OECD

ECONOMIC SURVEYS

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ICELAND

ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT ÉCONOMIQUES

MARCH 1972

BASIC STATISTICS OF ICELAND

THE LAND

Area (1 000 sq.km)	103
Productive area (1 000 sq.km)	25
of which:	
Cultivated area	1
Rough grazings	24
Unproductive area (1 000 sq.km)	78
of which:	
Glaciers	12
Other area devoid of vegetation	66

THE PEOPLE

Population, December 1970	204 578
Net increase 1966-1970, annual average (per cent)	1.2

Occupational distribution 1969 (per cent):	
Farming	12.9
Fisheries	6.0
Fish processing	8.2
Other manufacturing	16.5
Construction	11.5
Electricity, gas and water	0.7
Commerce	17.5
Transport and communication	8.8
Other services	17.9
	100.0

GOVERNMENT AND PARLIAMENT

Government, from 1971, number of Ministers:	
Progressive Party	3
Labour Alliance	2
Union of Liberals and Leftists	2

Last general election: 1971

Parliament, from 1971, number of seats:	
Independence Party (Lib. Cons.)	22
Progressive Party (Agrarians)	17
Labour Alliance (Socialists, Communists)	10
Social Democrats	6
Union of Liberals and Leftists	5
	60

Next general election: 1975

PRODUCTION AND CAPITAL FORMATION

Gross National Product in 1970:	
Millions of I.Kr.	42 400
Per head, U.S. $	2 360

Gross Fixed Capital Formation in 1970:	
Millions of I.Kr.	10 478
Per cent of GNP	25

FOREIGN TRADE

Exports of goods and services in 1970, per cent of GNP	50
Main exports 1970, per cent of exports of goods:	
Fish and fish products	78
Manufacturing products	17
Agricultural products	4

Imports of goods and services in 1970, per cent of GNP	48
Imports 1970, by use (per cent):	
Consumption goods	37
Production goods	33
Investment goods	30
	100
of which:	
Ships and aircraft	7
Fuels	9

THE CURRENCY

Monetary unit: Krona	
Currency unit per US $:	88.00

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

OECD ECONOMIC SURVEYS

ICELAND

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.*

The Members of OECD are Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

The Socialist Federal Republic of Yugoslavia is associated in certain work of the OECD, particularly that of the Economic and Development Review Committee.

The annual review of Iceland
by the OECD Economic and Development Review Committee
took place on 10th February 1972.
The present Survey has been updated subsequently.

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INTRODUCTION

The export-led recovery from the 1967-68 downturn, induced by a sizeable devaluation of the Icelandic Krona late in 1968 and fortuitously assisted by an unexpected improvement in export prices during 1969, culminated in an essentially domestic boom. Real gross national product grew by more than 9 per cent in 1971—the fastest growth rate recorded within the OECD area last year. Gross fixed investment rose by no less than an estimated 34 per cent and private consumption by a good 15 per cent in volume terms. As the residual cyclical unemployment had already been absorbed by the end of 1970, demand pressures spilt over into imports. In volume terms exports fell in 1971, reflecting essentially a decline in the fish catch as well as an accumulation of unsold stocks of aluminium ingots from the Straumsvík smelter. This development, despite a significant improvement in the terms of trade, led to a sharp deterioration in the balance of payments on current account.

The price freeze introduced in November 1970 succeeded in conjunction with accompanying measures in restraining the rate of increase in the consumer price index. Although a strict control of prices is being continued, the wage settlements of last December pose the threat of exacerbating the already precarious balance of payments situation through further stimulating pressures of domestic demand. In view of the prospective fall in productivity advances and the recent revaluation of the currencies of the most important supplier countries, there would also seem to be a serious risk of mounting pressure on both costs and prices. It is possible, therefore, to discern in the present situation a recurring pattern of development familiar in the Icelandic context —a rapid transmission of inflationary pressures from an export-induced boom to the protected domestic sectors.

The present Survey is placing greater emphasis than usual on structural problems, focussing attention in particular on the pronounced cyclical instability and the continuing high rate of inflation which have characterised the Icelandic economy during the post-war period. A brief discussion then follows of the difficulties which institutional conditions impose on the conduct of economic policy in Iceland. Against this background the major longer-term economic policy issues are considered as well as the shorter-term prospects for the current year.

I LONG-TERM TRENDS AND PROBLEMS

Structural features of the economy

Iceland's geographic location at a point where a branch of the Gulf Stream converges with cold Polar currents has endowed the country with

rich fish breeding grounds on its continental shelf, as well as a heavy precipitation which has formed the basis for abundant hydro power resources. The country is also situated in an active volcanic belt providing reserves of geothermal power. Approximately three-quarters of the country is devoid of vegetation, the remainder being covered by grassland.

With a population of only 206 000 Iceland is the least populous of all OECD Member countries, as well as the next most sparsely populated after Australia. The interior of the country remains virtually uninhabited, the major concentration of population being in the south-west corner around Reykjavik. The population is, however, growing at the relatively rapid rate of close to 1½ per cent per annum, at the same time as the degree of urbanisation is increasing.

While the country's fish resources have been intensively exploited, its abundant hydro and geo-thermal power reserves remain largely untapped. A mere 8 per cent of what at present levels of technological knowledge are considered as the economically exploitable hydro power resources of 27 000 GWh has so far been tapped. This has provided electrification for virtually the entire country, as well as leaving substantial quantities available for direct use in manufacturing processes[1]. Geo-thermal sources have been utilised for household heating and in conjunction with greenhouses, with application to industrial processes restricted to the diatomite plant at Lake Mývatn. Poverty of mineral resources, geographic remoteness from major markets, as well as the limited size of the domestic economy both with respect to final demand and the availability of finance are among the more important factors which have combined to limit the extent to which the country's power resources have so far been exploited. The grasslands have been largely used for rough summer grazing of sheep and dairy cattle which form the basis of Icelandic agriculture. The area of grassland brought under intensive cultivation through the application of chemical fertilizer—including land reclaimed from swamp areas—has been expanding over recent years by about 5 per cent per annum. Average hay yields have, however, been declining, possibly from the combined effect of unfavourable weather and use of less suitable land. Reafforestation projects have been undertaken, but appear so far to have met with only limited success.

Primary industries together account for around 19 per cent of total employment—a relatively high figure by comparison with other OECD countries[2]. Agriculture, which absorbs approximately 13 per cent of the labour force, is concentrated on sheep and dairy farming. However, in the face of adverse climatic and soil conditions, extensive subsidy and other less direct financial support is required to ensure this sector's continued viability[3].

1 In 1968 hydro sources accounted for over 95.5 per cent of total electricity output. Of this total, 79.7 per cent was consumed for " general use " and only 13.2 per cent for readily identifiable manufacturing processing. By 1970 after the opening of the aluminium plant 52.8 per cent of total output (96.8 per cent hydro-electric) was being utilised for industrial purposes.

2 In Norway, which in terms of resource endowments may be compared with Iceland (abundant hydro-electric power and fishing resources but relative poverty in mineral reserves), about 13.5 per cent of the work force is engaged in primary production.

3 Subsidies amounted to about 21 per cent of the wholesale value of agricultural output in 1969, payments being concentrated almost entirely (99.3 per cent) on two items—milk products and lamb/mutton.

Table 1 **Distribution of Employment by Sector**[1]
Per cent

	1960	1963	1966	1968	1969
Agriculture	16.0	13.7	12.8	13.0	12.9
Fishing	8.2	6.6	5.8	5.8	6.0
Manufacturing:					
of which:					
Fish processing	10.1	9.9	8.4	7.2	8.2
Other	15.5	17.9	17.1	15.8	16.5
Construction	10.7	10.6	12.1	13.7	11.5
Electricity, gas, water, etc.	1.0	0.4	0.5	0.5	0.7
Commerce, banking, etc.	14.7	16.5	18.1	17.9	17.5
Transport and communications	8.2	9.6	9.5	9.0	8.8
Other services	15.7	14.8	15.7	17.1	17.9
Total	100.0	100.0	100.0	100.0	100.0

1 Based on compulsory accident insurance figures for weeks worked in each sector.
Source: The Economic Institute.

Table 2 **Gross National Product by Industrial Origin**
Per cent

	1960	1966	1969P
Agriculture	9.6	7.6	7.5
Fishing and fish processing	16.8	18.5	15.3
Manufacturing other than fish processing	14.3	13.9	15.6
Construction	11.7	15.2	13.8
Public administration	6.3	6.3	7.5
Ownership of dwellings	7.7	7.5	8.7
Other services	33.6	31.0	31.6
Total	100.0	100.0	100.0

NOTE This table, which is based on factor cost data at constant 1960 prices, is subject to very wide margins of error and should be treated as indicating approximate values only.
Source: The Economic Institute.

Apart from lamb and mutton as well as sheepskins, production is essentially maintained to provide some degree of domestic self-sufficiency[1].

The share of fishing and fish processing in total employment, about 6 per cent and 9 per cent respectively, does not properly convey the key role of this sector in the Icelandic economy. Virtually the entire output is exported, the proceeds of which typically accounted for around 90 per cent of the total value of merchandise exports in the past[2]. Apart from the direct

1 Substantial surpluses of milk have on occasion arisen over and above domestic requirements. These have had to be disposed of with the aid of liberal export subsidies.
2 Start-up of the aluminium plant in 1969, the entire output of which is designed for export, has led to some reduction in dependence on fish exports.

dependence of other industries on the fishing sector, availability of foreign exchange constitutes a sine qua non for the prosperity of the economy as a whole, given the need to import a wide range of raw materials and semi-manufactured goods as well as end products[1]. The fishing industry consists predominantly of single or two-boat enterprises, a not unusual arrangement being for the captain and mate to share ownership of a boat with a processing plant. The supply of fish species which breed in Icelandic waters—most importantly cod—is much more stable than the migratory types caught in the same waters, e.g. herring.

One-third of the total labour input into manufacturing industry is absorbed by fish processing and a further third by transport equipment, food and beverages and metal products. Manufacturing is dominated by small enterprises engaged in relatively unsophisticated processing. The size distribution of the 2 038 firms (excluding fish processing) operating in 1968 is shown in Diagram 1. Numerically the 0-1 man-year category of companies clearly predominates. Less than half of the work force in manufacturing excluding fish processing is engaged in firms with a total labour input of more than 20 man-years. Table 3 summarises the preliminary results of the 1968 Survey of Manufacturing Industry. The size of firms as measured in terms of average value added per establishment ranged from Kr. 7.13 million (= ca $ 125 thousand at pre-November 1968 exchange rates) for the chemical indus-

Table 3 **Survey of Manufacturing Industry, 1968**
Kr. million and per cent

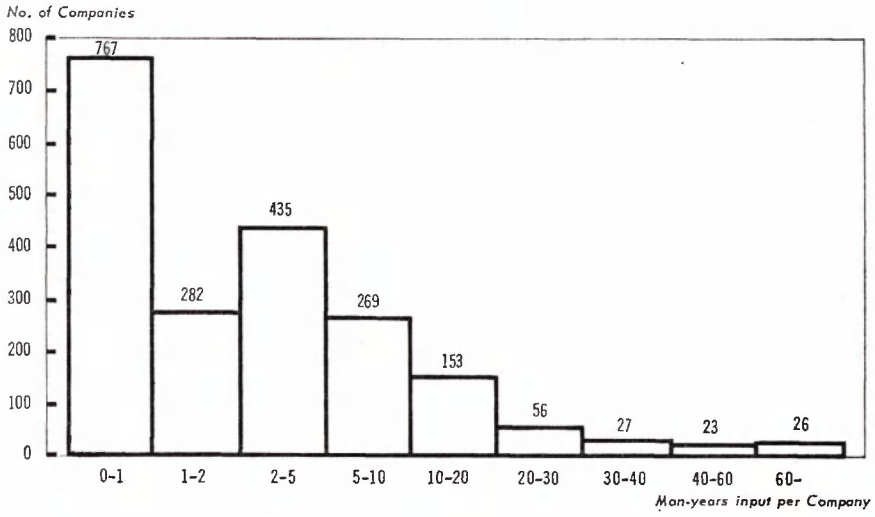
Industry	No. of Estabt.	Value Added	*b: a*	Labour Intensity[1]	Value Added[2] Ratio
	a	*b*	*c*	*d*	*e*
Transport equip. (manufac. and repair)	436	580.8	1.33	87.3	66.5
Food	225	486.1	2.16	66.2	15.2
Metal products	247	458.3	1.86	85.1	62.4
Woodworking, furniture, etc.	343	351.7	1.03	85.1	53.7
Printing, bookbinding, etc.	156	316.4	2.03	78.7	45.0
Textiles	69	230.7	3.34	65.3	48.4
Non-metallic mineral products	77	206.4	2.68	58.3	40.2
Chemicals	25	178.2	7.13	53.8	40.1
Footwear, clothing, etc.	196	171.5	0.88	80.5	46.7
Other	250	353.0	1.41	68.0	43.7
Total	2 024	3 333.1	1.65	75.4	38.0

1 Estimated total compensation to labour (wages, salaries, employers' social security contributions and an imputed labour share of the income of self-employed persons) expressed as a percentage of value added.
2 Value added expressed as a percentage of gross value of output.
NOTE This table is derived from preliminary results of the 1968 Survey of Manufacturing Industry. Value added data is based on factor cost.
Source: Icelandic Submission to the OECD.

1 For example, of the proceeds from sales of aluminium ingots abroad (which in 1970 accounted for 15 per cent of merchandise exports), only about 25 per cent represents value added in Iceland.

try to Kr. 0.88 million ($ 15 thousand) in footwear, clothing, etc. Labour intensity (as measured by labour compensation as a percentage of value added) ranged from 87 per cent for manufacturing and repair of transport equipment—which branch also contains the largest number of establishments—to 54 per cent for chemicals.

