury savings certificates worth Kr. 1 500 million issued.

Raw white fish prices raised by 13 per cent for the January-May period. FPEF (Fisheries Price Equalization Fund) decision on out-payments for frozen fish products of Kr. 6 000 million on an annual basis. New reference prices for fish meal and oil implied minor payments into the Fund.

Consumer subsidies (on butter) increased temporarily at a cost of Kr. 300 million for the period January-June.

*February*

Foreign exchange markets closed from 6th to 10th February.

The krona devalued by 13 per cent against the US dollar.

Estimated foreign exchange gains on existing export stocks of fish products (Kr. 1 900 million) redistributed as follows: 20 per cent to subsidize foreign exchange losses of owners of fishing vessels, 15 per cent to improve efficiency in fish processing industry, and 65 per cent to the FPEF.

The following provisions were enacted:

1. Full price compensation of wages as stipulated in the June 1977 wage agreements reduced to compensate for only half the price increases in 1978. Minimum price compensation for low incomes assured through flat rate income increases in accordance with price developments.
2. Social security and children's allowances (mostly tax credits) raised.
3. Compulsory savings scheme for corporate income. Savings are blocked until 1984, bearing no interest, but are fully indexed.
4. Special excise tax lowered from 18 to 16 per cent.
5. Government authorized to cut expenditure by Kr. 1 000 million in 1978 and to issue Treasury bonds worth Kr. 1 500 million.

Price compensation factor of interest rates raised by three percentage points.

The Central Bank and commercial banks agreed on a target rate of increase of 29 per cent for bank lending during the year.

*March*

According to the new wage indexation system wages will be increased by about 6 per cent on average (instead of some 11 per cent according to the previous scheme).

Treasury bills worth Kr. 1 billion issued.

Prices to farmers raised by 9 per cent.

All cod fishing banned during the last week of March.

*April*

The Central Bank and the Ministry of Finance established a target for the position of the Treasury current account with the Bank. The target was presented as monthly figures, taking into account seasonal fluctuations.

The General Workers' Union instigated a partial ban on exports in protest against the February wage compensation scheme. The ban was lifted by the end of July.

*May*

The Althing enacted legislation on changes in State income taxes and wealth taxes as of January 1979. The provisions included changes in taxation of married couples, new rules for taxing self-employed persons and changes in the provisions governing depreciation of assets.

Introduction of a 3 per cent import equalisation tax, levied on imported manufactured goods for the period May 1978 to December 1980.

By provisional legislation, the limits set by the February legislation on wage indexation were partly eased, especially with respect to the lowest incomes.

*June*

The price compensation index rose by 12.8 per cent. Including contractual increases, wages and salaries were increased by 16 per cent on average.

Raw white fish prices raised by 13-14 per cent for the period June-September. FPEF decision on outpayments for frozen fish products of Kr. 5 500 million on an annual basis. FPEF commitments partly guaranteed by the Government.

Prices to farmers raised by 14.5 per cent.

*July*

Alcohol and tobacco prices raised by 20 per cent and petrol tax by 33 per cent.

*August*

Foreign exchange markets closed from 28th August to 6th September.

All cod fishing banned from 1st to 7th August. Cod fishing by stern-trawlers was banned altogether for 30 days during the period 11th July to 15th November, with a minimum of 7 consecutive days each time.

*September*

The new Government introduced several incomes policy measures that kept the price compensation index (scheduled to rise by 8.1 per cent) at its June level. The measures included:

1. Full indexation reintroduced with, however, a flat rate ceiling for higher incomes.
2. Social security benefits raised and consumer subsidies increased by Kr. 3 000 million for the rest of the year. At the same time sales tax on food was abolished (cost to Treasury in 1978 Kr. 1 400 million).
3. Price controls tightened.
4. Additional wealth tax levied on persons and corporations for remainder of the year (revenue estimated at Kr. 1 380 million). Special tax on higher incomes and on gross profits of companies; estimated revenue in 1978 of Kr. 1 880 million.
5. The special excise tax levied at two rates, 16 per cent on most commodities and 30 per cent on certain consumer durables. Introduction of a 10 per cent tax on foreign exchange purchased for the purpose of travelling abroad. Total revenue estimated at Kr. 600 million in 1978.
6. Government authorized to reduce expenditure by Kr. 2 000 million.

The krona devalued by 15 per cent vis-à-vis the US dollar.

Devaluation gains on fisheries export stocks (estimated at Kr. 7 000 million) allocated as follows: 50 per cent to FPEF, 25 per cent to owners of fishing vessels, and 25 per cent to fish processing industry.

Prices to farmers raised by 11.6 per cent.

Alcohol and tobacco prices raised by 20 per cent and petrol tax raised from Kr. 36.40 to Kr. 48.40 per litre.

Treasury savings certificates worth Kr. 1 200 million issued.

*October*

1979 Budget proposal presented to the Althing. The Budget included considerable increases in direct taxes, a deceleration in the growth of real public capital outlays and a cut in consumer subsidies.

Raw white fish prices raised by 5 per cent.

*November*

Adoption of temporary measures against inflation, including:

1. Price compensation index should rise by only 6.1 per cent instead of 14.1 per cent according to the wage agreement.
2. Consumer subsidies were raised by the equivalent of 3 percentage points of the price compensation index, social improvements corresponded to another 3 percentage points, and



reduction of taxes on low incomes corresponded to a further 2 percentage points of the price compensation index.

Cod fishing during the latter part of the month restricted.

### December

The Budget for 1979 approved by the Althing. In connection with the Budget the Althing passed several fiscal measures, the principal ones being:

1. Measures replacing the provisional legislation of September:
  - instead of the provisional net wealth tax, the direct tax rate was raised for both individuals and corporations (estimated yield in 1979 Kr. 1 830 million);
  - instead of the special tax on profits, depreciation allowances were tightened (yield in 1979 Kr. 2 360 million).
2. Lowering of taxes according to November measures against inflation:
  - tax index raised (estimated revenue loss of Kr. 2 500 million).
  - social security tax lowered (estimated revenue loss of Kr. 1 450 million).
3. New measures for raising revenue:
  - taxes increased for higher income groups and corporations (yield Kr. 3 050 million);
  - imputed rent in owner-occupied dwellings raised (yield Kr. 800 million);
  - lower rate of special excise tax raised from 16 per cent to 18 per cent. Higher rate of 30 per cent unchanged (yield Kr. 1 150 million);
  - new tax on building starts other than dwellings, real estate tax on commercial and office buildings and the airport tax raised (total yield in 1979 Kr. 1 200 million).

Prices to farmers raised by 6.7 per cent.

## 1979

### January

Introduction of an import deposit scheme for furniture, windows and doors to reduce the impact on domestic industry of tariff reductions. Obligation of importers to deposit 35 per cent of the import value on interest-bearing blocked accounts with the Central Bank for a period of 90 days. The scheme is intended to be in force until end-1980.

Tariffs reduced in accordance with EEC and EFTA agreements and the tariff legislation of December 1976.

Interest rate on rediscountable export produce bills lowered from 18 to 8½ per cent; instead, the loans will be denominated in US dollars. Rediscount ratio with the Central Bank lowered by 3 percentage points but total financing ratio left unchanged at 75 per cent of product value.

Full indexation of salaries by the Reykjavik municipality reinstated.

White fish prices raised by 11 per cent for the period January through May.

Restrictions on capelin fishing lifted as of 10th January.

### February

Petrol tax raised from Kr. 48.40 to Kr. 59.22 per litre.

Revised report on a credit budget for 1979 passed by the Althing. The report provided i.a. for Kr. 7 400 million reduction in Treasury and other government debt with the Central Bank. Lending by the commercial banks to the Development Fund lowered from 5 to 4 per cent of the increase in total deposits.

Treasury bills worth Kr. 1 billion issued.

### March

Savings certificates worth Kr. 1.5 billion and Treasury bills worth Kr. 1.5 billion issued.

Wage regulating price index up by 6.9 per cent over 3 months earlier, triggering a corresponding increase in earnings up to Kr. 280 thousand per month; above this limit a flat rate of Kr. 19 thousand was applied.

Full indexation reinstated for public employees.

Introduction of temporary (until end-1979) 2½ per cent charge levied on fish prices paid by fish processors to boat owners. The charge does not affect share prices (that determine the value of the catch to be shared by boat owners and fishermen). Revenue to be used to alleviate cost implications of rising oil prices. White fish prices raised by 1.7 per cent. Export levy on fish products lowered from 6 to 5 per cent temporarily until end-1979.

Capelin fishing temporarily banned with effect from 18th March.

Farm prices raised by 6.1 per cent.