Diagram 1 **Size Distribution of Manufacturing Entreprises, 1968**
Excl. Fish Processing



Source: Icelandic submission to the OECD.

Construction absorbs an unusually large share of the work force in Iceland. Apart from such factors as the relative expensiveness of infrastructure development in a sparsely populated country as well as the demands posed by climatic and geological conditions, this heavy concentration on construction may reflect in part the combined effect of incentives provided by taxation legislation and the continuing high rate of inflation to investment in housing[1].

The data given in Tables 1 and 4 indicate longer-term trends in the distribution of the labour force. Agriculture's share of total labour input has declined at the same time as the service sector has been attracting an increasing share. These changes reflect a continuation of trends already manifest since the early part of the century. Some decline can be noted in the share of manufacturing industry during the mid 1960s (both for fish processing and other) but the recovery of the fishing sector and the opening of the aluminium

1 In Iceland construction plus imputed income from the ownership of dwellings accounts for over 20 per cent of GNP, about twice the corresponding figure for Norway.

smelter has helped reverse this trend in more recent years. The share of the labour force engaged in fishing contracted between 1960 and 1963 but has since remained relatively stable.

During the 1960s exports of goods and services accounted on average for 28 per cent of total final demand and imports for 29 per cent of total supply. However, Iceland's dependence on foreign trade is reflected not only in these relatively high figures, but also in the wide range of commodities

Table 4 **Distribution of Employment in Manufacturing Industry**[1]
Per cent

	1960	1965	1969
Fish processing	34.9	35.6	33.0
Transport equipment	10.9	9.8	11.7
Food and beverages	9.9	11.2	11.5
Metal products	11.2	10.9	10.5
Other	33.1	32.5	33.3
Total	100.0	100.0	100.0

1 Based on calculated man-years input.
Source: The Economic Institute.

Table 5 **Geographic Distribution of Foreign Trade**
Per cent

	1961-1965	1966-1970	1961-1970
		Imports	
EFTA	38.8	41.6	40.4
EEC	20.2	25.7	23.4
USA and Canada	16.1	12.5	14.0
Japan	2.1	3.3	2.8
Eastern Europe	17.9	11.5	14.2
Other	4.9	5.4	5.2
Total	100.0	100.0	100.0
		Exports	
EFTA	41.0	39.3	40.1
EEC	19.0	16.9	17.8
USA and Canada	16.0	23.3	19.9
Japan	—	0.1	0.1
Eastern Europe	14.8	12.7	13.7
Other	9.2	7.7	8.4
Total	100.0	100.0	100.0

Source: Icelandic Submission to the OECD.

for which the country is dependent on supplies from abroad. Non-fish exports consist primarily of sheep products (mutton, wool and hides) as well as the output of the " new industries " (diatomite and aluminium ingots). The geographic distribution of exports and imports is presented in Table 5. Comparison of the two five-year periods 1961-1965 and 1966-1970 indicates a decline in the importance of North America and Eastern Europe as suppliers to the Icelandic market, at the same time as the share of the EEC has risen. While Eastern Europe has also declined in importance as an export market, the most striking shift which has emerged in Iceland's foreign trade pattern during the period under consideration has been the increased reliance on exports to the North American market.

Foreign trade prices have tended to develop favourably for Iceland. Taking 1960 as the base year (= 100), the terms of trade index (covering both goods and services) had reached 121 by 1970, the gain representing an average annual increase in real national income of 0.8 per cent. Between 1960 and 1970 deficits have been incurred on current account (excluding transfer payments) on six occasions and surpluses on five, with foreign funded indebtedness rising from $ 65.3 million to $ 169.3 million. Over this same period official foreign exchange reserves rose from $ 11.3 million to $ 52.6 million. Net capital inflows have derived primarily from public and private borrowing abroad. Erection of the aluminium smelter represents the major item of foreign direct equity investment to date in Iceland.

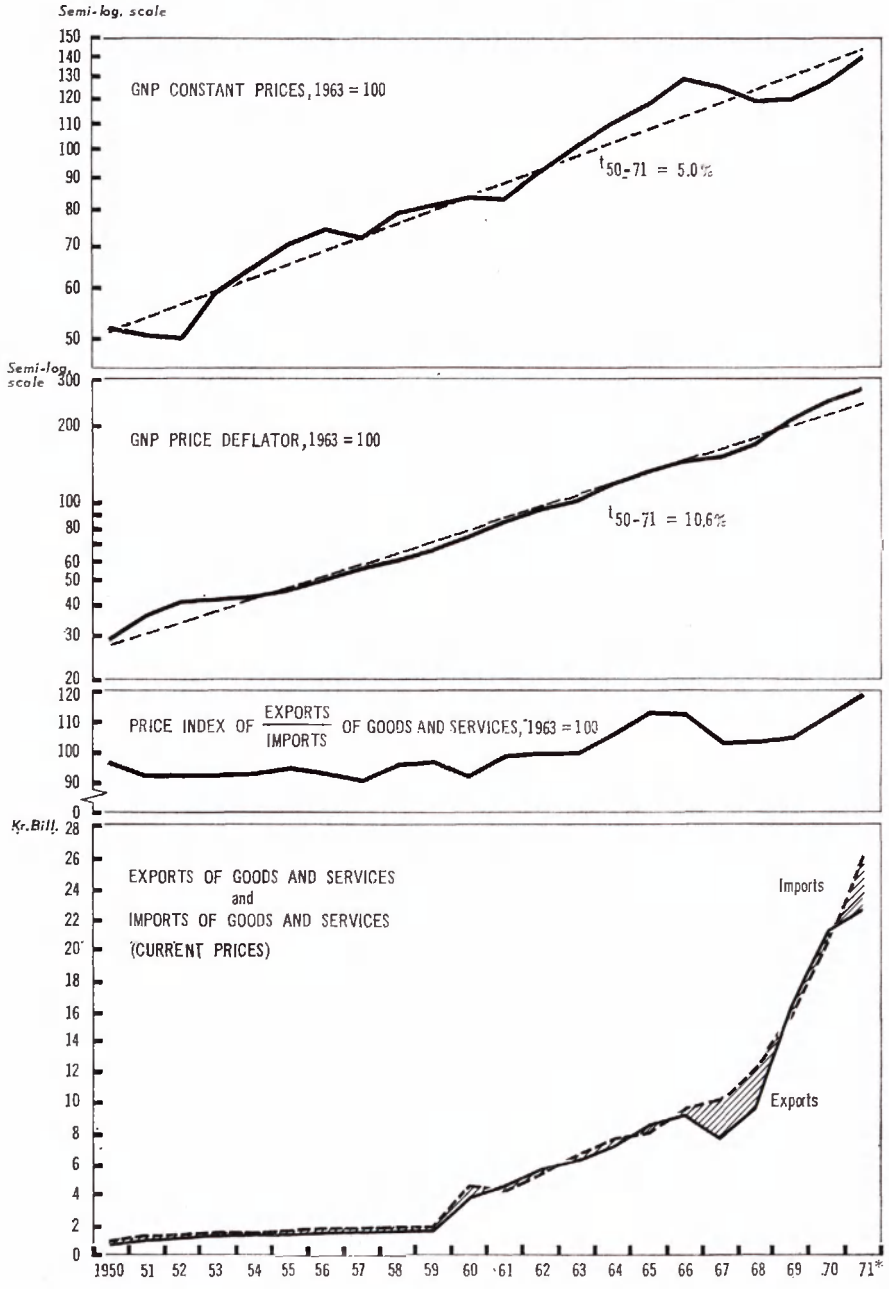
Cyclical instability and inflation

Despite its limited range of natural resources and disadvantageous geographic location, Iceland has succeeded in attaining a relatively high standard of living. The average annual growth rate of real GNP amounted to about 5 per cent during the period 1953-1971 and per capita income in 1971 was above the European OECD average. A salient feature has been the sharp cyclical swings in the level of economic activity which have been particularly pronounced on the income side. Variability in the rates of growth of GNP and its demand components has been greater for Iceland than for any other OECD country. This high degree of instability is reflected in the fact that gross output has actually fallen in real terms on three occasions since 1950.

The source of this instability lies in the dominant position of the fishing industry, the performance and profitability of which greatly depend on biological factors and price developments abroad. The wide margins of error attached to predictions of both the size of the fish catch and export prices have complicated the task of counter-cyclical policies. By observation of the strength of individual " year classes " of fish marine biologists make short-term predictions of the availability of fish species, but these predictions are acknowledged to be subject to considerable error. With respect to prices Iceland is essentially a price taker[1]. Apart from the fact that the country

1 In 1970 Iceland's share of total world value of exports of fish products was only 6.5 per cent, although in particular sub-markets its share is considerably higher. For example, in the important US market for frozen fish, Iceland accounted for 27 per cent of total imports, but at the same time Canada supplied 31 per cent and Norway 26 per cent of the total.

Diagram 2 **GNP, Foreign Trade and Price Deflators, 1950-1971**



* Provisional.

Source: OECD National Accounts.

Table 6 **Growth and Variability of GNP in Nordic Countries, 1953-1970**

	Average growth rate	Variability
Iceland	4.7	5.1
Denmark	4.3	2.4
Norway	4.1	1.5
Sweden	4.3	1.7
Finland	5.2	3.2

NOTE Mean and standard deviation of percentage annual changes in GNP at constant prices. Clearly the standard deviation is raised by the drastic post 1966 slump; however, even when measured for the period 1953-1966, at 4.2 it remains higher than for other OECD countries. The average annual growth rate for Iceland during this period was 6.2 per cent.

Source: OECD National Accounts.

does not occupy a dominant position in world markets for fish or fish products, these items also compete in varying degree with other substitute products[1]. As a result, both price and volume of Icelandic exports may vary in the same direction, and in fact have frequently done so, tending to reinforce the amplitude of fluctuations in export earnings. Overall, variations in volume of the catch have contributed more to this instability than have price fluctuations.

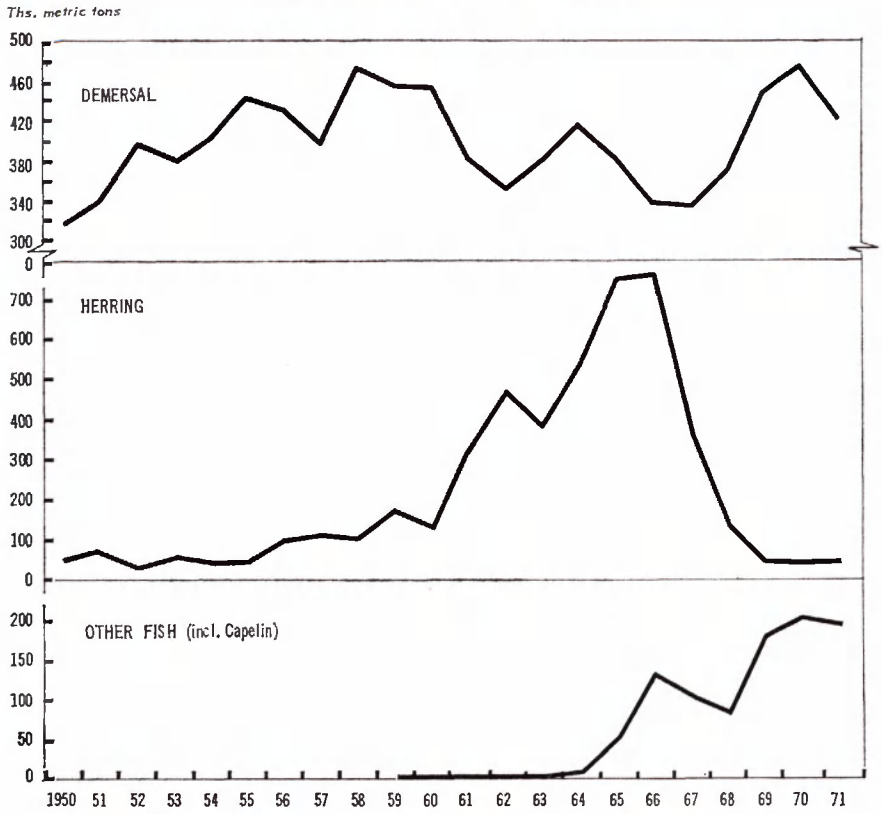
The instability in incomes from fishing appears to be a principal factor behind the continuous inflation and recurrent devaluations. Between 1950-1971 the GNP deflator increased at an annual rate of more than 11 per cent. The net result of the frequent adjustments to the parity of the Krona under these circumstances has been an average devaluation with respect to the dollar of 9.6 per cent per annum during the same period[2]. The essential elements in the inflationary process, set in motion by a strong rise in fish catch and/or fish prices, can be described as follows: An increase in export earnings leads in the first instance to " windfall " profits accruing either to the fish processing sector alone or being distributed between the fishing and fish processing industries[3]. Within the fishing sector in turn, the institutional arrangements for distributing income between boatowners and crew link the earnings of the

1 There is evidence of some cross price elasticity between fish and red meat, while fish oils compete with certain vegetable oils.

2 One of the five devaluations since 1950 (that of 1967) was undertaken within the context of a more general parity realignment, in particular that of the £ Stg. Through the implementation of a policy of quantitative trade restrictions and de facto multiple exchange rates, the official parity of the Krona was maintained at an unchanged level throughout the decade of the 1950s.

3 The processing plants' buying prices for raw fish are fixed in advance of the season through negotiations between boatowners and crew on the one hand and the processing plants on the other. Hence unexpected increases in export prices accrue in principle entirely to the fish processing sector. On the other hand, the extra income deriving from an increase in the volume of the catch is distributed between both the fishing and processing sectors. Movements in export prices will, however, influence subsequent negotiations setting raw fish prices. The length of this lag has been shortened by the increasing practice of negotiating share prices for shorter periods.

Diagram 3 **The Fish Catch, 1950-1971**



Source: **Icelandic Submission to the OECD.**

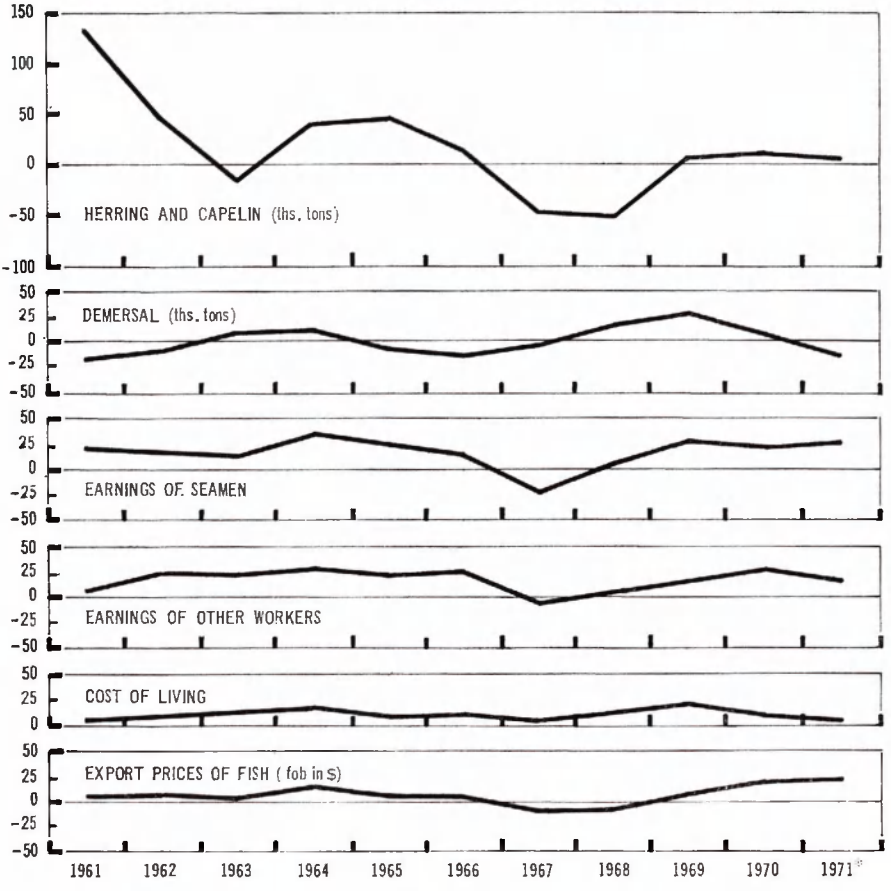
latter to movements in boatowners' gross receipts via a sharing system[1]. As incomes in the fisheries sector tend to act as a pacesetter for other sectors of the economy—or have at least an important demonstration effect—a rise in fishermen's earnings will lead to wage claims by other unions. Legislative provisions linking farmers' incomes to those of industrial workers and seamen completes the propagation of the impact of variations in fishing sector incomes to the remainder of the economy. Movements in the general level of wage rates (during the upswing) are thus effectively related to the capacity to pay of the fishing sector where productivity during the boom period is rising substantially faster than in other sectors (see Table 7 below). The system

1 Although a formal distinction exists between the systems of remuneration of crews on the boats and on the trawlers, both effectively receive a guaranteed minimum income plus a variable element based on both the " share " price and the volume of the catch. The variable element is, however, more important on the boats. In conjunction with the 1968 devaluation the share price was divorced from the effective gross price for raw fish received by boatowners through the imposition of a levy on processing plants, the proceeds of which were deployed for the benefit of boatowners.

of price control which has operated in Iceland throughout the post-war period focuses attention essentially on profit margins and thus can accommodate price increases motivated by cost-push. Import-competing as well as sheltered sectors are usually able to pass on cost increases via prices because of the high degree of tariff protection, and in some cases subsidies, accorded them. The indexation of wage rates to movements in the cost-of-living index which has applied during most of the 1960s may have exacerbated the problems posed by a wage/price spiral.

A subsequent setback in export earnings influences not only the profitability of the fishing sector but at the same time reduces the country's capacity to pay for imports from current export earnings. The strain to which the

Diagram 4 **Cyclical Behaviour of Key Data, 1961-1971**
Percentage change

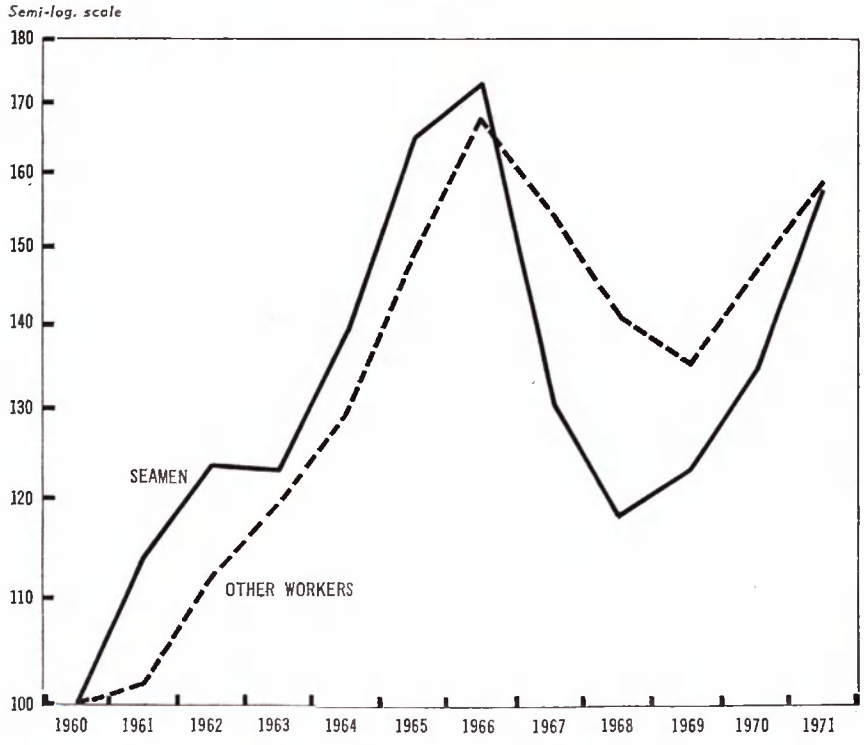


* Provisional.
Source: The Economic Institute.

current balance of payments is thereby subjected may be aggravated by the necessarily lagged response of domestic demand pressures to the initial export-led stimulus. Furthermore, the functioning of both institutional arrangements (e.g. the Catch Equalisation Fund) and discretionary measures of economic policy (e.g. subsidy payments) which operate to contain downward pressures on earnings and to secure the operation of the export industries will also, of course, maintain the level of import demand. Given the downward rigidity of wages and prices a devaluation becomes inevitable if the period of unfavourable fish catch or export prices is protracted.

Developments during the 1960s provide a convenient illustration of the operation of the mechanisms outlined above. The earlier part of the decade, which was dominated by the " herring boom ", saw a rapid growth of earnings spearheaded by those of seamen which rose by an average compound rate of more than 20 per cent between 1960 and 1965. During the same period the cost-of-living index rose on average by 11 per cent a year. While 1966 saw a slight fall in the volume of output of marine products as well as an easing in the growth rate of export prices as the year progressed, the following two years

Diagram 5 **Real Earnings of Seamen and Other Workers**
1960 = 100



1 Nominal earnings deflated by the cost-of living-index.
Source: The Economic Institute.

brought successive and marked declines in the levels of both output and prices. Herring largely disappeared from Icelandic fishing grounds, while price movements for this fish reflected increased supplies of fish meal from Peru as well as the substitution of soya bean for fish oil. The cod catch also fell as resources had been diverted to the herring catch, while increased supplies from other sources depressed prices on the important US market.

The nominal earnings of seamen continued to grow rapidly during 1966, but 1967 saw a sharp absolute decline of no less than 22 per cent. Earnings of most other categories of workers also fell during the latter year, although much less sharply (in fact those of unskilled workers remained essentially unaffected). The measures of support accorded the fisheries sector (including the 1967 devaluation) enabled seamen's incomes to recover slightly in 1968. The rate of price increase (as measured by the cost-of-living index) remained at a high level through 1966, but slackened noticeably during 1967. Deflated by this index, earnings of both seamen and other workers declined in real terms in both 1967 and 1968 (see Diagram 5); for seamen this cumulative fall over the two years amounted to more than 30 per cent and for all workers to some 17 per cent. The severity of the downturn may be illustrated by the fact that in 1968 real GNP was more than 8 per cent below its 1966 level.

The current account of the balance of payments had already turned into deficit in 1966, although by a small amount equivalent to 3.5 per cent of current receipts. The position deteriorated rapidly during the course of 1967 as export receipts (in dollar terms) fell by no less than 31 per cent while imports continued to grow, if only marginally. The deficit for the year equalled some 29 per cent of current receipts, or almost 9 per cent of GNP at market prices. The November 1967 devaluation brought a slight improvement in the absolute size of the deficit during the following year. After a further devaluation of the Krona by more than 30 per cent in November 1968, the economy picked up rapidly as an unexpected boost was received from a recovery in both the size of the catch and export prices. Domestic earnings and prices then resumed a rapid rate of growth. By late 1970, against a background of a continuing wage/price spiral fed by adjustments of wage rates to increases in the cost of living, legislation was passed imposing a price freeze and partially suspending wage rate indexation. The freeze and accompanying measures (including increased payments of consumer subsidies) appear to have been largely successful in temporarily reducing the rate of price increase. 1971 saw some fall in the fish catch, but a sharp rise in export prices (24 per cent) again imparted a boost to export earnings. Despite this, the high growth rate of domestic demand led to a serious deterioration in the balance of payments situation. If current predictions of only a modest increase in the volume of fish exports for 1972 materialise, the stage may be set for another period of balance of payments difficulties[1].

The internal and external financial instability of the Icelandic economy is closely linked to the sharp variations in sectoral productivity levels. Unfortunately data allow only a very limited empirical analysis of productivity in the different sectors. Estimates of average labour productivity based on data for the years 1965-1969—a period which covers the last years of the boom and

1 A more detailed discussion of short-term prospects is given below.

Table 7 **Average Labour Productivity by Industrial Sector**

	1965	1966	1967	1968	1969	1965	1966	1967	1968	1969
Agriculture	77.0	67.2	68.0	67.7	59.7	100.0	93.0	91.6	84.1	75.0
Fish and fish processing	138.7	143.7	114.3	110.0	116.2	100.0	110.3	85.4	75.9	81.1
Manufacturing (excluding fish processing) and construction	103.4	106.8	112.0	115.6	117.2	100.0	110.1	112.3	107.0	109.7
Manufacturing (excluding fish processing)	87.7	88.3	91.6	97.5	106.7	100.0	107.2	108.3	106.4	117.8
Construction	126.1	133.1	137.0	136.5	133.9	100.0	112.5	112.6	103.5	102.8
Other	90.4	90.9	96.8	96.2	95.3	100.0	111.1	111.1	101.8	102.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	106.5	103.7	95.7	96.8

NOTE The table has been estimated on the basis of the respective sectors' shares of GNP at factor cost excl. ownership of dwellings and of total labour input. The effect of possible inaccuracies stemming from these primary sources could be compounded by inconsistencies of sector definition. The data presented should accordingly be treated as subject to possibly wide margins of error and as indicating orders of magnitude only. As the most uncertain part of the classification was felt to be between Manufacturing and Construction joint as well as separate estimates are given for these sectors.

The left-hand division of the table refers to relative labour productivity of individual sectors in relation to that for the economy as a whole (where the latter = 100) while the right-hand division indicates movements in productivity of the individual sectors and of the economy as a whole in relation to 1965.

Source: Icelandic submission to the OECD and Secretariat calculations.

the succeeding slump—are presented in Table 7. With due reserve for the considerable margins of error to which these estimates are subject, it would appear that in 1965 and 1966 average productivity was considerably higher in fishing and fish processing than in other sectors, even though the rate of increase in the volume of the catch declined sharply in the latter year. It should be noted that the relative productivity of protected industries as shown in Table 7 is overstated to the extent that these industries are able to maintain higher prices because of tariff protection and subsidies. High tariff protection and subsidies thus provide for a permanent level of redistribution of income between the export and domestic sectors. The same seems to hold for manufacturing, although allowance has to be made for the fact that the capital/labour ratio in this sector has been significantly below the national average. There seems little reason to doubt that marginal productivity in fisheries exceeds that in other sectors during a cyclical upswing. At the same time, lower average productivity in agriculture offers prima facie evidence of the relatively weak position of this sector.

During periods of favourable fish catch and high export prices the above-average profitability of the fishing sector can only partly be eliminated by a movement of resources into fishing or by tax measures. Instead, redistribution takes place by higher wages and prices in the protected sector. Devaluations —usually occurring after a slump in export earnings—reverse this process by restoring the relative income position of export industries. In the event the size of a devaluation may prove excessive where subsequent increases in the volume and price of fish products are not anticipated. The income expansion that follows together with the effect of the devaluation on import prices thus risks giving a further push to the inflationary process.

Although there is no evidence that the rate of inflation in Iceland has accelerated towards a state of hyper-inflation, some acceleration can be discerned. The average annual rate of growth of the GNP deflator rose from 9.8 per cent in the 1950s to 12.6 per cent during the 1960s. Little guidance is provided, either by available empirical work or by the body of theoretical reasoning, in seeking to assess the net effects of such levels of inflation on the structure and development of the Icelandic economy. Particular interest attaches in this context to the possible effects on savings and investment behaviour as well as on the allocation of resources. It should be recalled here that no organised capital market as such exists in Iceland and that interest rates are in general controlled at levels below those to which a free market could reasonably be expected to tend. In fact, real interest rates have been extremely low, or even negative[1]. A priori reasoning would suggest that the incentive to invest borrowed funds will be increased under such circumstances. Nor need direct equity investment by foreigners be discouraged by the prospects of domestic inflation leading to devaluation—whether production be intended for sale in the Icelandic or export markets. The time profile of investment could be influenced as, where the expected rate of inflation exceeds the nominal interest rate, there is an added incentive to borrow now to purchase equipment for future use. At the same time the low real rates of interest could discourage saving.