#### April

The "Economic Management Act" enacted by the Althing. The main provisions were:

- *Article I* Deals with the aims and formulation of economic policy, which is to be based on annual economic forecasts submitted by the Government to the Althing along with the Budget proposals.
- *Article II* Contains provisions on incomes policy consultations between Government, unions and employers' organisations on economic policy in general and incomes policy in particular.
- *Article III* Deals with fiscal policy. Firstly, there are provisions on the preparation of the Budget linking it directly to national economic forecasts for the fiscal year and provisions for a longer-term indicative plan for central government finances. Secondly, the law stipulates that all Budget outlays and earmarked taxes governed by automatic rules in permanent legislation shall be taken up for revision with the aim that decisions on such expenditures and taxation will be taken within the framework of the annual Budget. Thirdly, the provisions in this section involve various measures for increased control with government expenditure, i.a. through the setting down as a target ceiling for 1979 that central government revenue and expenditure shall not exceed 30 per cent of GNP while aiming at similar targets in 1980.
- *Article IV* Contains provisions on the preparation and implementation of the investment programme and credit budget. Further, the aim of the 1979 credit budget of keeping total investment within 25 per cent of GNP is emphasized. Finally, this section sets forth a proposal of a total revision of investment credit fund lending, particularly with the aim of coordinating the terms of lending by the funds, i.a. with regard to interest, indexation and the length of loans. At the same time special attention shall be given to the criteria on which the allocation of the loans is based with the aim that loans be allocated according to coordinated rules of project evaluation and profitability criteria, within the framework of comprehensive industrial development programmes.
- *Article V* Deals with the preparation and implementation of industrial development programmes aiming at improving productivity and securing the operational conditions of industry. The industrial development programmes shall be submitted to the Althing.
- *Article VI* Deals with monetary policy where an emphasis is laid on setting a maximum target for monetary expansion in 1979 and 1980 and on raising the legal maximum for the average reserve requirements for deposits of commercial and savings banks that are held at the Central Bank from 25 to 28 per cent. Finally, it is stipulated that a system of general price indexation of savings and credit shall be gradually implemented before the end of 1980.
- *Article VII* Contains detailed provisions on the indexation of savings and credit, where the emphasis is placed on positive provisions for authorizing the general use of indexation replacing the earlier legislation which prohibits the general use of indexation.
- *Article VIII* Deals with indexation of wages and salaries. The provisions in this article were based on the prevailing indexation mechanism but departed from it in one major instance — as it was stipulated that changes in the external terms of trade from the base year 1978 shall affect the index.
- *Article IX* Contains provisions for the establishment of a nation-wide Labour Market and Manpower Policy Office, and certain labour market policy measures.
- *Article X* Deals with price control and contains i.a. provisions on increased activities of the price control authorities in studying and publishing information on price setting and the use of markups and on import prices in particular. The new legislation opens up the possibility of decontrol of prices in trade and commerce where competition is deemed to be sufficient for this purpose.
- *Article XI* Contains provisions for a more effective use of the Fisheries Price Equalization Fund and the Catch Equalization Fund as instruments of stabilization, i.a. by authorizing the use of taxes on overexploited species as tools for catch equalization over time.

Allowance for oil heated dwellings increased to Kr. 5 000 per person for the first quarter of 1979 (against Kr. 2 600 per quarter in 1978).

Ceiling established for bank lending, indicating a 32.7 per cent increase during this year. The ceiling excludes rediscountable produce loans to fisheries, agriculture and manufacturing.

Basic salaries of public employees raised by 3 per cent in accordance with their wage contracts for the period July 1977-June 1979. This was subsequently followed in settlements by principal labour unions (cf. June).

Cod fishing by stern trawlers banned for 7 consecutive days in the period 9th-20th April.

Regulation of farm output enacted. Under conditions of excess production the Agricultural Production Board — subject to approval by the Farmers' Federation and the Ministry of Agriculture — is authorized to:

- introduce price differentiation according to volume of production;
- reduce subsidies paid directly to farmers above a certain production level;
- levy a production tax for price equalization purposes;
- levy a tax on imported feedstuff consumed by the sector — up to 100 per cent on cif value — the revenue of which may be allocated as price compensations for farmers who reduce output.

#### May

In connection with the public investment programme and credit budget for 1979 the following measures were enacted:

1. Authorization of foreign borrowing worth Kr. 9 283 million for public investment projects;
2. Obligation for pension funds of the Federation of Labour to allocate 20 per cent of disposable funds for purchases of indexed bonds issued by the State Building Fund.

Introduction of temporary 3 per cent adjustment charge for period July 1979 to December 1980 on imported manufactures on which tariffs had previously been reduced or abolished according to EEC and EFTA agreements. Proceeds will be earmarked for industrial development.

Reserve requirement ratio for deposit money banks increased from 25 to 27 per cent of total deposits as of May 1st. Further, the ratio was raised to the legal maximum of 28 per cent as of June 1st and banks required to reach this target during the months of June and July.

New legislation enacted entailing greater liberalization of foreign trade and currency transactions.

Cod fishing by stern trawlers banned for a total of 70 days during period May through September. 30 days had to fall in July and August. Minimum stop fixed at 9 consecutive days.

#### June

Alcohol prices raised by 19 per cent and tobacco prices by 12 per cent.

Implementation of first adjustment of interest rates according to the Economic Management Act's provisions regarding indexation of bank credit and deposits. For details, see Part II.

Treasury bills worth Kr. 1.5 billion issued.

First wage indexation according to provisions of the Economic Management Act, including adjustment for a terms-of-trade loss. See Table 12 for a detailed breakdown of adjustments to the regulating index.

Basic wage rates of members of the Federation of Labour raised by 3 per cent.

White fish prices raised by 13.5 per cent. Oil charge on fish prices raised from 2.5 to 7 per cent and Kr. 500 million was allocated from export levies of the Insurance Fund for Fishing Vessels and Kr. 700 million from the Catch Equalization Fund in order to raise share prices of red-fish and saithe in the period May through December 1979.

Prices to farmers raised by 13.3 per cent.

#### July

Petrol tax raised from Kr. 59.22 to Kr. 70.93 per litre.

In connection with rise in oil prices, additional foreign borrowing of Kr. 2 275 million authorized in order to promote investment projects in the energy sector.

Oil charge on fish prices raised from 7 to 15 per cent; 3 per cent of this will be reflected in share prices.

Capelin fishing banned from 16th July until 20th August.

#### August

Allowances for persons living in oil heated dwellings set at Kr. 8 500 for the 2nd quarter of 1979, Kr. 15 000 for the 3rd quarter and Kr. 18 200 for the 4th quarter.

Herring quota for 1979 fixed at 35 000 tons.

#### September

Sales tax raised from 20 to 22 per cent and lower rate of the special excise tax raised from 18 to 24 per cent. At the same time, the excise tax was abolished for several merchandise groups.

Adjustments of interest rates in accordance with the Economic Management Act.

Prices to farmers raised by 19.7 per cent.



Decision to implement quota system for pricing of milk production in 1980 and meat production as from autumn 1980.

#### October

Budget proposals for 1980 submitted to the Althing.

Target rate of increase in bank lending raised to 42 per cent in the light of the acceleration in inflation.

White fish prices raised by 9.2 per cent. The temporary oil charge lowered from 15 to 9 per cent. The part of the oil charge (3 percentage points) shifted back into share prices in July now abolished. Net impact of this price decision implied a 7 per cent increase in the cost of raw materials to the processing plants.

#### November

Tobacco prices raised by 17 per cent.

New classification rates introduced for price decisions in the fisheries.

Capelin fishing banned as from 10th November; cod fishing banned for a total of 23 days in the November/December period.

#### December

Elections to the Althing.

Alcohol and tobacco prices raised by 13 per cent.

Temporary tax of 10 per cent on foreign currency purchased for foreign travelling extended until end-1980. The tax had been introduced in September 1978.

Interest rates adjusted in accordance with the Economic Management Act.

Prices to farmers raised by 11.1 per cent.

Imports of pastry, cakes and other bakers' wares liberalized.

### 1980

#### January

The advance collection of income and net wealth taxes (to be paid in the first half of 1980 before the 1980 assessment is finalized) set at 65 per cent of previous year's assessment for state income taxes and 70 per cent for municipal income taxes.

White fish prices raised by 11 per cent. This decision was accompanied by the following measures:

1. Lowering of the temporary oil charge from 9 to 5 per cent.
2. Lowering of export levy on fish products from 6 to 5½ per cent.
3. Changed allocation of revenue from export levies to permit special price compensations for certain species for fish preservation purposes.

These measures entailed an 11 per cent increase in share prices, 5½ per cent increase in boat-owners' share and 7.3 per cent increase in costs of processing plants.

Ban on capelin fishing (introduced 10th November 1979) lifted as of 8th January. However, capelin fishing would be restricted to boats receiving special licenses.

Final phase of tariff reductions in accordance with EEC and EFTA agreements took effect.