1 For example, the rates of interest charged by the Investment Credit Funds for long-term loans vary between 6.0 per cent and 10.0 per cent.

In effect the domestic savings ratio (gross), which averaged about 27 per cent during the 1960s, is comparatively high; however, a relatively large share thereof accrues within the public sector[1]. The distribution of these investible funds between competing ends is decided by a process of administrative rationing through the channelling of funds via specialised credit institutions rather than through the price mechanism operating via the free formation of interest rates. Thus, although the overall investment ratio is relatively high, the large volume of funds channelled into housing no doubt reflects in some measure anti-inflationary hedging behaviour on the part of households. It may also reflect a different set of preferences in Iceland than in other countries. Approximately 85 per cent of housing in Iceland is owner-occupied. On the other hand, the share of funds accounted for by investment in machinery and equipment compares less favourably with other countries. To the extent that the relatively high investment in housing reflects behaviour conditioned by inflationary expectations it may be argued that it hinders growth. On the other hand, it is possible that the welfare gain from house ownership is higher than reflected in national income statistics.

The effect of inflation on income distribution is particularly difficult to assess. Unfortunately, time series data are not available by main income size group or by sector. The impact of inflation on income distribution clearly depends on the relative ability of individuals to foresee and adjust their behaviour to the expected rate of inflation. State benefits, including pension benefits, have been protected from the effects of inflation by being indexed to the wages of unskilled workers. The fact that rates of income taxation are adjusted for price changes and the valuation of assets for purposes of wealth tax tends to lag behind market values would suggest that

Table 8 **Inflation, Saving and Investment in Nordic Countries, 1960-1969[1]**
Per cent

	GDP Price Deflator	Savings Ratio[2]				Construction/Total Invest. Ratio[3]	
		Total Domestic	Private	Public	Foreign Sector[4]	Total construct.	Resident. construct.
Iceland	12.1	25.3	16.4[5]	8.8[5]	2.5	70.0	21.7
Denmark	5.9	20.1	14.9	5.3	2.1	49.6	18.5[1]
Norway	3.7	27.2	20.1	7.2	1.5	48.6	15.2
Sweden	3.7[5]	24.1	14.8	9.3	0.5	65.6	24.9
Finland	5.4	27.8	19.6	8.2	1.1	63.2	20.1

1 Average values for period 1960-1969.
2 Gross savings related to Gross Domestic Product.
3 Expenditure on Residential and all Construction related to Gross Fixed Asset Formation.
4 Net capital inflow from abroad.
5 Refers to 1960-1968.
Source: OECD National Accounts.

1 A limited volume of index-linked Government savings certificates have been issued to the public to finance the extra-budgetary public investment programme. Furthermore, a system of index-linked compulsory saving is in operation for young people.

Table 9 **Gross Fixed Asset Formation, 1961-1970**
Average percentage composition

	1961-65	1966-70	1961-70
Industry	52.1	46.3	48.7
Agriculture	10.3	7.9	8.9
Fishing	7.4	5.5	6.3
Fish processing	5.5	2.8	3.9
Manufacturing	6.9	13.6	10.8
Transport equipment	13.0	8.5	10.4
Commercial building	5.0	4.2	4.5
Various machinery and equipment	4.0	3.8	3.9
Residential construction	21.4	19.6	20.4
Public works and building	26.5	34.1	30.9
Total	100.0	100.0	100.0

Source: The Economic Institute.

inflation has not led to a shift of resources to the public sector. Those who save at rates of interest that are not price-indexed would lose relative to those who borrow. House owners may gain relative to those who rent dwellings. Unfortunately it is not possible to go beyond these general statements to an analysis of the net debtor/creditor position of different income groups.

The role of stabilization policies

Given the " openness " of the Icelandic economy and the extreme degree of fluctuations to which the country's export earnings have been subjected, mitigating the destabilizing and distorting effects of these fluctuations on levels of domestic activity and income distribution becomes a major task of economic policy. In assessing policy performance, a distinction should usefully be made between short- and longer-term policies, the former being concerned with demand management and the latter bearing on the longer-term allocation of resources. Inevitably some degree of interaction and conflict may exist in practice between these two aspects of policy.

The very degree of unpredictability and volatility of the cyclical fluctuations have not only required that attention be focussed on the exigencies of the current situation, but have also reduced the degree of realism attaching to attempts at forward planning of resource allocation. The latter point may be illustrated by comparing forecasts of the growth rate of the major demand components published in the " Economic Programme " for the years 1963-1966 with the actual outcome. The Programme represents Iceland's sole venture into the field of preparing and weighing alternative strategies of development on an economy-wide scale on the basis of medium-term projections of resource availability. In the event, the period covered corresponded largely with that of the herring boom and targets were all exceeded by wide margins. The policy issues raised by alternative strategies of development are considered in more detail in the section on longer-term prospects below.

Table 10 **Growth of Major Demand Components, 1963-1966**
Forecast vs. Actual Outcome
Per cent

	Average annual real growth rate	
	Forecast	Outcome
Gross national product	4.0	9.0
Private consumption	3.8	10.3
Public consumption	5.7	7.3
Gross fixed asset formation	6.1	14.9

Source: OECD National Accounts and (Icelandic) Economic Programme 1963-1966.

The following paragraphs are concerned mainly with demand management policies[1].

Icelandic economic policy appears to have placed first priority on the maintenance of high levels of employment and ensuring parity growth of income as between the export and the domestic sectors over a whole business cycle[2]. In pursuit of these objectives the authorities have tolerated what for other countries would appear to be an unsustainably high rate of inflation and have relatively frequently resorted to devaluations for the dual purpose of restoring external equilibrium and of redistributing income in favour of the export sector. It is important to note that the severe fluctuations in real income in the fishing sector have regularly been caused by factors outside the control of the authorities and have thus not been amenable to classical instruments of demand management. The problem of reconciling full employment and income parity objectives with external and internal financial stability would therefore seem to include a greater unmanageable core in Iceland than in most other Member countries.

Maintenance of external equilibrium is in the longer run a condition necessarily imposed upon a country. The extent to which this condition may be compatible with accumulating balance of payments deficits on current account depends on the individual economy's own stock of foreign exchange reserves as well as upon its ability to attract long-term capital from abroad. For Iceland's part, the cumulated deficits on current account (excluding transfers) have exceeded surpluses during the period 1960-1970 by an amount equivalent to about 5 per cent of the total value of exports of goods and ser-

1 Legislation providing for a thorough-going revision of the structure of the taxation system was submitted to Parliament in December. The reform incorporates a shifting in the relative emphasis placed on various categories of tax (including a shift from indirect to direct taxation) as well as between the respective responsibilities of the Central and Local Governments. The overall burden of taxation remains, however, approximately unchanged.

2 Except for the unemployment which emerged in the wake of the 1967-1968 recession and which, despite some emigration, reached an average annual peak of 2.5 per cent of the work force in 1969, virtually full employment (allowing for seasonal unemployment) has been maintained throughout the post-war period. At the same time, the overall average real GNP growth rate of about 5 per cent recorded over the period 1953-1971 has been in line with that for the other Nordic countries and with that for the OECD area as a whole.

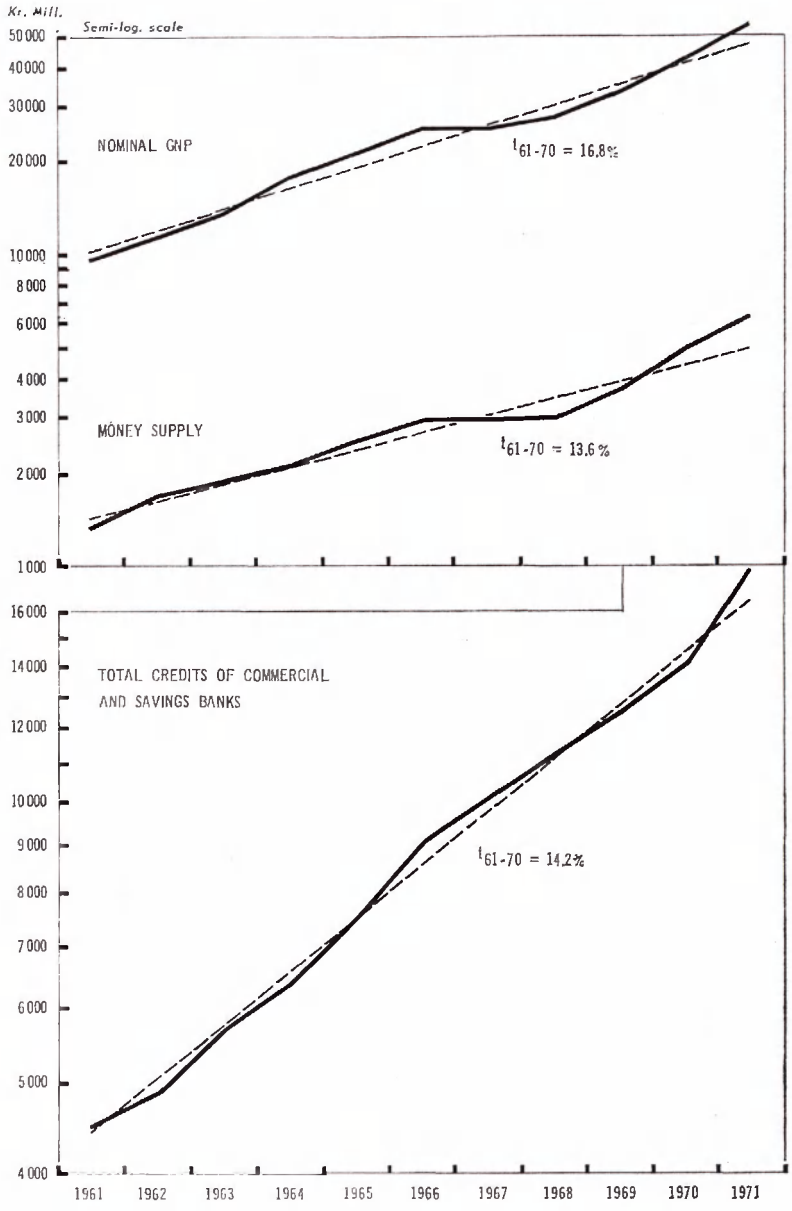
vices over the same period (= 2.2 per cent of GNP). At the same time the foreign funded debt had risen to $ 169.3 million by the end of 1970, equivalent to 70 per cent of the value of exports of goods and services during that year (35.1 per cent of GNP). During the 1950s a system of quantitative trade restrictions as well as export subsidies and import charges (amounting in effect to a system of multiple exchange rates) helped maintain equilibrium on external account. After a policy of dismantling such direct controls was initiated in 1960, the major policy instrument used to restore external equilibrium has been alterations to the parity of the Krona. Absence of the constraint normally imposed by reluctance to adjusting the external value of the currency has accorded policy an extra " degree of freedom " in establishing the scale of priorities attached to domestic objectives.

The Stabilization Plan of February 1960 referred to earlier saw a reappraisal of the general approach to economic policy which had developed during the latter half of the 1950s. Apart from the liberalisation of foreign trade, greater reliance was to be placed on general non-discriminatory measures in the conduct of domestic policies. The effectiveness of demand management policy has, however, at times been limited by the constraints imposed by longer-term policies favouring the agricultural and fisheries sectors. This favoured treatment finds expression in the especially low tariff rates applied to imported inputs into these sectors, the payment of subsidies and other transfers, as well as the granting of privileged access to credit facilities (in respect to both availability and cost).

Although due allowance should be made for the special constraints under which economic policy is being operated in Iceland, the behaviour of monetary and fiscal aggregates suggests that neither the credit control system nor public finance have been particularly adjusted to cope with the primary task of smoothing the effects of unpredictable " external shocks ". As interest rates, which are controlled by the Central Bank, have been maintained at low levels relative to price changes, monetary policy has been obliged to operate through influencing the availability of funds[1]. Diagrams 6 and 7 show the development of certain monetary series during the period 1961-1970 as well as movements in the velocity of circulation. Over the period as a whole the money supply (narrowly defined) and total credits of the commercial and savings banks have increased at annual average compound rates of 16 and almost 14 per cent respectively—compared with 17 per cent for nominal GNP. Both during the periods of rapid expansion (1961-1966 and 1969-1970) as well as virtual stagnation (1967-1968) the prime factor influencing the money supply has been changes in foreign exchange holdings. Behaviour of the liquidity of the private banks reflects the pervading influence of export sector earnings on their liquidity position. During an export-led boom the deposits of the banks increase at an even faster rate than their lending. Success of counter-cyclical policy appears to have been greater in the stimulatory than in the restraining direction. Apart from problems associated with controlling such an intermediate variable as the money supply, variations in

1 The Central Bank may charge penalty rates on loans by overdraft accorded to commercial banks. As the latters' lending rates are subjected to control, the increased costs may not be passed on and must be borne fully by the bank.

Diagram 6 **Selected Monetary Indicators**



NOTE Money supply is narrowly defined as notes and current account deposits less advance deposits for imports. Total credits exclude foreign funds relent. Money supply and total credits are estimated as end-of-month averages.

Source: Statistical Bulletin, Central Bank of Iceland.

the velocity of circulation would point to " slippages " in the system complicating the task of controlling demand through monetary aggregates.

The automatic rediscounting facilities accorded bills drawn by the fisheries and agricultural sectors have maintained the volume of rediscounts by the Central Bank at a high level[1]. Furthermore, the fact that the volume of these bills will tend to vary directly with the respective sector's accrued income reduces the scope for pursuing an effective counter-cyclical policy in respect to discounting. Attempts to restrain the growth rate of credit by way of gentlemen's agreements between the Central Bank and the commercial banks have not proved effective. During 1970 and 1971 such agreements (which lack legal enforcement) sought to set quantitative limits of 14 per cent and 12 per cent on the growth rate of bank credit during the respective years; the actual rates of expansion amounted to 19 per cent and 22 per cent respectively. Non-bank financial intermediaries account for approximately 45 per cent of total credit to final borrowers. About two-thirds of this non-bank total is accorded by the Investment Credit Funds which, though partly dependent on the Development Fund, appear able to maintain a relatively independent existence through their system of financing[2]. On the other hand, the system of average and marginal cash reserve ratios which the banks are required to hold with the Central Bank does appear to constitute an important stabilizing element.

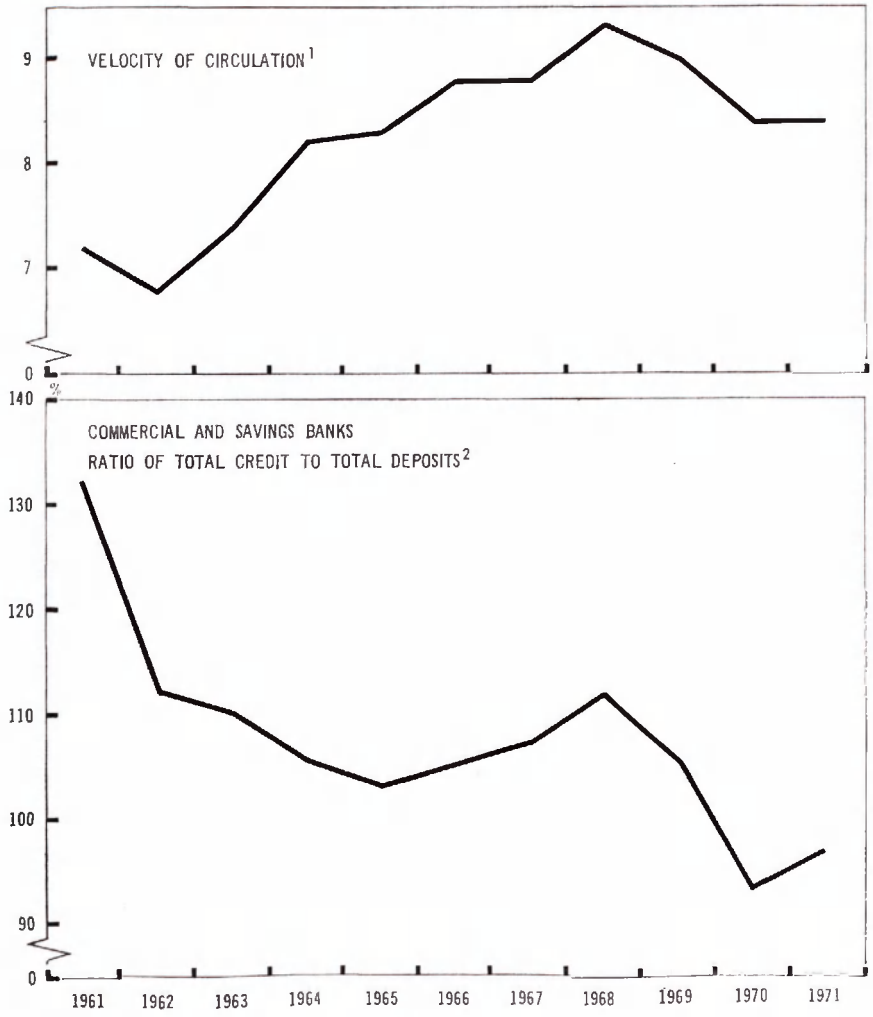
The difficulties of controlling monetary developments are aggravated by a very pronounced seasonal pattern of primary liquidity creation. The Treasury's short-term credit requirements are concentrated in the first half of the year when the balance of payments is relatively strong and when most bills of the fisheries sector are presented for discount. The resulting primary liquidity supply facilitates a strong expansion of bank credit. The reversal of this liquidity cycle during the second half of the year has often forced the commercial banks to take advantage of the Central Bank's role as lender of last resort. The penal rates charged do not, however, seem to have been sufficient to deter the earlier excessive credit creation. It would therefore seem highly desirable to encourage the commercial banks to supply part of the seasonal financing needs of the Government. This could be accomplished by the issuing of Treasury bills on terms that would be sufficiently attractive to the commercial banks. The issuing of such bills might also be considered as a first step in the development of open market operations as a further tool of monetary policy. These seasonal problems would also suggest the need to readjust the timing of tax payments.

Ex-post variations in the surplus of net income over expenditure of the central government budget and of the financial balance would suggest that the budget has better succeeded in exercising a stabilizing influence during periods of pronounced slack (e.g. 1961 and 1967) than during the upswing. This result has come about essentially through variations in net receipts (i.e.

1 Loans to these two sectors together account for ca 28 per cent of total outstanding commercial bank credit (and ca 25 per cent of all deposit institutes' outstanding loans).

2 In 1970 of total net revenues (i.e. excluding amortization and interest in respect to loans granted), about 35 per cent represented the proceeds of earmarked taxes and municipal as well as other grants. The greater part of the remainder (" net borrowing ") represented funds received from the commercial banks and the compulsory saving scheme.

Diagram 7 **Velocity of Circulation and Bank Credit Ratio**

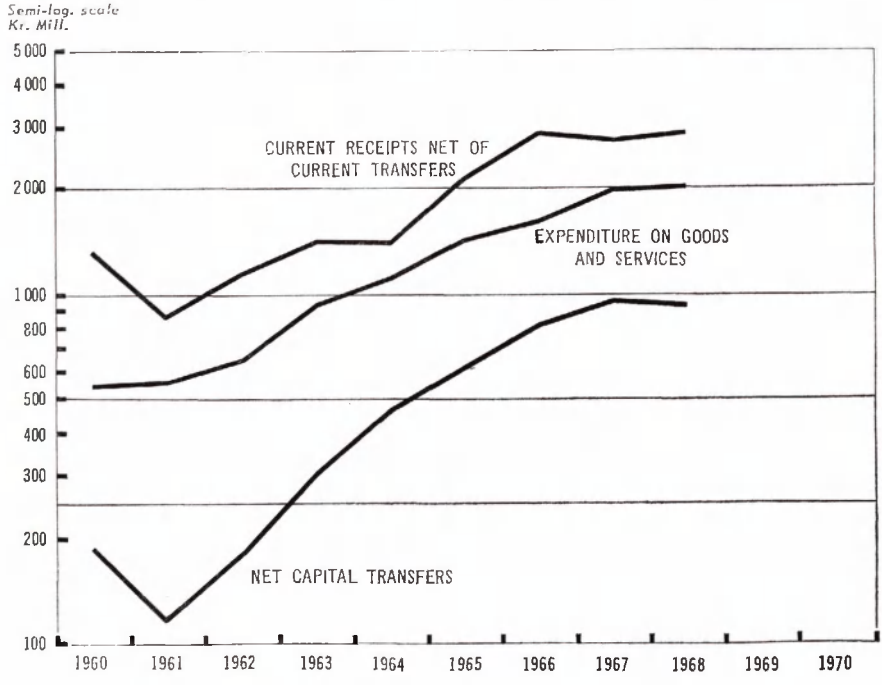


1 Money supply estimated as for Diagram 6.
2 Annual data estimated as end-of-month averages.
Sources: Statistical Bulletin and OECD National Accounts.

current receipts net of subsidy payments) as the growth path of expenditures on goods and services has held steady (except for an acceleration in 1963). At the same time capital transfers expanded rapidly during the period of the herring boom but then levelled off during the 1967-1968 recession, even falling during the latter year. The net result of these movements may be summarised in changes in the Government's net financial position (national accounting concept) shown in Table 11. Following an increase equal to 1 percentage

point of GNP in 1962 (the first year of the boom) this balance deteriorated through 1964 as the upswing continued, but then improved to exercise a stabilising influence through 1966 when the boom peaked out. The balance then swung around sharply (by the equivalent of 3.1 percentage points of GNP) in 1967 as net receipts fell and expenditures were increased. Budgetary action subsequently provided support to the various measures taken to stimulate the 1969 revival. Unfortunately, data are not available on a comparable basis for more recent years. Budget figures as shown in Table 19 seem to indicate, however, that the restraining impact on the economy during the latest boom period was again relatively weak.

Diagram 8 **Central Government Budget Transactions**



Source: OECD National Accounts.

Certain aspects of the fiscal system would appear disadvantageous from the viewpoint of pursuing an effective stabilization policy. A principle adopted in preparing central government budgets is that estimated tax revenue should balance estimated current and investment expenditure[1]. Adherence to such an approach, even if not realised ex post (in fact, approximate " overall balance " is generally observed), is likely to reduce the scope for develop-

1 See 1969 Survey, p. 39.

Table 11 **Indicators of Budget Impact and Demand Pressures**

	Budget financial balance[1]	Demand pressures[2]
1960	8.1	–0.1
1961	2.4	–5.7
1962	3.4	–2.6
1963	1.6	1.4
1964	–1.2	4.6
1965	0.7	5.3
1966	2.3	8.8
1967	–0.8	0.6
1968	–0.3	–10.8

1 Net lending (national accounts definition) of the Central Government expressed as a percentage of previous year's GNP at current prices.
2 Deviation from the semi-log trend rate of growth of GNP at 1963 prices.
Source: OECD National Accounts.

ing effective counter-cyclical measures[1]. Furthermore, the ca 20 per cent of central government taxation receipts which are earmarked have reduced in both quantitative and qualitative terms the discretionary powers over public expenditure[2]. The present system of levying personal income tax on income of the preceding year rather than according to the PAYE system may well act on occasion as an inbuilt destabilizer where rapid changes in the growth rate of incomes occur—as is the case in Iceland[3].

To supplement general policy instruments, resort has been had on occasion to direct measures in the form of price freezes to halt the inflationary process[4]. Given the indexation of wage rates to the cost of living, accompanying measures such as increased payment of consumer subsidies have also been utilised. To the extent this latter measure contributes to maintaining demand pressures it may be in conflict with demand management objectives. Devaluation of the Krona has been resorted to for the dual purpose of restoring external equilibrium and of redistributing income in favour of the export sector. Given that Iceland has essentially been a pricetaker in its export markets with the volume of fish exports largely determined by other than market factors, a devaluation will not significantly increase export earnings in terms of foreign exchange. On the other hand, given the limited size of the domestic Icelandic market and restricted range of import-competing industries, foreign suppliers probably have little incentive to reduce their prices in terms of foreign currencies. Under these circumstances, restoration of external equilibrium operates essentially through the income effect (rather

1 Local governments are legally obliged to balance their overall budgets (i.e. including financial transactions).
2 Under the recent fiscal reform the importance of earmarked taxes has been reduced.
3 The impact of this effect is reduced by the relatively small share of direct taxes in total current revenue; ca 11 per cent for the Central Government and ca 30 per cent for General Government.
4 Supplementing the standing system of price control which largely pays attention to profit margins.

than the price effect) on imports, whereby Iceland's terms of trade remain unaffected[1]. Earnings from exports expressed in Krona then tend to rise to the full extent of the devaluation. In practice the degree of redistribution of real income involved will be modified to the extent that previous subsidy payments to the fisheries sector are simultaneously withdrawn. Furthermore, as most larger fishing vessels are imported, the cost of debt servicing rises proportionately with a devaluation[2].

Consideration of means to strengthen counter-cyclical monetary and fiscal policy leads inevitably to measures aimed at dampening the impact of fluctuations in the earnings of the foreign sector. Devices to " smooth out " earnings which readily suggest themselves are a suitably designed system of taxation or of redistributing the receipt of earnings over time. A relatively recent innovation adopting the latter approach is the establishment of the Price Stabilizing Fund of the Fishing Industry. Rates of payment into, and disbursement from, the Fund are determined as a percentage (subject to a maximum of 50 per cent) of the excess or shortfall of average actual prices received in relation to a predetermined " base price " set at the beginning of the season[3]. Monies in the Fund are frozen in a special account with the Central Bank. The Fund's response is thus limited to price changes while variations in volume of the catch appear to have contributed more to the instability of earnings[4]. The discretionary powers allowed the Fund's management imparts the flexibility probably necessary for adaptation to changing conditions, but it also represents a potential limitation on the Fund's ability to dampen an upward movement in earnings. The operation of a system of taxation in association with eventual subsidy payments would essentially have the same effect in redistributing income over time, provided that the extra revenue from the special export sector tax were removed from the income and money circuit and did not induce additional expenditure in the same year.

A further method of smoothing out the income of the export sector, and at the same time establishing a direct mechanism for passing on windfall profits to the domestic sector, could be provided by timely revaluations, provided the effect on industrial exports was not too adverse. By thus reducing the export sector's capacity to pay higher wages and thereby bypassing also the established institutional arrangements for transmitting wage increases through the economy, some alleviation of the inflationary process could be hoped for.

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1 Elasticity of demand for imports with regard to income and price have been estimated at 1.4 and 0.3 respectively for Iceland.

2 In practice measures may be taken to mitigate these negative effects.

3 Both the percentage and " base price " are determined by the Board responsible for the management of the Fund, subject to the Minister of Fisheries' approval. In determining the base price the Board is required to take into account prices received over the previous 3 years, the findings of the Fisheries Pricing Board (which determines " share " prices) as well as current conditions in export markets, etc.

4 The Catch Equalisation Fund, which has been in operation for over 20 years, provides partial indemnification to individual boats for serious shortfalls in the volume of the catch. Funds are provided by a 1.25 per cent levy on the fob value of fish exports and by Treasury contributions.