#### February

Revised Budget proposal for 1980 submitted to the Althing by caretaker Government.

Central Bank rediscount ratios for produce bills lowered by 1.5 percentage points with a corresponding increase in commercial banks' share leaving total financing unchanged at 75 per cent of product value.

Cod fishing by stern-trawlers banned for a total of 27 days in the period January through April 1980. Capelin fishing restricted as of 13th February.

#### March

Alcohol and tobacco prices raised by 12 per cent.

New Budget proposals for 1980 submitted to the Althing after the new coalition Government had come into office.



White fish prices raised by 4 per cent. Oil charge lowered from 5 to 2.5 per cent. Share prices consequently rose by 4 per cent, boat-owners share by 0.6 per cent and costs of processing plants by 1.7 per cent.

Capelin fish banned as from 10th March.

Prices to farmers raised by 5.5 per cent.

Announcement of a 3 per cent devaluation of the krona.

#### *April*

Petrol tax raised from Kr. 70.93 to Kr. 91.36 per litre.

Approval of the 1980 Budget by the Althing.

Introduction of an energy equalisation charge in order to lower heating costs in oil heated dwellings. The charge was levied as a 1½ percentage point supplement to the sales tax.

#### *May*

The government's Investment Programme and Credit Budget for 1980 submitted to the Althing.

Several budgetary measures approved by the Althing, i.a. application of the 1980 tax reform with new tax brackets, increased personal tax allowances and children's allowances. Airport tax raised from Kr. 5 500 to Kr. 8 800 per passenger on international flights.

Kr. 5 billion worth of savings certificates issued.

Cod fishing banned for a total of 66 days in the period May through mid-August.

#### *June*

In accordance with the Investment Programme and Credit Budget for 1980 the Althing authorized foreign and domestic borrowing at Kr. 11.3 billion and Kr. 8.9 billion respectively for public investment projects.

Introduction of quarterly oil allowance of Kr. 20 000 for persons living in oil heated dwellings.

Petrol tax raised from Kr. 91.36 to Kr. 99.84 per litre.

Adjustment of interest rates in accordance with the Economic Management Act.

White fish prices raised by 11.7 per cent.

Prices to farmers raised by 11.8 per cent.

Decision to authorize the Agricultural Production Board to levy a tax on imported feedstuff of up to 200 per cent of the cif value. A 200 per cent tax was subsequently introduced with effect from 24th June.

#### *July*

Introduction of new 2-year time deposits, fully index linked (credit terms index) with a real interest rate of 1 per cent. Similar accounts opened with the Central Bank for deposit money banks at an interest rate of 2½ per cent. Interest rate on indexed loans of four years or longer to maturity raised from 2 to 2½ per cent.

Herring quota in 1980 raised to 50 000 tons compared with a quota of 35 000 tons in 1979, and an actual catch of 45 000 tons.

#### *August*

Cod fishing banned for a total of 31 days in the period mid-August/end-November. Quota of 650 000 tons of capelin distributed among 52 boats; fishing permitted as from 5th September.

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***STATISTICAL ANNEX***

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Table A Supply and use of resources  
Kr. million, current prices

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 <sup>1</sup>
Private consumption	28 183	35 667	44 685	60 919	2 210	124 990	164 110	232 380	354 550	531 610
Public consumption	4 230	5 519	7 225	9 924	5 670	21 968	29 938	42 978	68 360	100 600
Gross fixed asset formation	10 511	16 050	19 100	28 610	15 150	63 560	78 010	108 750	150 540	212 940
EXPENDITURE ON FINAL DOMESTIC USE	42 744	57 236	71 010	99 453	153 030	210 518	272 058	384 108	573 450	845 150
Change in stocks of export products and livestock	-393	1 580	-840	-189	2 578	3 680	-1 710	7 030	-3 890	3 100
NATIONAL EXPENDITURE	42 531	58 816	70 170	99 264	156 608	214 198	270 348	391 138	569 560	848 250
Exports of goods and services	21 138	22 373	26 205	37 390	48 080	72 190	105 520	145 270	249 805	385 615
Imports of goods and services	20 487	26 233	27 960	40 025	63 610	93 570	109 910	154 925	241 935	392 835
GROSS NATIONAL PRODUCT (market prices)	43 182	54 956	68 415	96 629	141 078	192 818	265 958	381 483	577 430	841 030
Depreciation	6 061	6 703	8 458	11 353	17 175	28 332	37 133	48 929	75 269	113 350
NET NATIONAL PRODUCT (market prices)	37 121	48 253	59 957	85 276	123 903	164 486	228 825	332 554	502 161	727 280
Indirect taxes	9 357	12 798	15 697	23 063	36 247	52 080	69 989	97 839	146 200	217 300
Subsidies	1 668	3 014	3 317	4 380	7 509	12 431	12 614	16 838	31 100	54 200
NET NATIONAL INCOME	29 432	38 469	45 577	66 593	95 165	124 837	171 450	251 553	387 061	564 180
Net income to abroad	481	509	890	1 180	1 915	4 863	7 283	8 830	16 100	25 550
NET DOMESTIC INCOME	29 913	38 978	48 467	67 773	97 080	129 700	178 733	260 383	403 161	589 730

<sup>1</sup> Provisional.

Sources: Direct Icelandic communication to the OECD; National Economic Institute.

Table B Supply and use of resources  
Kr. million, 1969 prices

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 <sup>1</sup>
Private consumption	25 311	29 459	32 292	35 101	37 558	33 802	34 140	36 871	39 083	39 865
Public consumption	3 551	3 791	4 078	4 463	4 736	4 964	5 311	5 353	5 554	5 665
Gross fixed asset formation	9 272	13 171	13 043	15 670	17 360	15 900	15 490	17 270	16 040	15 790
EXPENDITURE ON FINAL DOMESTIC USE	38 134	46 421	49 413	55 234	59 654	54 666	54 941	59 494	60 677	61 320
Change in stocks of export products and livestock	-255	1 351	-787	-350	952	1 243	-770	570	-147	-110
NATIONAL EXPENDITURE	37 879	47 772	48 626	54 884	60 606	55 909	54 171	60 064	60 530	61 210
Exports of goods and services	19 095	18 366	20 255	22 052	21 888	22 187	24 836	27 403	31 395	33 111
Imports of goods and services	19 932	24 356	24 699	29 368	33 250	29 819	29 455	34 950	37 120	38 272
GROSS NATIONAL PRODUCT	37 042	41 782	44 182	47 568	49 244	48 277	49 552	52 517	54 805	56 049
Effect of changes in terms of trade	1 463	2 807	2 815	4 881	3 782	1 673	3 395	5 195	5 445	3 176
Export income	20 558	21 173	23 070	26 933	25 670	23 860	28 231	32 598	36 840	36 287
Income balance of goods and services	626	-3 183	-1 629	-2 435	-7 580	-5 959	-1 224	-2 352	-280	-1 985
GROSS NATIONAL INCOME <sup>2</sup>	38 505	44 589	46 997	52 449	53 026	49 950	52 947	57 712	60 250	59 225

NOTE: Estimates of real income coincide with output in real terms on the assumption of unchanged terms of trade. Due to particularly strong fluctuations in Icelandic terms of trade national expenditure in real terms may deviate substantially from real gross national product without adverse effects on the balance of payments. This is explicitly introduced in the Icelandic national accounts, as shown above. The item "Export income", obtained through the deflation of exports with a price index for imports, expresses the external purchasing power of the export earnings, and the difference between this item and exports, normally deflated with an export price index, is a measure of the real income "effect of changes in terms of trade".

<sup>1</sup> Provisional.

<sup>2</sup> Gross national product + effect of changes in terms of trade.

Source: National Economic Institute.