Longer-term prospects

The problem of uncertainty surrounding the catch makes forecasting of growth rates hazardous if not impossible. After the rather discouraging forecasting exercise for the period 1963-1966 attention has been focussed in Iceland on the prospects of expanding the fisheries sector and on the implications of alternative growth strategies in respect to capital requirements and labour input. In a study published last year under the auspices of the previous Government (though not necessarily representing its views) a series of long-term projections have been examined whereby emphasis was placed on the problems of diversification into both large- and small-scale industrial development[1]. The present Government has undertaken institutional reorganisations with a view to increasing the role of planning in the economy.

There would seem to be general consensus in Iceland on two important long-term policy requirements: firstly to provide a suitable range of job openings and secondly to reduce the vulnerability of the economy to the " vagaries " of nature. On the basis of the present age structure and assuming no increase in the participation rate for women and no significant amount of emigration, the labour force can be expected to grow by about 2 per cent per annum during the remainder of the present decade. By comparison the average annual growth was 1.4 per cent between 1950-1960 and 1.8 per cent between 1960-1968. The expected continued acceleration reflects the high post-war birth rate and the concomitant more favourable age structure. As the agricultural labour force is likely to decline at an annual rate of some 3 per cent approximately 17 900 persons remain to be absorbed by other sectors by the end of this decade.

The question in which particular sectors the diversification of the economy will or should be concentrated is intimately linked with three pending policy issues: the extension of fishing limits[2], the future of EFTA and Iceland's relationship to an enlarged EEC. The use of manpower resources for expansion of the fisheries sector or for diversification into traditional labour-intensive industries on the one hand and capital-intensive, power-based industries on the other leads to very different import and investment requirements. It is difficult to discuss the various alternatives in quantitative terms as data are not available to enable a disaggregated approach involving separate import and production functions for each sector. It will therefore be necessary to deal with the problems involved in piecemeal fashion.

(i) *The fishing sector*

If it is assumed that the extension of the fishing limit does not become effective then prospects for this industry appear poor. The Icelandic arguments for the new fishing limits suggest that there is a considerable danger of overfishing leading to a serious depletion of the more important species in Icelandic waters. In particular the presence of large mobile foreign vessels

1 Magnusson G., " Idnthrounaraform " (" Industrial Development Perspectives ") The Ministry of Industry, Iceland, 1971.

2 The Icelandic authorities have given notice that regulations will be issued before the 1st September 1972 extending the fishing limits from 12 to 50 miles. This extension will in effect cover a large part of the continental shelf.

is feared, as these are in a position to change fishing grounds as the stock of fish in an area becomes depleted. Even if this danger is not completely accepted it is unlikely that the high growth rates of demersal catch that have occurred during the past two years will continue. The switching of fishing effort from herring to white fish is now largely completed and future year classes are thought to be poorer than those of the past two years. Forecasts of the catch rate (catch per 1 000 ton hours) for the period 1971-75 in Icelandic waters[1] suggest that the catch rate of cod in 1975 will only be about 80 per cent of its 1969 level. Further progress could be made within the fishing sector by increased processing of the fish catch[2].

However as Iceland is not the dominant supplier on foreign markets the price will be largely determined by the supply from other sources. In the medium term the total supply is almost impossible to forecast. An optimistic feature has been the Canadian attempt to regulate the supply of frozen fish fillets being sent to the United States market. The demand situation is almost equally uncertain. Estimates for the United States market have suggested that the income elasticity of demand for groundfish is slightly greater than unity and that a significant cross elasticity exists with meat and poultry. Such estimates can, however, only be projected with great caution.

Extension of the fishing limits to largely cover the Icelandic continental shelf would significantly alter the prospects for the fishing industry. In 1969 Icelandic vessels took about 60 per cent of the total demersal catch within the proposed fishing limits. During the ten years preceding this the average proportion was about 51 per cent. Taking the latter figure and ignoring the effect of reduced fishing on stock, the demersal fish catch could expand for ten years at an annual average rate of 7 per cent, compared with 8.8 per cent during the period 1966-1970. However, as one of the main purposes of the expansion would be to allow conservation of the fishing stock, suitable management policies could allow expansion of the catch for a considerably longer period than those illustrated above. A reduction in the overall catch in relation to the stock could contribute to lessening the problem of cyclical fluctuations in the catch. As the cod catch has proved more stable than that of other species in Icelandic waters, a further reduction in cyclical instability may be expected if emphasis continues to be placed on cod[3].

1 See "Fishing Prospects for 1971-1972", (UK) Ministry of Agriculture, Fisheries and Food, 1971.

2 In the past processing has been discouraged by higher tariffs on processed than on raw fish products.

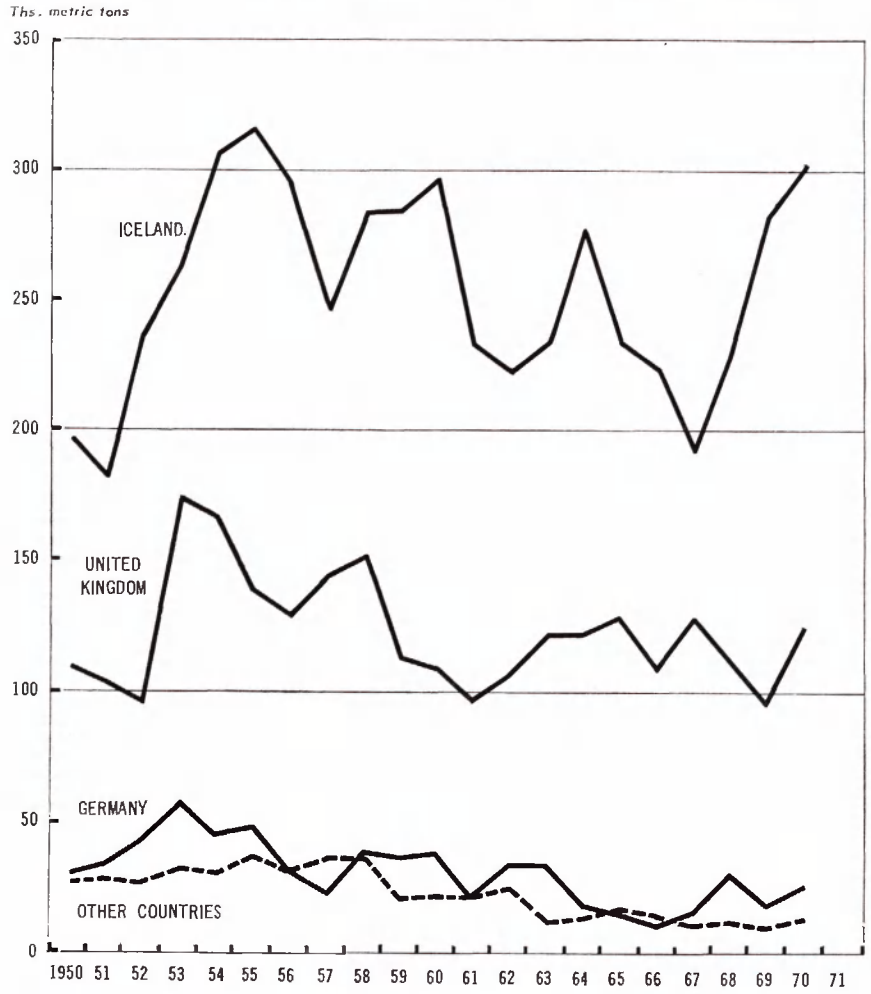
3 This is indicated in the following table:

Per cent of Total Catch

	1960	1965	1970	Variability Index
Cod	50	20	42	40
Haddock	7	5	4	10
Herring	23	64	7	280
Other	20	11	47	
Total	100	100	100	100

(The Variability Index is based on the standard deviation/mean of the volume of the catch during the period 1953-1970).

Diagram 9 **Distribution of the Cod Catch by Major Countries, 1950-1970[1]**



1 Cod caught in the waters surrounding Iceland.
Source: Icelandic Submission to the OECD.

It is difficult to estimate the effect an extension of the fishing limit would have on resource requirements in the fishing industry. Initial estimates have suggested that the ratio of capital to labour in the fishing industry is about the same as for the whole economy. A lower ratio of capital to labour has been found in the fish processing industries[1]. In 1969 fishing accounted for 6 per cent of the labour force and it is unlikely that, even with the effect on associated

1 There is also evidence that the capital to output ratio is lower in fishing and fish processing than for the economy as a whole. These estimates should however be treated with caution.

industries, an expansion in fishing would seriously lessen the need for the diversification of industry. An expansion of fishing limits would therefore not solve the problem of employing the expected increase in the labour force. During the period 1961-1970 fishing accounted for an average of 6.3 per cent and fish processing 3.9 per cent of total gross fixed investment. Given the low level of investment in the fishing industries during 1968 and 1969 and the unfavourable age distribution of the trawler fleet, an extension of the fishing limit might, however, involve considerable new investment in the initial stage. If this were the case, extension of the limits and diversification of industry may be partly seen as competitive objectives. On the other hand, a period of export led growth in the fishing industry could provide the foreign exchange to finance the purchase of investment goods for other industries.

(ii) *Diversification of industry*

Thus, irrespective of the outcome of the dispute over the fishing limits the diversification of resources into manufacturing remains of the greatest importance for a satisfactory future development of the Icelandic economy. A recent study[1] provides a series of normative projections based on alternative sets of assumptions with regard to (large and small-scale) industrial developments. On the basis of the development of those industries discussed below, manufacturing would employ about 25 per cent of the increased available labour force by 1980 (see Table 12). As capital-intensive, large-scale industries are expected to directly supply work for only 1275 (of which the aluminium smelter would account for 500) most of the extra employment after construction has been completed would have to go into traditional small-scale industries. An absolute decline is forecast in the labour force employed in agriculture whilst fishing and to a lesser extent fish processing would decline in

Table 12 Forecast Distribution of Increase in Labour Force to 1980

	% of labour force	Average annual rate of change			Projected yearly increase (No. of persons), 1971-80
	1969	1960-69	1963-69	1970-80[1]	
Agriculture	12.9		1.3	–3.0	–26
Fishing	6.0		0.9	0	0
Fish processing	8.2	1.1	–0.8	1.1	80
Manufacturing	16.5	1.6	1.1	2.8	427
Construction	11.5		3.8	2.1	207
Electricity, gas and water	0.7		11.3	1.1	12
Communications	8.8		1.0	3.1	254
Commerce	13.5		2.3	2.6	350
Other services	21.9		6.3	2.7	455
Total	100.0				1 759

1 As 1970 data on distribution of the labour force are not yet available, the projected annual increase has been estimated as from that year.

Sources: The Economic Institute and Secretariat calculations.

1 See Industrial Development Perspectives, *op. cit.*

relative importance. In common with what has been observed in other developed countries the service sectors would absorb a more than proportionate share of the increased labour force.

The change in structure which would result from a successful programme of diversification is seen more obviously in Table 13. The diversification of export products would be an essential factor in lessening the variability of export earnings. Manufactured products become significantly more important increasing their share of commodity exports from 17 per cent in 1970 to 42 per cent in 1980[1]. These figures do not give a complete picture of the relative contribution of different industries to external balance. The lack of domestic raw materials means that manufacturing and particularly aluminium production is very dependent on imports. It has been estimated that at present only about 25 per cent of the export value of aluminium represents domestic value added. Perhaps with further processing of the aluminium output (particularly aluminium casting) this might increase to a third by 1980. Difficulties might, however, be encountered in finding markets for processed aluminium products. The percentage contributions to net exports (shown on the right of Table 13), although less dramatic than those discussed earlier, still show a significant structural change in the composition of exports.

Iceland's estimated hydro-electric power resources amount to 35 000 GWh a year of which only 6-7 per cent has yet been utilised. Development is considered economically feasible for about three quarters of this total supply. This proportion will be sensitive to the price of alternative power sources. The hydro-electric capacity at Búrfell has formed the basis of an aluminium industry in Iceland. The industry has been developed with the aid of foreign capital[2] and the manpower requirements are relatively low. Excluding the construction period the industry has therefore probably not involved a large cost

Table 13 **Forecast of Export Values and Shares, 1974 and 1980**

	1970		1974		1980		% share of net exports[1]	
	Mill. Kr.	%	Mill. Kr.	%	Mill. Kr.	%	1970	1980
Fish products	10 081	78	12 000	67	17 000	56	85	65
Aluminium and other energy-intensive production	1 708	13	4 250	23	9 500	32	5	20
Other manufacturing (incl. diatomite)	519	4	1 200	7	3 000	10	5	13
Agricultural and other products	589	5	500	3	600	2	5	3
	12 897	100	17 950	100	30 100	100	100	100

1 Share of domestic value added in exports.
Source: " Industrial Development Perspectives ". Iceland 1971.

1 In 1965 manufactured goods represented only 1 per cent of commodity exports.
2 The Icelandic Aluminium Company (ISAL), which runs the Straumsvík plant is a subsidiary of the Swiss Aluminium Company.

in terms of Icelandic resources. In view of the importance of the aluminium industry at present and its future potential for further diversification, the present difficult position of this industry must be seriously viewed. There is now considerable over-capacity in the industry and in 1971 there has been a sharp increase in stocks of aluminium awaiting export. At this stage it is difficult to forecast how long and intense this over-capacity will prove to be.

If poor conditions in the aluminium industry lead to a shortfall in the proposed diversification of export production this could be partly compensated by greater effort to attract foreign capital to the development of other large-scale industries. Amongst the most interesting of the projects now under discussion in Iceland is that for a sea chemicals industry based on the use of steam from the geo-thermal area at Reykjanes. A proposed complete project would eventually produce a range of chemical products including salt, magnesium chloride and magnesium metal. Most of this project is still at the planning stage but initial studies on economic feasibility have been favourable. The National Research Council in its assessment of the possibilities for new industries is considering development of a heavy water plant based on geo-thermal power, a seaweed-based industry and an oil refinery. At this stage, however, these projects must be regarded as only at the exploratory stage. Further expansion is also anticipated in the production of diatomite and fertilizers. The most promising of the small-scale traditional industries are skins, wool products, ceramics and mink-farming. As these latter are based on local materials their net contribution to exports would be relatively important. No explicit consideration is given in the study to the development of the export of services. In 1971 transportation and travel represented over 23 per cent of total exports of goods and services. The expected expansion of tourism might lead to particularly good opportunities for Iceland in the next decade. On the other hand the reduction of transatlantic air fares could adversely affect receipts from the relatively cheap Icelandic carrier.