Table C Production and employment

		1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	
<b>FISHERIES AND FISH PROCESSING</b>												
Export production: Value, current prices	Kr. mill.	9 609	11 405	11 823	19 510	26 576	37 891	53 648	84 186	133 100	214 400	
	1973 prices <sup>1</sup>	Kr. mill.	19 954	18 820	17 691	19 510	19 944	19 922	22 213	26 900	28 433	32 783
Fishing fleet <sup>2</sup> , end of year: Trawlers	GRT	16 981	17 911	20 340	29 810	34 796	36 523	36 843	38 422	39 096	40 269	
	Motor boats	GRT	61 698	60 984	62 146	62 042	62 982	62 456	60 313	62 817	67 319	63 891
Total	GRT	78 679	78 895	82 486	91 852	97 778	98 979	97 156	101 239	106 415	104 160	
Employment in fish processing	1962 = 100	103.9	109.0	107.0	105.7	110.5	122.0	127.7	136.1	134.0	135.0	
<b>AGRICULTURE</b>												
Production: Value, current prices <sup>3</sup>	Kr. mill.	3 686	4 700	5 868	8 032	11 651	15 969	20 858	30 566	48 032	62 551	
	1969 prices	Kr. mill.	3 114	3 420	3 558	3 709	3 840	3 702	3 835	3 968	4 112	3 856
Capacity <sup>4</sup> : Cultivated grassland	1 000 hect.	104.5	108.4	111.3	113.8	115.0	117.0	119.2	121.6	123.6	125.7	
	Sheep	1 000 heads	780.6	735.5	786.2	828.6	845.8	863.6	850.8	896.2	890.8	796.8
	Cattle	1 000 heads	53.4	53.3	59.2	65.3	67.3	66.5	61.8	62.7	62.8	57.2
<b>MANUFACTURING (exc. fish processing)<sup>5</sup></b>												
Production, volume	1970 = 100	100.0	114.9	124.2	134.9	135.3	133.1	139.9	151.7	156.1	163.9	
Employment	1970 = 100	100.0	107.6	111.4	111.7	110.2	109.4	111.9	117.6	122.1	124.0	
<b>DWELLING CONSTRUCTION</b>												
Started	Number	1 469	1 833	1 963	3 377	2 640	2 261	2 268	1 980	2 281		
Completed	Number	1 329	1 362	1 930	2 220	2 193	2 068	2 172	2 300	2 283		
Under construction, end of year	Number	3 039	3 510	3 543	4 672	5 119	5 312	5 408	5 088	5 086		

1 As from 1976 the constant price series is based on chain quantity indices using current years weights.

2 Including whale-catchers, excluding open boat.

3 Including change in livestock.

4 Beginning of year.

5 Excluding aluminium and ferrosilicon.

Source: Direct Icelandic communication to the OECD.

Table D Gross fixed asset formation  
Kr. million, current prices

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 <sup>1</sup>
<b>GROSS FIXED ASSET FORMATION, TOTAL</b>	<b>10 511</b>	<b>16 050</b>	<b>19 100</b>	<b>28 610</b>	<b>45 150</b>	<b>63 560</b>	<b>78 010</b>	<b>108 750</b>	<b>150 540</b>	<b>212 940</b>
Classification by end-use:										
<b>INDUSTRIAL ASSET FORMATION</b>	<b>4 718</b>	<b>8 350</b>	<b>8 910</b>	<b>13 140</b>	<b>20 800</b>	<b>25 810</b>	<b>27 730</b>	<b>46 230</b>	<b>66 950</b>	<b>91 940</b>
Agriculture	728	960	1 300	1 860	2 920	3 850	4 770	6 690	9 250	11 500
Fishing	705	790	1 880	4 640	4 910	4 880	3 500	10 440	10 720	16 500
Fish processing	282	530	800	1 265	1 920	2 640	2 570	4 985	6 390	10 200
Manufacturing other than fish processing	1 320	1 850	2 370	1 805	2 770	4 500	5 240	8 470	18 800	26 810
Transport equipment	742	2 750	1 010	1 380	3 650	4 550	5 490	7 520	8 250	9 730
Commercial buildings	613	690	930	1 250	2 710	2 930	3 970	4 990	8 190	9 800
Various machinery and equipment	328	780	620	940	1 920	2 460	2 190	3 135	5 350	7 400
<b>RESIDENTIAL CONSTRUCTION</b>	<b>2 138</b>	<b>2 700</b>	<b>4 120</b>	<b>7 740</b>	<b>10 200</b>	<b>13 460</b>	<b>16 940</b>	<b>23 270</b>	<b>33 980</b>	<b>49 000</b>
<b>PUBLIC WORKS AND BUILDINGS</b>	<b>3 655</b>	<b>5 000</b>	<b>6 070</b>	<b>7 730</b>	<b>14 150</b>	<b>24 290</b>	<b>33 340</b>	<b>39 250</b>	<b>49 610</b>	<b>72 000</b>
Electric power, generation and distribution	1 053	1 510	1 680	1 800	4 100	9 960	15 720	13 860	15 000	23 500
Geothermal heating and water supply	338	350	540	650	1 350	2 600	3 350	6 350	9 000	13 300
Communications	1 263	1 880	2 350	3 480	5 450	7 250	8 810	11 545	15 810	22 000
Public buildings	1 001	1 260	1 500	1 800	3 250	4 480	5 460	7 495	9 800	13 200
Classification by type of assets:										
<b>MACHINERY AND EQUIPMENT</b>	<b>2 857</b>	<b>5 948</b>	<b>5 339</b>	<b>8 837</b>	<b>13 418</b>	<b>16 443</b>	<b>15 846</b>	<b>29 103</b>	<b>40 038</b>	<b>57 100</b>
Machinery and other equipment	2 115	3 198	4 329	7 457	9 768	11 893	10 356	21 583	31 788	47 370
Transport equipment	742	2 750	1 010	1 380	3 650	4 550	5 490	7 520	8 250	9 730
<b>BUILDINGS AND OTHER CONSTRUCTION</b>	<b>7 654</b>	<b>10 102</b>	<b>13 761</b>	<b>19 773</b>	<b>31 732</b>	<b>47 117</b>	<b>62 164</b>	<b>79 647</b>	<b>110 502</b>	<b>155 840</b>
Residential buildings	2 138	2 700	4 120	7 740	10 200	13 460	16 940	23 270	33 980	49 000
Non-residential buildings	2 582	3 324	4 696	5 644	9 942	11 963	15 222	22 560	33 560	44 390
Other construction	2 934	4 078	4 945	6 389	11 590	21 694	30 002	33 817	42 962	62 450

<sup>1</sup> Provisional.

Sources: Direct Icelandic communication to the OECD; National Economic Institute.



**Table E Gross fixed asset formation**  
Kr. million, 1969 prices

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 <sup>1</sup>
<b>GROSS FIXED ASSET FORMATION, TOTAL</b>	<b>9 272</b>	<b>13 171</b>	<b>13 043</b>	<b>15 670</b>	<b>17 360</b>	<b>15 900</b>	<b>15 490</b>	<b>17 270</b>	<b>16 040</b>	<b>15 790</b>
Classification by end-use:										
<b>INDUSTRIAL ASSET FORMATION</b>	<b>4 323</b>	<b>7 219</b>	<b>6 578</b>	<b>7 920</b>	<b>9 205</b>	<b>7 200</b>	<b>5 970</b>	<b>8 425</b>	<b>8 060</b>	<b>7 840</b>
Agriculture	634	770	927	1 025	1 140	1 000	980	1 115	1 085	950
Fishing	651	634	1 398	2 975	2 400	1 430	680	1 990	1 300	1 340
Fish processing	249	438	543	680	730	690	550	900	800	960
Manufacturing other than fish processing	1 221	1 578	1 723	1 040	1 150	1 260	1 170	1 585	2 305	2 320
Transport equipment	729	2 552	872	940	1 880	1 380	1 300	1 470	995	880
Commercial buildings	523	529	580	610	870	660	730	700	785	640
Various machinery and equipment	316	718	535	650	1 035	780	560	665	790	750
<b>RESIDENTIAL CONSTRUCTION</b>	<b>1 825</b>	<b>2 057</b>	<b>2 569</b>	<b>3 775</b>	<b>3 270</b>	<b>3 040</b>	<b>3 100</b>	<b>3 275</b>	<b>3 250</b>	<b>3 190</b>
<b>PUBLIC WORKS AND BUILDINGS</b>	<b>3 124</b>	<b>3 895</b>	<b>3 896</b>	<b>3 975</b>	<b>4 885</b>	<b>5 660</b>	<b>6 420</b>	<b>5 570</b>	<b>4 730</b>	<b>4 760</b>
Electric power, generation and distribution	909	1 215	1 095	920	1 470	2 490	3 300	2 150	1 550	1 695
Geothermal heating and water supply	275	259	331	320	430	590	610	895	860	865
Communications	1 086	1 463	1 535	1 855	1 945	1 570	1 510	1 470	1 380	1 340
Public buildings	854	958	935	880	1 040	1 010	1 000	1 055	940	860
Classification by type of assets:										
<b>MACHINERY AND EQUIPMENT</b>	<b>2 717</b>	<b>5 367</b>	<b>4 276</b>	<b>5 802</b>	<b>6 798</b>	<b>5 039</b>	<b>3 765</b>	<b>5 958</b>	<b>5 401</b>	<b>5 470</b>
Machinery and other equipment	1 988	2 815	3 404	4 862	4 918	3 659	2 465	4 488	4 406	4 590
Transport equipment	729	2 552	872	940	1 880	1 380	1 300	1 470	995	880
<b>BUILDINGS AND OTHER CONSTRUCTION</b>	<b>6 555</b>	<b>7 804</b>	<b>8 767</b>	<b>9 868</b>	<b>10 562</b>	<b>10 861</b>	<b>11 725</b>	<b>11 312</b>	<b>10 639</b>	<b>10 320</b>
Residential buildings	1 825	2 057	2 569	3 775	3 270	3 040	3 100	3 275	3 250	3 190
Non-residential buildings	2 228	2 562	2 988	2 764	3 193	2 731	2 812	3 250	3 300	2 980
Other construction	2 502	3 185	3 210	3 329	4 099	5 090	5 813	4 787	4 089	4 150

<sup>1</sup> Provisional.

Sources: Direct Icelandic communication to the OECD; National Economic Institute.

Table F Balance of payments, OECD basis  
US \$ million

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 <sup>1</sup>
Exports, fob	107.1	146.2	150.4	191.7	290.2	329.3	308.8	404.0	512.6	649.4	790.8
Imports, fob	107.0	143.5	200.0	215.5	325.4	476.6	442.9	429.5	565.2	617.5	764.5
Trade balance	0.1	2.7	-49.6	-23.8	-35.2	-147.3	-134.1	-25.5	-52.6	31.9	26.3
Services, net	4.3	4.7	5.5	3.7	5.9	-8.3	-5.1	1.3	4.0	-2.9	-46.8
Balance on goods and services	4.4	7.4	-44.1	-20.1	-29.3	-155.6	-139.2	-24.2	-48.6	29.0	-20.5
Current transfers, net	-0.8	-0.4	-0.1	0.2	16.2	0.6	-0.6	0.2	-0.1	-0.9	-2.8
Current balance	3.6	7.0	-44.2	-19.9	-13.1	-155.0	-139.8	-24.0	-48.7	28.1	-23.3
Long-term capital (excl. spec. trans.)	20.0	0.4	48.1	24.4	23.3	85.1	107.5	47.5	98.4	64.4	79.7
(a) Private	5.8	0.6	35.5	0.4	0.9	39.9	43.5	6.6	22.0	19.6	23.3
(b) Official	14.2	-0.2	12.6	24.0	22.4	45.2	64.0	40.9	76.4	44.8	56.4
Basic balance	23.6	7.4	3.9	4.5	10.2	-69.9	-32.3	23.5	49.7	92.5	56.4
Non-monetary short-term capital	-1.6	3.7	3.8	0.7	-15.6	-9.5	-26.6	-22.6	-14.5	-16.9	-29.4 <sup>2</sup>
Errors and omissions	-0.8	1.0	-0.6	—	-1.8	0.4	-0.4	-4.2	-14.2	-26.6	—
Balance on non-monetary transactions	21.2	12.1	7.1	5.2	-7.2	-79.0	-59.3	-3.3	21.0	49.0	27.0
Private monetary institutions short-term capital	-9.6	2.7	3.6	9.9	-0.6	-9.3	-3.1	-1.7	-1.3	-0.9	-2.0
Balance on official settlements	11.6	14.8	10.7	15.1	-7.8	-88.3	-62.4	-5.0	19.7	48.1	25.0
Use of IMF credit	3.8	-9.5	-1.8	—	—	18.6	19.4	28.9	—	-11.7	-16.3
Special transactions	—	—	—	—	—	—	—	—	—	—	—
Miscellaneous official accounts	-4.9	6.0	3.5	-3.6	23.8	20.2	43.8	7.1	-4.2	10.8	15.5
Allocation of SDRs	—	2.5	2.5	2.6	—	—	—	—	—	—	3.5
Change in reserves (+ = increase)	10.5	13.8	14.9	14.1	16.0	-49.5	0.8	31.0	15.5	47.2	27.7
(a) Gold	—	—	—	—	—	—	—	—	0.5	0.3	0.3
(b) Currency assets	14.2	13.3	6.7	10.4	16.0	-42.5	2.6	34.5	14.0	49.3	22.6
(c) Reserve position in IMF	-3.7	—	5.7	—	—	-7.0	—	—	—	—	7.0
(d) Special Drawing Rights	—	0.5	2.5	3.7	—	-0.1	-1.8	-3.5	1.0	-2.4	-2.2

1 Provisional.

2 Including errors and omissions.

Sources: Central Bank of Iceland; Direct Icelandic communication to the OECD.

Table G Central government income and expenditure

Accruals basis  
Kr. billion

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980 <sup>1</sup>
<b>CURRENT REVENUE</b>	9.80	13.26	18.53	24.88	37.72	51.04	71.32	100.28	163.65	248.04	346.18
Direct taxes	1.06	1.49	4.32	5.67	5.94	6.10	9.19	11.04	28.05	46.22	63.85
Indirect taxes <sup>2</sup>	8.50	11.60	14.00	18.91	31.39	44.18	60.98	87.34	132.70	196.58	276.23
Other	0.24	0.17	0.21	0.29	0.39	0.76	1.15	1.90	2.91	5.24	6.09
<b>CURRENT EXPENDITURE</b>	6.82	10.29	14.06	19.74	32.33	43.86	53.72	80.18	135.42	207.62	286.83
Purchase of goods and services <sup>3</sup>	2.87	3.82	5.38	7.56	11.95	16.38	22.65	38.93	63.39	93.13	137.54
Current transfers and subsidies	3.95	6.47	8.68	12.18	20.39	27.48	31.07	41.25	72.03	114.49	149.29
<b>GROSS SAVING</b>	2.98	3.28	4.47	5.14	5.39	7.18	17.60	20.10	28.23	40.42	59.35
Gross fixed asset formation	0.82	1.40	1.59	2.13	3.01	4.80	4.70	8.01	9.61	14.33	19.47
<b>SURPLUS ON CURRENT AND FIXED INVESTMENT ACCOUNT</b>	2.16	1.88	2.88	3.01	2.38	2.38	12.90	12.09	18.62	26.09	39.88
Lending, net <sup>4</sup>	-0.11	-0.25	0.02	0.05	0.10	-2.04	1.33	-0.78	2.18	-3.36	-6.70
Net capital transfers to other sectors	1.74	2.22	2.75	3.26	5.66	9.92	12.09	14.63	20.23	27.20	36.94
<b>OVERALL BALANCE<sup>5</sup></b>	0.52	-0.10	0.12	-0.30	-3.39	-5.50	-0.52	-1.76	-3.79	2.25	9.64

1 Budget on cash basis.

2 Including employers' social security contributions.

3 Including interest.

4 "-" = net borrowing.

5 Net change in floating debts and cash balances.

Sources: Direct Icelandic communication to the OECD; Central Bank of Iceland.

Table H Fish catch, wages and prices

	Fish catch (thous. tons)					Wages and prices (1969 = 100)											
	Total	White fish, etc.	Herring	Capelin	Shrimp, lobster, shell-fish	Hourly wage rates, unskilled workers <sup>1</sup>	Cost of living index <sup>2</sup>				Building cost <sup>3</sup>	Export prices of fish products <sup>4</sup>					
							Total	Goods and services		Rent		Fresh and iced fish	Frozen products	Salted products	Fish meal and oil		
								Total	Food, beverages							Other	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
1970	729	475	51	192	11	123	113	114	116	114	106	117	129.5	116.9	125.1	135.2	
1971	684	425	61	183	15	140	120	123	118	126	112	132	144.3	156.4	162.3	128.7	
1972	726	390	42	277	17	187	133	140	137	142	128	160	158.8	179.2	185.6	129.0	
1973	907	407	43	442	15	226	162	175	177	171	148	205	229.9	228.8	237.6	295.4	
1974	944	431	40	462	11	327	232	249	259	237	182	312	252.8	257.1	389.6	290.5	
1975	994	450	33	501	10	438	346	374	387	360	245	443	225.3	254.1	364.0	184.1	
1976	986	483	31	459	13	556	457	499	518	483	321	547	342.7	286.4	372.8	236.1	
1977	1 374	518	29	813	14	790	596	652	693	619	411	711	432.7	341.4	386.7	344.9	
1978	1 566	544	37	967	18	1 225	859	940	997	904	581	1 046	548.5	356.7	393.3	324.8	
1979	1 649	622	45	964	18	1 748	1 250	1 370	1 326	1 368	835	1 538	554.5	390.6	446.0	284.8	
<b>Quarterly:</b>																	
1978	1	590	115	—	470	5	1 083	728	802	877	767	465	852	100.0	100.0	100.0	100.0
	2	203	198	—	—	5	1 278	813	883	959	848	594	929	66.0	93.5	120.2	96.4
	3	384	158	3	218	5	1 375	904	894	1 101	935	618	1 050	70.5	101.5	107.6	95.8
	4	389	73	34	279	3	1 459	960	1 054	1 052	1 065	646	1 161	90.0	97.7	103.2	88.3
1979	1	708	181	—	522	5	1 560	1 005	1 105	1 061	1 141	666	1 248	93.4	104.4	112.5	87.1
	2	201	198	—	—	3	1 790	1 130	1 225	1 156	1 277	854	1 355	66.8	113.7	147.0	84.6
	3	332	152	6	169	5	1 954	1 283	1 404	1 399	1 422	886	1 495	81.5	111.1	118.9	77.9
	4	408	91	39	273	5	2 212	1 487	1 640	1 688	1 630	936	1 718	105.2	103.8	123.2	81.3

1 Yearly figures are weighted averages. Quarterly figures give the wage rate at the end of the quarter.

2 New index beginning February 1968 (Jan. = 100), excluding direct taxes.

3 February, June and October. From 1976: March, June, September, December.

4 At a constant rate of exchange; base year for the quarterly series is 1969. The annual and quarterly indices, which are based on fob prices in terms of foreign currencies, are not fully comparable due to weighting differences as well as to the fact that the annual series is an implicit price index while the quarterly series is a unit base index.