(iii) *Financing and marketing problems*

The small size of the Icelandic population makes it unlikely that domestic saving could generate sufficient funds to finance the development of large-scale industry[1]. The attraction of foreign capital therefore becomes an essential part of a programme for industrial diversification. To the extent that foreign capital is borrowed the problem of debt service must be considered[2]. Direct investment tied to a particular project could also be sought. Foreign capital would usually be attracted to capital-intensive projects and the opportunity cost in terms of Icelandic resources should therefore be low. In addition, account should be taken of the technical knowledge that foreign-owned companies may bring with them. The policy statement of the new Icelandic Government lays stress on the development of diversification with Icelandic ownership. The Government's stress on national control could imply difficulties in attracting foreign capital.

1 The marginal propensity to save calculated from ordinary least squares regression for the period 1951-1969 was about 0.3.

2 The ratio of amortization and interest payments to export, was 9.8 per cent in 1971, slightly below the average for the whole decade.

The limited size of Iceland's domestic market makes access to foreign markets an essential condition for any programme of industrial diversification. In this context the accession to full membership of EFTA in March 1970 was an event of considerable importance[1]. However, Icelandic membership has coincided with a period of great uncertainty for EFTA. If the United Kingdom, Denmark and Norway become full members of the EEC, then the continuation of the advantages gained from membership of EFTA are questionable. At the moment it is uncertain what final arrangement Iceland might achieve with an enlarged EEC. A possibility would be a free trade area but with a time scale comparable with the transitional period agreed with EFTA. The recently declared Fisheries Policy of the EEC and the proposed extension of Iceland's fishing limits are complicating negotiations.

(iv) *Regional problems*

Relative dependence on agriculture and fishing in Northern and Eastern Iceland is greater than for the country as a whole. Incomes are below average in these regions, while variations in the fish catch lead to considerably more unemployment than in other parts of the country. There is also a seasonal unemployment problem as the fish catch is concentrated to particular parts of the year. The problems are increased by the low density of population and difficulty of communication outside the Reykjavik area. These factors have resulted in net emigration from the country to the towns and from the regional centres to Reykjavik. Extrapolations suggest that if no action were taken

Table 14 **Demographic, Employment and Income Data by Region**

	Reykjavik area	North	North West	West	South	East	Total
Per cent of total population, 1970	58.6	15.7	4.9	6.5	8.8	5.5	100
Percentage growth in population, 1960-1970	22.2	9.0	–3.6	12.1	13.7	11.6	16.4
Net migration as per cent of population growth, 1965-1985[1]	+ 31	–55	–95	–10	–30	–30	0
Unemployment as per cent of population, 1969	0.6	2.4	0.5	0.7	0.3	1.5	1.0
1970	0.3	1.8	0.2	0.2	0.2	0.9	0.5
Proportion of labour force in fishing industry, 1969	4.7	9.1	19.0	11.5	11.5	27.8	14.2
Percentage deviation from mean income for whole country, 1969	+ 5.7	–9.5	–6.4	–7.1	–4.7	–15.2	0

1 Based on extrapolation of 1960-1965 experience
Source: The Economic Institute and Hagtidindi.

1 The terms of agreement would seem very favourable to Iceland. Immediate tariff free access to EFTA markets is gained for manufactures and certain fish products. In return, Iceland is allowed a ten-year adjustment period in which to gradually remove tariff barriers. Until 1975 Iceland may increase tariffs not covered by GATT in order to protect new industrial development. In addition, the Nordic Industrialisation Fund was established to provide funds for industrial diversification.

almost half of the growth of population outside the capital would migrate to the Reykjavik area. As this migration would probably be concentrated to the more active sections of the population the burden of providing basic infrastructure development for small communities would be considerably increased.

Table 15 **Distribution of Employment by Sector and Region**
Per cent

	Northern Region, 1965	Eastern Region, 1968	Whole Country, 1968
Agriculture	31.0	27.0	13.0
Fishing	7.6	12.1	5.8
Fish processing	10.5	17.6	7.2
Other manufacturing	15.2	7.9	15.8
Construction	8.7	7.8	13.3
Electricity, gas, water, etc.	0.6	0.1	0.9
Transport, storage and communications	5.1	7.7	9.1
Commerce	9.7	9.1	15.0
Other services	11.6	10.7	19.9
Total	100.0	100.0	100.0

Source: The Economic Institute.

Policy has been concentrated on the improvement of communications and the establishment of regional growth points which would form the basis of industrial diversification in the regions. The concentration of potential hydro-electric power in the South-Western and North-Eastern parts of the country might allow the development of large-scale industries in these regions. A series of plans have been sponsored by the Employment Equalisation Fund and produced by the Economic Institute covering communications programmes for the North-Western peninsular and the Eastern region. A general industrial development programme has been produced for Northern Iceland and a communications programme for this region is now being prepared. An industrial development plan is also being considered for the Western region. The magnitude of the problem is illustrated by the estimate that for the Northern region 5 600 new jobs in industry and services will be needed during the period 1965-1985. During the previous 15 years only 700 new jobs were created in these sectors.

II SHORT-TERM DEVELOPMENTS AND PROSPECTS

Mounting pressure on resources

1971 marked the second year of strong business upswing with real GNP increasing by some 9 per cent and real national income by 12 per cent. The

economy was operating at a high level of capacity utilisation. Unemployment was virtually non-existent. The continued sharp increase in export earnings of the fisheries sector constituted the main factor pushing the economy ahead. Whilst the volume of fish catch fell by about 6-6½ per cent export prices of marine products rose by no less than 24 per cent. Exceptionally favourable weather conditions led to a significant increase in agricultural production for the first time in five years. Production in manufacturing, excluding fish processing, and construction expanded by more than 15 per cent.

The rapid growth of incomes in the fisheries sector entailed a steep rise in domestic demand with real gross fixed asset formation increasing at a record rate of about 34 per cent. In absolute terms private consumption showed the biggest advance which even outstripped the increase in GNP. Stockbuilding was boosted by the failure to export the increased aluminium production. Imports of goods and services which at constant 1970 prices rose by 25 per cent met half of the increase in domestic expenditure. Exports fell in real terms in 1971 reflecting the fall in fish catch and slack demand conditions abroad for aluminium.

Table 16 **National Product and Expenditure**

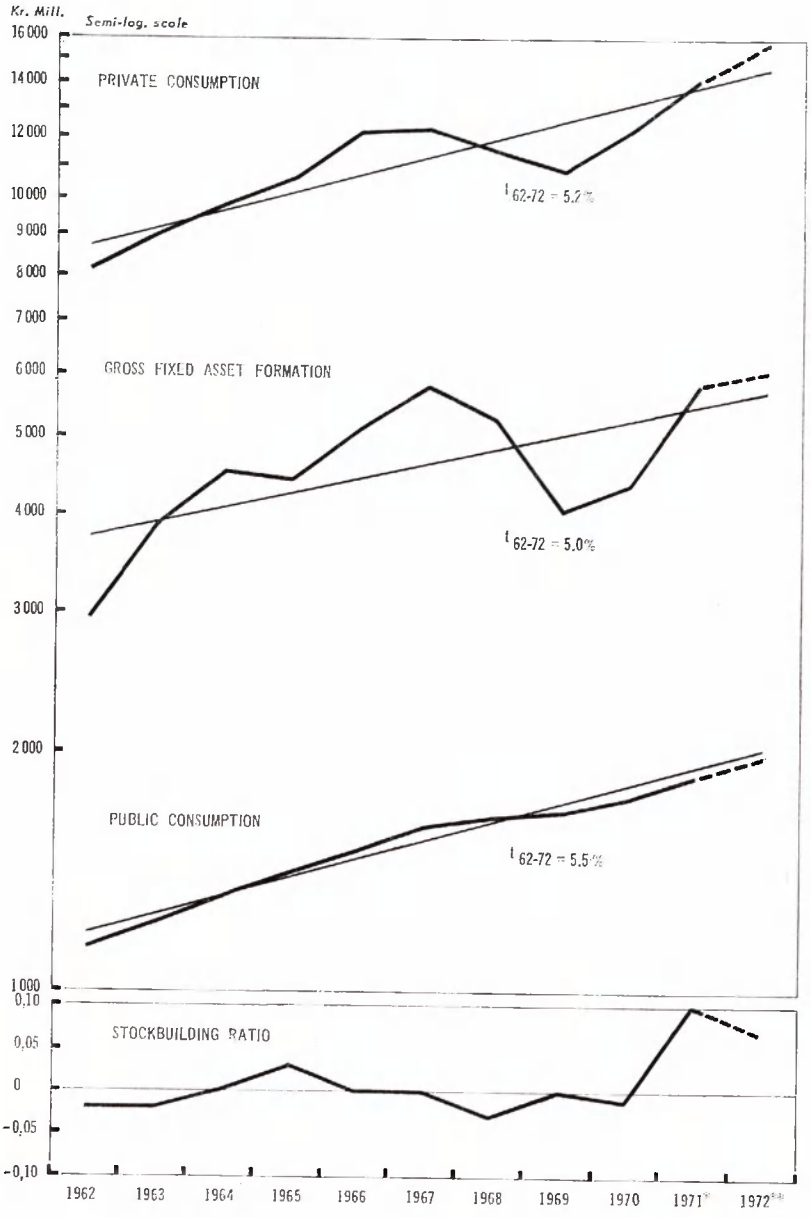
	1970 at current prices Kr. million	Percentage change from previous year at constant prices[1]			
		1969	1970	1971	1972
Private consumption	27 500	–6.4	12.2	15.5	11.8
Public consumption	4 050	2.2	4.5	6.4	5.6
Gross fixed asset formation	10 478	–24.1	8.6	34.0	2.4
Change in stockbuilding	–353	1.3	–0.2	4.3	–0.9
DOMESTIC EXPENDITURE	41 675	–9.8	10.4	23.7	7.5
Exports of goods and services	21 195	13.3	19.3	–3.8	9.4
Imports of goods and services	20 470	–11.1	26.4	25.3	9.4
GROSS NATIONAL PRODUCT	42 400	2.0	6.0	9.3	7.3
Effect of change in terms of trade	—	1.1	4.9	3.2	–1.7
GROSS NATIONAL INCOME	42 400	3.0	10.5	12.5	5.4

1 Change in the rate of stockbuilding and effect of change in terms of trade shown as percentage of previous year's GNP.

Source: The Economic Institute.

After two years of small surplus the current balance of payments swung back into a sizeable deficit position which amounted to as much as 7 per cent of 1971 GNP. The deterioration can in part be attributed to the exceptionally high imports of ships and aircraft, but the major factor was the response of imports to the high level of demand. The current deficit did not pose any

Diagram 10 **National Expenditure, 1962-1972**
1963 Prices



* Provisional.
** Forecast.
1 Ratio of stockbuilding to aggregate demand.
Source: Icelandic submission to the OECD.

financial problems as capital transactions produced a surplus of as much as $ 59 million, enabling a further strengthening of the external reserve position. The heavy capital inflow in part reflects the provision of funds from abroad to finance special imports and holdings of aluminium stocks.

Table 17 **Balance of Payments, 1969-1972**
$ million

	1969	1970	1971[1]	1972[2]
Trade Balance, fob	0.0	2.6	–50.8	–58.1
Exports	106.9	145.8	149.9	173.6
Imports	–106.9	–143.2	–200.6	–231.7
of which: special imports[3]	–16.2	–23.3	–45.6	–37.8
Services, net	4.4	5.6	6.4	–1.1
Transfers, net	–0.8	–0.3	–0.4	–0.4
Current Balance	3.6	7.9	–44.8	–59.6
Capital Balance	16.3	2.1	59.3	34.4
Errors and omissions	–0.8	1.1	—	—
Special Drawing Rights (IMF)	—	2.5	2.5	2.4
Change in foreign exchange reserves	19.2	13.6	16.9	–22.7

1 Provisional.
2 Forecast.
3 Ships and aircraft, imports for power projects, aluminium smelter and defence force.
Source: The Central Bank.

The relatively strong liquidity creation in the first half of the year facilitated a high rate of lending and was probably the major factor behind the unsuccessful attempt of the Central Bank to restrain the rate of commercial banks' credit expansion to below 12 per cent during 1971. The ample liquidity base in the first half of the year represented an intensification of the normal seasonal pattern. Despite the deteriorating trend of the balance of payments, an increase of the penalty rate for overdrafts at the Central Bank and the Kr. 832 Million frozen in the Price Equalisation Fund there was a 22 per cent increase in commercial bank credit expansion during 1971. The reversal of seasonal factors led, however, to serious liquidity difficulties in the latter part of the year. The penalty rate clearly did not prove a serious deterrent as banks had heavy recourse to Central Bank credit facilities. The rate of increase in the money supply (money and quasi-money) fell from 23 to 18.2 per cent with a clear shift in liquidity creation towards domestic sources.

The approved initial central government budget estimates foresaw little increase in the surplus on current and fixed investment account and a significant drop in the overall cash surplus as compared with the 1970 results. The actual budget outcome saw a deficit of Kr.220 million on current and fixed investment account representing a deterioration from the 1970 results equivalent to about 1.3 per cent of GNP. This large deficit resulted from a 40 per cent increase in expenditure whilst revenue rose by only 30 per cent. The larger than anticipated increase in wages and salaries and the continuation of the price

freeze and concomitant subsidy payments throughout 1971[1] were the major factors behind the overstepping of initial expenditure appropriations. The overall cash deficit was Kr. 480 million, but as Kr. 290 million represented a repayment of loans to the Central Bank the cash deficit vis-à-vis the private and financial sector is reduced to Kr. 190 million. The large swings in both the income effective balance and the liquidity balance of the central government budget reinforced the already excessive demand pressures.