Sources: Icelandic Statistical Bulletin and Hagtidindi; Central Bank of Iceland, Economic Statistics; Direct Icelandic communication to the OECD.



Table 1 Foreign trade, total and by area  
US \$ million, monthly rates

Total imports cif		Imports by area						Total exports fob		Exports by area							
Orig.	Adj.	OECD countries				Non-OECD countries		Orig.	Adj.	OECD countries				Non-OECD countries			
		Total	Europe		USA	Eastern Europe	Developing countr.			Total	Europe		USA	Eastern Europe	Developing countr.		
			EEC	Others							EEC	Others					
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
1970	13.1	..	10.8	7.2	2.1	1.1	1.4	0.9	12.2	..	10.8	4.6	2.4	3.7	1.2	0.2	
1971	17.5	..	14.6	9.1	2.9	1.8	1.8	1.0	12.5	..	10.9	4.0	2.2	4.6	1.4	0.2	
1972	19.2	..	16.3	10.1	3.7	1.5	2.0	0.9	15.7	..	13.4	5.2	3.3	4.8	1.9	0.4	
1973	29.6	..	26.2	13.3	7.5	2.2	2.7	0.8	24.1	..	21.6	9.5	5.0	6.5	2.1	0.4	
1974	43.2	..	36.3	19.3	9.9	3.5	5.8	1.0	27.7	..	23.5	8.1	8.1	6.1	3.4	0.7	
1975	40.6	..	34.3	18.4	8.8	3.7	5.1	1.2	25.7	..	20.7	6.4	6.4	7.5	4.3	0.6	
1976	38.9	..	32.1	17.0	7.6	4.1	5.5	1.4	33.4	..	29.1	10.5	8.3	9.6	3.5	0.9	
1977	50.7	..	41.6	24.1	10.7	3.3	6.3	2.7	42.7	..	34.8	13.1	7.9	12.9	6.1	1.7	
Quarterly:																	
1978	1	48.5	61.7	40.1	23.3	8.8	3.5	5.7	2.6	41.8	55.3	34.6	14.4	9.3	10.8	4.0	3.1
	2	61.5	55.9	52.3	27.7	15.5	4.6	6.2	2.9	49.5	41.3	39.1	15.2	6.0	17.0	7.5	2.9
	3	54.0	58.0	45.5	27.7	11.2	4.2	5.9	2.6	57.3	57.0	45.7	15.1	8.0	19.7	3.9	7.8
	4	61.1	57.0	51.4	27.7	15.3	3.8	5.4	4.3	65.1	63.0	52.8	23.7	13.2	15.4	4.8	7.5
1979	1	54.7	64.0	47.0	25.6	13.1	3.8	5.2	2.4	52.2	63.0	43.9	21.5	10.5	10.2	5.9	2.5
	2	62.6	58.0	51.9	27.9	14.8	5.0	8.1	2.6	60.5	56.0	56.0	21.3	7.4	22.2	3.3	1.2
	3	73.7	78.0	58.4	33.3	16.8	4.3	11.2	3.1	68.0	66.0	61.1	25.8	12.4	20.7	5.4	1.5
	4	80.9	75.0	68.1	39.2	18.7	4.8	9.5	3.3	79.8	77.0	69.0	31.8	16.6	19.8	6.7	4.1
1980	1	75.5	88.0	62.2	32.4	20.1	5.3	10.7	2.7	60.6	72.0	50.9	25.4	9.0	15.7	7.7	1.6
	2	94.0	84.0	80.7	35.6	20.3	13.7	9.5	3.8	83.8	77.0	68.0	27.4	21.3	17.6	7.7	6.4

Source: OECD, Foreign Trade Statistics, Series A.

Table J Foreign trade by commodity group  
US \$ million

		Imports by commodity group					Exports by commodity group										
		Other imports															
Total	Transport equipment	Total	Food and live animals	Semi-manufactured goods	Machinery and apparatus	Other goods	Total	Fish products, total	Frozen fish filets	Herring salted	Herring and capelin meal	Other fish and misc. prod.	Agricultural prod.	Aluminium prod.	Other manuf. prod.		
SITC No.	73	0		6	71.72												
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		
1970	157.3	19.2	138.1	17.1	37.0	26.7	57.3	146.6	114.6	48.7	5.2	5.6	1.7	5.0	19.4	5.9	
1971	220.0	43.0	177.0	18.2	44.5	42.6	71.7	149.7	125.6	57.7	1.7	5.2	1.4	4.5	10.1	8.1	
1972	232.0	32.3	199.7	21.3	49.6	49.3	79.5	189.7	140.0	59.9	1.9	7.1	1.3	5.9	30.9	10.6	
1973	354.0	68.6	285.4	31.3	78.7	60.4	115.0	295.9	218.1	79.7	0.2	27.0	1.6	8.7	50.5	15.3	
1974	520.8	94.8	426.0	43.3	102.1	85.7	194.9	331.1	247.9	80.2	0.0	24.9	2.0	9.2	49.3	17.2	
1975	488.0	61.5	426.5	46.0	99.0	98.7	191.8	308.6	243.2	101.0	1.5	17.9	1.4	9.0	32.5	19.6	
1976	469.9	45.8	424.1	49.5	94.0	95.3	185.3	404.0	293.4	119.7	7.8	16.9	2.4	10.3	68.0	25.4	
1977	607.0	90.5	516.5	53.2	120.9	109.8	232.6	512.6	377.9	162.6	10.2	48.0	4.2	12.1	75.1	37.3	
1978	693.6	68.8	624.8	61.3	145.6	140.9	277.0	658.3	502.4	215.0	15.7	64.7	3.7	15.1	89.5	41.9	
1979	827.3	74.1	753.2	80.0	159.7	143.5	370.0	779.0	582.7	247.8	22.1	61.1	3.8	19.8	105.7	62.4	
Quarterly:																	
1978	1	146.6	11.0	135.6	13.5	30.5	29.1	62.5	125.3	97.1	38.1	9.5	18.0	0.8	4.8	15.6	6.8
	2	191.5	31.1	160.4	16.7	38.8	35.4	69.5	154.1	111.5	58.0	0.3	16.5	0.7	2.7	28.9	9.6
	3	172.8	15.0	157.8	15.1	35.0	44.0	63.7	183.7	142.6	65.6	0.0	11.6	1.0	2.1	23.6	14.0
	4	182.7	11.7	171.0	16.0	41.3	32.4	81.3	195.2	151.2	53.3	5.9	18.6	1.2	5.5	21.4	11.5
1979	1	163.7	9.9	153.8	18.4	34.6	35.0	65.7	156.6	114.1	36.3	12.3	21.4	0.5	5.7	26.4	9.7
	2	186.4	30.9	155.5	15.0	30.9	29.7	79.9	179.9	144.0	71.6	0.1	13.8	0.9	2.1	23.7	9.1
	3	220.3	14.4	205.9	21.0	45.3	39.4	100.2	203.2	149.6	69.5	0.3	5.6	1.2	4.3	27.3	20.8
	4	256.9	18.9	238.0	25.6	48.9	39.4	124.1	239.3	175.0	70.4	9.4	20.3	1.2	7.7	28.3	22.8
1980	1	226.5	13.0	213.5	22.6	46.8	41.2	102.9	182.4	130.1	63.4	10.6	15.1	0.8	5.3	28.6	17.6
	2	283.9	60.5	223.4	23.5	47.2	41.1	111.6	251.2	200.0	64.8	0.2	22.5	3.6	2.6	26.3	18.7

Sources: Icelandic Statistical Bulletin; OECD.

Table K Money and credit  
End of period

	Central Bank		Non-Bank sector			Deposit money banks (DMB)			Credits granted by DMB					Foreign exchange		
	Interest rate on bank overdrafts	Net position of government	Money supply		Savings deposits	Required reserves	Redis-counted bills	Net foreign position	Total	of which to:				Official gold and foreign exchange <sup>3</sup>	Commercial banks' short-term foreign assets	
			M1 <sup>1</sup>	M2 <sup>2</sup>						Agri-culture	Fishery and fish processing	Manu-facturing and commerce	Dwell-ings			
Per cent	Kr. million														Million SDR's	Kr.
1970	16.00	523	4 668	13 508	12 624	3 359	1 744	-330	16 052	1 719	2 125	6 149	2 013	54	-320	
1971	16.00	512	5 685	16 006	15 198	4 030	2 053	-550	14 587	1 940	2 844	6 849	2 514	64	-1 113	
1972	16.00	235	6 978	19 165	17 782	4 741	2 690	-1 025	23 492	2 339	3 589	8 142	3 215	78	-571	
1973	18.00	1 440	9 681	25 949	23 097	6 797	3 979	-1 538	31 274	3 337	5 047	10 480	3 929	83	-447	
1974	24.00	5 352	12 450	33 572	29 567	8 579	8 226	-3 393	45 811	4 514	10 235	14 854	4 773	40	365	
1975	24.00	12 060	17 050	44 159	37 548	11 400	12 524	-8 382	56 068	7 212	12 226	17 884	5 746	40	985	
1976	36.00	14 381	20 747	54 788	51 260	15 891	16 010	-9 303	70 781	9 586	16 146	20 962	7 733	69	1 395	
1977	36.00	16 853	30 606	78 291	73 265	22 482	26 499	-15 040	100 869	15 293	26 399	26 716	10 548	82	1 764	
1978	36.00	30 488	42 870	112 229	109 978	32 880	39 738	-27 901	141 925	23 970	33 252	37 658	15 594	106	2 944	
1979	36.00	30 341	63 231	169 032	175 965	53 320	58 723	-45 723	222 744	37 819	50 135	61 680	27 346	125	3 971	
Quarterly:																
1978	1	36.00	25 775	33 986	84 261	77 826	25 702	26 590	-17 097	122 084	13 197	31 004	31 422	11 961	92	1 962
	2	36.00	26 717	37 111	91 694	84 224	27 932	30 046	-19 463	126 598	12 740	36 485	36 037	13 696	70	675
	3	36.00	29 802	38 552	93 191	86 306	28 442	33 909	-22 861	137 015	15 306	38 878	37 794	14 955	67	2 471
	4	36.00	30 488	42 870	112 229	109 978	32 880	39 738	-27 901	141 925	23 970	33 252	37 658	15 594	106	2 944
1979	1	36.00	42 004	50 571	125 973	122 794	38 800	38 379	-25 350	159 794	20 045	40 955	45 948	17 934	103	2 554
	2	4.00 <sup>4</sup>	37 823	55 243	138 171	132 880	45 530	42 740	-28 653	182 326	19 289	48 128	54 584	21 554	105	2 650
	3	4.50 <sup>4</sup>	36 789	54 784	139 206	138 023	48 293	45 169	-33 315	199 479	21 783	49 242	58 368	25 555	104	3 754
	4	4.50 <sup>4</sup>	30 341	63 231	169 032	175 965	53 320	58 723	-45 723	222 744	37 819	50 135	61 680	27 346	125	3 971
1980	1	4.50 <sup>4</sup>	39 477	69 147	182 957	190 462	65 758	64 437	-39 775	261 971	34 881	63 598	79 542	32 314	119	3 145
	2	4.75 <sup>4</sup>	39 063	77 009	198 932	201 840	74 711	72 473	-46 776	296 746	32 610	77 595	88 765	37 315	100	6 396

1 Notes and coins, demand deposits.

2 Broad money, i.e. M1 plus general savings deposits.

3 Excluding IMF position.

4 Per month.

Sources: Central Bank of Iceland, *Annual reports*; OECD, *Main Economic Indicators*.

*BASIC STATISTICS :*  
*INTERNATIONAL COMPARISONS*



BASIC STATISTICS: INTERNATIONAL COMPARISONS

	Reference period	Units	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Japan	Luxembourg	Netherlands	New Zealand	Norway	Portugal	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States	Yugoslavia <sup>1</sup>
POPULATION	Mid-1978	Thousands	14 248	7 508	9 841	23 499	5 105	4 752	53 278	61 327	9 360	223	3 221	56 697 <sup>2</sup>	114 920	358	13 937	3 129	4 060	9 820	36 778	8 278	6 337	42 738	55 902	218 717	21 968
	"	Inhabitants per sq. km	2	89	323	2	119	16	97	247	71	2	46	188	309	138	412	12	13	107	73	18	153	55	229	23	86
	Mid-1968 to Mid-1978	Net average annual increase	1.7	0.2	0.2	1.3	0.5	0.3	0.7	0.3	0.7	1.0	1.0	0.7	1.3	0.6	0.9	0.6	0.7	1.1	0.5	0.4	2.4	0.1	0.9	0.9	
EMPLOYMENT	1978	Thousands	5 975	3 015	3 711	9 972	2 473	2 074	20 921	24 679	(3 189)	(99)	1 033	19 932	54 080	150	4 569	(1 204)	1 854	3 772	12 091	4 115	2 839	14 907	24 610	94 373	9 276 <sup>3</sup>
	"	of which: Agriculture, forestry, fishing	6.4	10.9	3.2	5.7	8.7	12.3	9.1	6.5	(27.3)	(13.3)	22.2	15.5	11.7	5.7	6.2	(11.8)	8.7	31.3	20.2	6.1	8.4	60.9	2.7	3.7	36.8
	"	Industry <sup>4</sup>	31.6	40.6	36.6	28.7	30.3	34.4	37.1	45.1	(30.7)	(37.9)	30.9	38.3	35.0	43.1	32.5	(34.1)	31.6	34.8	37.3	33.0	42.7	16.5	39.7	31.2	21.8
	"	Other	62.0	48.5	60.2	65.6	61.0	53.3	53.8	48.4	(42.0)	(48.8)	46.9	46.2	53.3	51.2	61.3	(54.1)	59.7	33.9	42.5	60.9	48.9	22.6	57.6	65.1	41.4
GROSS DOMESTIC PRODUCT at market prices	1978	US \$ billion <sup>11</sup>	109.1	58.1	96.9	205.3	55.9	33.9	471.6	638.9	31.6	2.2	12.2	260.1	973.9	3.5	130.8	18.4	40.0	17.8	147.1	87.3	84.6	52.5	309.2	2 112.4	47.1 <sup>5</sup>
	1973 to 1978	Average annual volume growth <sup>6</sup>	2.5	2.8	2.3	3.3	1.9	2.2	3.0	1.9	3.6	3.8	3.5	4.0	3.7	0.6	2.6	1.1	4.6	2.3	3.2	1.3	-1.0	6.6	1.1	2.5	6.1
	1978	Per capita	7 660	7 730	9 850	8 740	10 950	7 130	8 850	10 420	3 370	9 770	3 780	4 590	8 480	9 800	9 380	5 880	9 850	1 820	3 960	10 550	13 340	1 160	5 530	9 660	2 140
GROSS FIXED CAPITAL FORMATION	1978	% of GDP	22.7 <sup>10</sup>	26.3	21.2	22.2	22.3	23.3	21.5	21.5	23.8 <sup>8</sup>	25.5	26.7	18.8	30.2	25.8	21.2	20.5 <sup>9</sup>	31.1	20.7	18.4	19.3	21.1	20.5	18.1	18.1	35.6
	"	of which: Transport, machinery and equipment	10.0	9.7	6.5	7.6	7.4	7.8	9.1	8.9	8.1	6.8	(12.4)	7.8	10.9	9.2 <sup>22</sup>	8.2	..	11.0	7.0	..	7.2	7.0	..	9.2	7.3	..
	"	Residential construction	4.0	16.5	7.3	5.7	7.5	7.0	6.9	6.0	8.4	5.8	..	5.0	7.3	6.6 <sup>22</sup>	5.9	..	5.1	3.6	..	5.0	..	3.8	3.2	5.0	..
	1973 to 1978	Average annual volume growth <sup>6</sup>	0.4	1.7	2.1	2.2	-1.8	-3.1	0.4	0.0	-2.1	0.4	2.0	-1.7	1.2	-1.8	0.4	..	2.7	-2.9	-0.8	-1.5	-4.7	5.7	-0.7	0.5	9.8
NATIONAL SAVINGS RATIO <sup>12</sup>	1978	% of GNP	23.1 <sup>10</sup>	26.7	20.3	20.6	19.0	23.9	23.7	25.1	21.1	26.6	17.7	22.2	32.6	36.2	22.5	24.3	25.1	11.5	20.8	17.4	26.8	19.8	21.1	18.5	17.3
GENERAL GOVERNMENT	1978	% of GDP	16.8 <sup>10</sup>	17.8	17.9	20.5	23.7	19.0	15.1	20.0	16.0	11.6	18.3	16.4	9.6	15.5	18.3	16.3	18.5	14.7	10.5	28.9	12.9	12.7	20.3	18.2	25.1
	"	Current expenditure on goods and services	10.6 <sup>10</sup>	19.1	22.5	12.6	16.3	16.1	25.6	19.6	12.3	..	..	17.0	11.1	29.3 <sup>22</sup>	31.7	..	25.9	9.1	12.7 <sup>22</sup>	29.2	15.4	10.5	15.5	11.2	..
	"	Current transfer payments	31.9 <sup>10</sup>	44.5	42.7	35.8	49.0	40.2	42.3	43.3	30.2	..	..	37.0	24.3	37.9	54.4	..	52.1	27.1	26.6 <sup>22</sup>	60.3	34.0	25.9	38.8	32.6	44.0
	"	Current revenue	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
NET OFFICIAL DEVELOPMENT ASSISTANCE	1978	% of GNP	0.5	0.3	0.6	0.5	0.7	0.2	0.6	0.4	..	..	..	0.1	0.2	..	0.8	0.3	0.9	..	..	0.9	0.2	..	0.5	0.3	..
INDICATORS OF LIVING STANDARDS	1978	US \$ <sup>11</sup>	4 600	4 230	6 120	4 980	6 080	3 970	5 440	5 750	2 200	5 860	2 430	2 810	4 900	5 770	5 550	3 490 <sup>9</sup>	5 300	1 350	2 700	5 580	8 420	950	3 270	6 200	1 230
	1977	Private consumption per capita	392	248	292	389 <sup>14</sup>	271	227	314	326	66	315	180	289	173	398	277	385	273	107 <sup>14</sup>	161	350 <sup>14</sup>	307	11 <sup>14</sup>	255 <sup>14</sup>	505 <sup>14</sup>	88
	1977	Passenger cars, per 1 000 inhabitants	404	325	315	618	493	429	374	374	250	429	161	285	424	523	418	533	386	120	261	717	657	28 <sup>14</sup>	415	744	71
	1977	Telephones, per 1 000 inhabitants	351 <sup>14</sup>	247 <sup>16</sup>	286	428 <sup>14</sup>	338	363 <sup>14</sup>	274 <sup>14</sup>	308	127 <sup>14</sup>	214 <sup>14</sup>	193	224	239 <sup>20</sup>	293 <sup>14</sup>	279	259 <sup>14</sup>	270 <sup>14</sup>	76 <sup>14</sup>	185 <sup>14</sup>	363 <sup>14</sup>	285 <sup>14</sup>	44 <sup>14</sup>	324	571 <sup>20</sup>	161 <sup>14</sup>
	1976	Television sets, per 1 000 inhabitants	1.4 <sup>13</sup>	2.3	2.0	1.7	1.9	1.5	1.5	2.0	2.1	1.7 <sup>16</sup>	1.2	2.2	1.2	1.1	1.7	1.3 <sup>14</sup>	1.8	1.2	1.8	1.7 <sup>20</sup>	1.9	0.6	1.3	1.6	1.4
	1977	Doctors, per 1 000 inhabitants	45.0	32.0	61.3 <sup>20</sup>	64.9	57.4	60.8 <sup>20</sup>	54.6	41.5	45.4 <sup>20</sup>	..	50.0 <sup>14</sup>	43.9 <sup>14</sup>	70.9	33.5 <sup>20</sup>	62.7	44.8	63.6	33.4 <sup>14</sup>	35.5 <sup>14</sup>	56.3 <sup>14</sup>	70.1	12.7 <sup>20</sup>	44.6 <sup>20</sup>	73.7	..
	1978	Full-time school enrolment <sup>15</sup>	14.3	16.9	14.0	14.3	8.9	12.0	11.4	15.5	20.3	10.1	15.7	17.6	8.9	10.6	9.5	13.9	10.5	38.9 <sup>14</sup>	15.6	8.0	10.7 <sup>14</sup>	..	14.0	14.0	36.7 <sup>14</sup>
	1978	Infant mortality <sup>17</sup>	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
WAGES AND PRICES	Average annual increase																										
	1974 to 1979	Hourly earnings in industry <sup>18</sup>	11.9	8.5	10.9	11.2	12.7	14.7 <sup>21</sup>	14.0	6.5	23.6	36.7	17.7	22.0	9.1	..	7.8	14.8	11.4	20.1	26.5 <sup>21</sup>	11.1	3.2	27.5 <sup>23</sup>	16.6	8.6	19.6
	"	Consumer prices	11.5	5.7	7.5	8.9	9.8	11.9	10.1	4.2	14.1	40.0	14.5	15.8	7.3	6.9	6.7	14.3	8.5	20.0	18.9	9.7	2.9	36.6	15.5	8.1	16.7
FOREIGN TRADE	1979	US \$ million <sup>11</sup>	18 636	15 432	55 428 <sup>7</sup>	55 932	14 616	11 148	97 980	171 516	3 852	792	7 164	72 120	103 032	..	63 624	4 709	13 452	3 480	18 192	27 528	26 472	2 472	90 816	181 800	6 240
	"	As percentage of GDP	15.5	22.4	49.7	25.1	22.3	26.8	17.3	22.7	10.3	33.0	48.1	22.6	10.1	..	41.9	22.3	29.7	17.2	9.2	26.6	28.1	3.7	23.2	7.7	..
	1974 to 1979	Average annual volume increase	4.7	6.5	3.5	4.9	4.1	4.5	5.1	3.0	8.4	10.6	9.7	8.1	5.9	..	3.6	5.1	8.5	6.8	10.3 <sup>21</sup>	0.0	4.2	-2.7	4.4	4.1	3.8
	1979	Imports of goods, cif	16 536	20 184	60 348 <sup>7</sup>	53 520	18 456	11 304	106 872	157 752	9 624	828	9 864	77 808	110 672	..	67 212	4 566	13 728	6 540	25 380	28 536	29 304	5 688	102 828	207 132	12 360
	"	As percentage of GDP	13.7	29.3	54.1	24.0	28.1	27.2	18.9	20.9	25.7	34.5	66.2	24.4	10.8	..	44.3	21.6	30.3	32.4	12.9	27.6	31.1	8.6	26.3	8.8	..
	1974 to 1979	Average annual volume increase	1.7	6.6	3.2	3.2	3.6	-0.2	5.8	7.0	4.9	0.7	8.4	4.7	3.1	..	4.4	-3.2	2.3	0.8	0.5 <sup>21</sup>	0.2	4.4	-2.8	3.6	5.8	2.1
TOTAL OFFICIAL RESERVES <sup>24</sup>	End-1979	US \$ million	1 790	5 048	6 991 <sup>7</sup>	3 887	3 312	1 586	21 357	56 940	1 126	165	2 230	21 239	20 327	..	9 619	453	4 269	1 962	13 898	3 583	20 275	941	20 694	19 956	1 336
	In 1979	As percentage of imports of goods	10.8	25.0	11.6	7.3	17.9	14.0	20.0	36.1	11.7	19.9	22.6	27.3	18.4	..	14.3	9.9	31.1	30.0	54.8	12.6	69.2	16.5	20.1	9.6	10.8

1 Partly from national sources.  
 2 Total resident population.  
 3 Private and socialised sector.  
 4 According to the definition used in OECD: Labour Force Statistics: mining, manufacturing, construction and utilities (electricity, gas and water).  
 5 Social product.  
 6 At constant prices.  
 7 Including Luxembourg.

8 Excluding ships operating overseas.  
 9 Fiscal year beginning April 1st.  
 10 Year ended 30th June.  
 11 At current prices and exchange rates.  
 12  $\left[ \frac{\text{GNP} - (\text{Priv. cons.} + \text{Pub. cons.})}{\text{GNP}} \right] \times 100$   
 13 1972.  
 14 1976.

15 Children aged 15-19.  
 16 1974.  
 17 Deaths in first year per 1 000 live births.  
 18 Figures are not strictly comparable due to differences in coverage.  
 19 1973.  
 20 1975.  
 21 1973 to 1978.  
 22 1977.  
 23 1972 to 1977.

24 Gold included in reserves is valued at 35 SDR per ounce (see IMF, International Financial Statistics, series Total Reserves).

NOTE Figures within brackets are estimates by the OECD Secretariat.

Sources: Common to all subjects and countries: OECD: Labour Force Statistics, Main Economic Indicators, National Accounts, Observer, Statistics of Foreign Trade (Series A); Office Statistique des Communautés Européennes, Statistiques de base de la Communauté; IMF, International Financial Statistics; UN, Statistical Yearbook.



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(350 UQ 10 81 17 1) ISBN 92-64-12135-8  
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*PRINTED IN FRANCE*

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