In order to contain the danger of an accelerating wage spiral, the authorities introduced a price freeze in November 1970 which was subsequently extended throughout 1971. The freeze and the concomitant increases in food subsidies contributed to reducing the rate of increase in the cost-of-living index from more than 13 per cent in 1970 to about half this rate in 1971 (excluding the effect of higher subsidies the rate might still have reached 11 per cent). The slowing-down of price increases has not only been confined to consumer goods; the implicit GNP deflator was reduced from as much as 18.2 per cent

Table 18 **Monetary Survey**
Changes (Kr. Million)

		1969	1970	1971 Preliminary
1	Foreign assets, net	1 861	1 390	824
2	Domestic assets	1 441	2 494	2 989
	Claims on Government, net[1]	238	–270	56
	Claims on Treasury's Depository Funds	80	–204	–943
	of which: Price Equalisation Fund of the Fishing Industry	–46	–184	–832
	Funds[1]	–96	364	601
	Credit to other Sectors[2]	1 582	2 734	3 159
	Foreign funds relent	–363	–130	116
	Total (1 + 2 = 3 + 4)	3 302	3 884	3 813
3	Money and Quasi-Money	3 131	3 512	3 405
	Money supply[3]	1 327	921	817
	Notes and coin in circulation	174	261	197
	Demand deposits	1 153	660	620
	Time and savings deposits	1 743	2 576	2 558
	Import deposits	61	15	30
4	Other items, net[4]	171	372	408

1 Prior to 1970 the data reflect only Central Bank claims.
2 Prior to 1970 Deposit Money Bank lending includes lending to Government and Investment Credit Funds.
3 Notes and coin in circulation, demand deposits of Deposit Money Banks adjusted for checks in transit and deposits of Investment Credit Funds held by Central Bank.
4 Capital and reserves of Deposit Money Banks, etc.
Source: The Central Bank.

1 The price freeze was originally due to end 1st September 1971.

Table 19 **Central Government Finance**
Kr. million

	1969 Accounts	1970 Accounts	1971 Estimated Outcome	1972 Budget
Current revenue	7 455	9 800	12 780	16 899
Current and fixed investment expenditure[1]	7 590	9 351	13 000	16 550
Balance on current and fixed investment account	–135	449	–220	349
Long-term lending, net	–113	–17		4
Short-term lending, net	–44	–17		—
Long-term borrowing	304	141		–266
Short-term borrowing	–17	3		—
Balance on financial transactions	130	110	–260	–262
Current receipts outstanding and other adjustments	–205	–35	—	—
Overall cash balance	–210	524	–480	87

1 Including capital transfers to Investment Credit Funds.
Source: The Ministry of Finance.

in 1970 to 12.3 per cent in 1971[1]. The easing of inflationary pressures in 1971 is further reflected in wage movements. The growth rate of average annual earnings of all employees declined from the exceptional rate of 28.0 per cent in 1970 to 23 per cent in 1971. However, the fact that this decline is smaller than the combined effect of revisions in wage and salary rates and escalator clause adjustments is largely explained by the above-average rise in the share price of fishing and also by some element of wagedrift.

Deteriorating price and balance of payments outlook

Whereas in the past three years maintenance of a high growth rate has been assisted by closing the gap between actual and potential output, in 1972 growth will depend solely on expansion of the latter. Further, a continuation is not expected of the strong rise in the export price of fish that has increased the scope for real demand expansion and aided the balance of payments during the past two years. The increase in volume of the catch is tentatively put at 4 per cent whilst a 4½ to 5 per cent increase is expected in the export price of fish products. This is based on the assumption that the high level of fish prices reached on the U.S. market at the end of 1971 will hold throughout 1972. The December wage settlement and the ending of the rigid price freeze will also involve problems in restraining the rate of price increase and balance of payments deterioration.

The main features of the wage agreements concluded in December and covering a two-year period to November 1973 are:

1 Excluding the export component the reduction is even more pronounced.

(*i*) an immediate increase of 8 per cent for lower paid workers[1]. Other union members receive 4 per cent;
(*ii*) a further 4 per cent to be paid on 1st June 1972 and 6 per cent on 1st March 1973;
(*iii*) a reduction in the working week from 44 to 40 hours from 1st January 1972 and an increase in the length of paid vacations.

The agreement covers about 50 per cent of the labour force and indirectly a further 15 per cent (predominantly farmers) whose incomes are linked to those directly affected. As the new agreement contains an escalator clause its eventual impact on earnings is dependent upon the development of prices[2]. Public employees had signed a contract in December 1970 for the three-year period from 1st July 1970 to 1st July 1973 giving a total weighted average increase of about 40 per cent, half of which was received in 1971, the other half becoming fully effective during 1972. Incomes in the fishing sector will be influenced by the 10 per cent increase in raw fish prices[3]. In Table 20 a range of forecasts is given for the possible changes in prices and wages during 1972. The " low " wage and price forecast for 1972 assumes that the shortening of hours agreed in the December wage settlement leads to no increase in overtime. The " high " forecast assumes that hours worked remain the same and overtime increases. The forecast range of increase in personal earnings is 24.5 to 32.5 per cent and that of the cost of living 8.5 to 10.5 per cent.

The official forecasts for aggregate demand and balance of payments are based on the " low " wage assumption in Table 20. The 7.3 per cent real GNP growth rate expected for 1972 is considerably above the trend for the period 1950-1971. A small fall is expected in the growth rate of private consumption, whilst the expansion of gross fixed investment is expected to slow down sharply. In part the low growth rate of investment reflects the sharp fall in purchases of transport equipment. Excluding these items the growth rate of investment still falls from 23 to 11 per cent. Investment in fishing is expected to increase by 153 per cent at constant prices and that in fish processing by almost 35 per cent. Part of this increase reflects the need to replace outdated trawlers, and part a response to the high earnings of this sector during the past three years. The rate of change of government expenditure remains fairly constant and stockbuilding should remain high at about 1.6 per cent of GNP—again as a result of the depressed state of the aluminium industry.

On the basis of the 24.5 per cent rise in personal earnings imports are expected to increase by over 15 per cent in 1972; when account is taken of the reduced importance of " special imports " the growth rate becomes 25 per cent. The growth rate of export earnings will, however, be slower as a considerable reduction is expected in the rate of increase of prices for marine products and only half of the aluminium produced is forecast to be exported. As net earnings from services are expected to fall by an amount equal to 2.6 per cent of total export receipts, the deterioration in the current balance is

1 Approximately 45 per cent of those directly covered by the agreement.
2 Since June 1970, with minor exceptions in the agricultural sector, all changes in the cost of living are fully compensated in wages.
3 Settlement of 6th January 1972.

forecast to be even more pronounced than that in the trade balance. The current déficit is now expected to reach almost 9 per cent of GNP, a figure comparable to that in the exceptional year of 1967. There is also a fall in net capital inflow associated in part with the reduction in borrowing to finance "special imports". Although the absolute capital inflow remains large the loss of reserves is equal to about 42 per cent of their total value at the end of 1971. The forecast takes into account the recent revaluation of major supplier countries which meant an effective 5 per cent average devaluation of the Icelandic Krona.

As the official forecast is based on the assumption of some reduction in effective hours worked achievement of an above-capacity growth rate would seem unlikely given the fact that full or over-full capacity utilisation was already reached in 1971. If, on the other hand, hours remain unchanged and wage and price movements prove closer to those considered in the " high " assumption this will certainly have considerable effects on domestic demand and the balance of payments. The expected increase in real consumption associated with the "high" forecast is 17 per cent, which is 1.5 percentage points higher than the increase in 1971. In this event the deterioration in the balance of payments would be even more serious than that indicated above. It may also be questioned, on the basis of past experience, whether the increase in cost of living can be kept down to the 10.5 per cent estimated if wage and salary rates increase by as much as 30 per cent. The recent revaluations of supplier currencies associated with the ending of the formal price freeze and the reduction of consumer subsidies will all add to the pressure on prices.

The outlook for 1972 makes unambiguous the need for a restrictive policy stance. The deterioration of the balance of payments will of itself strongly assist a restrictive monetary policy. There is, however, a danger that the seasonal factors commented upon earlier will again lead to an excessive expansion of credit during the first part of the year. Priority should be given to avoiding

Table 20 Wages and Prices
Percentage change from previous year

		1969	1970	1971[1]	Preliminary forecast 1972 Low	Preliminary forecast 1972 High
1	Wage and salary rates of all employees	12.8	24.4	17.7	20.5	30.0
2	Total personal earnings (nominal)	15.3	28.0	23.0	24.5	32.5
3	Cost of living	21.7	13.2	6.7	8.5	10.5
4	Real wage and salary rates (1/3)	–7.3	9.9	10.3	11.1	17.6
5	Real earnings (2/3)	–5.3	13.1	15.3	14.7	19.9
6	Disposable income of households (nominal)	15.1	30.8	22.6	23.9	32.5
7	Prices of consumer goods	24.1	14.3	7.0	10.4	12.5
8	Real disposable income (6/7)	–6.3	14.4	14.6	12.2	17.8

1 Estimates.
Source: The Economic Institute.

this unwarranted expansion possibly by selling Treasury bills to the commercial banks. The 1972 Budget proposals show the influence of the recent tax reform[1]. The large increases in central government revenue and expenditure partly reflect a redistribution of responsibilities from Local to Central Government. Income tax receipts are expected to be the most important factor contributing to this increase in revenue, whilst wages and salaries represent the major item in the rise in expenditure. By comparison with last year's budget outcome the approved budget for 1972 should exercise a considerable restrictive impact. While the increase in the surplus on current and fixed investment account would represent almost 1 per cent of GNP, the budgeted surplus is, however, smaller than that initially estimated for 1971 and the danger of slippages should be recognised. As the budget is based on the " low " forecast for earnings, any further increase in incomes and prices will tend to strengthen the overall balance. There is, however, at present a further wage claim being considered for public employees which could inflate the level of expenditure. The balance of payments and price forecasts would appear strong arguments for attempting to ensure a high degree of budgetary and fiscal restraint in 1972.

III CONCLUSIONS

Iceland is faced with a number of inherent disadvantages. The range of natural resources is relatively limited, climatic conditions are unfavourable and the country is located at a point remote from major world markets and suppliers. In addition, the size of the population, which barely exceeds 200 000, sets strict limits to the range of industries which can be economically developed on the basis of an assured domestic market. Despite these apparent handicaps a comparatively high standard of living has been attained. Even after the severe setbacks of 1967 and 1968 when real income levels actually fell in absolute terms, average per capita GNP has remained above the European OECD average. The distribution of income appears to be relatively even and high levels of employment have been maintained during virtually the entire post-war period. Iceland would also appear to rank highly in terms of other social indicators of well-being in a broader sense. Certainly, housing standards must rank among the highest in the world.

Iceland has, however, experienced a higher rate of inflation and more severe fluctuations in real income than any other OECD Member country during the post-war period. An important source of this instability lies in the dominant position of the fisheries sector and in the variability of both volume and price of the catch. The tendency of wages to follow seamen's incomes which are closely linked to export earnings has complicated the task of restraining general increases in nominal incomes within the limits set by the growth of real disposable resources. During periods of favourable fish catch labour productivity gains in the fisheries sector easily outstrip those in other domestic sectors, and the wage-granting capacity of the fishing industry has often been

1 See footnote on page. 22.

further strengthened by the observed tendency for volume and price of fish exports to vary in the same direction. The leverage exercised by the fisheries sector on other income groups operates as a ratchet in the upward direction, whereby domestic price increases ensure a redistribution of incomes in favour of the sheltered domestic sectors. On the other hand, falls in export earnings have only partly been reflected in subsequent movements in seamen's earnings, as subsidy payments and other arrangements have operated to sustain boat-owners' capacity to pay guaranteed minimum wages to crews. Nominal incomes in other sectors are by the nature of things even more unlikely to move in a downward direction under these circumstances. Moreover, devaluations, usually following a sharp fall in the fish catch, have helped to maintain profitability of the fishing sector, thereby adding further strength to the inflation process.

The relatively high and fast growing level of per capita income suggests that Iceland has learnt to live with a rate of inflation which (measured by the GNP price deflator) has averaged over 11 per cent per annum during the period 1950-1971. Compensation for the effects of price increases has been achieved through the widespread use of escalator clauses; wage rates as well as both the capital value and yield on certain Government savings certificates for example, have been linked to cost indices. In addition, State pension benefits have been linked to the earnings of unskilled workers, while the application of a special index compensates for the progressivity effect of inflation on income tax liabilities. While domestic institutional arrangements have thus adapted to the monetary instability, external equilibrium has been maintained through relatively frequent parity changes of the Krona.

Limitations on the availability of data preclude making anything but broad observations on the possible impact of a high rate of inflation on basic behavioural patterns such as are reflected in the volume and distribution of investible funds. Available theoretical and empirical work in general appears to offer little guidance for assessing such effects. In fact, a high, and indeed increasing, overall savings ratio has been maintained in Iceland. At the same time, however, the proportion of such saving channelled into housing has been relatively high. This preference for investing in real property rather than in financial assets, while no doubt in part reflecting a desire to preserve the real value of savings, cannot be attributed ipso facto to inflation, but rather to a lack of suitable alternative investment media[1]. However, for the export and import-competing industries, whose ability to pass on cost increases is strictly limited, a continuing high rate of domestic inflation poses special problems; both the timing and magnitude of devaluations, which provide subsequent compensation for the cumulative effects of cost-push pressures, are uncertain. The control of interest rates below levels to which the market could be expected to tend as well as the system whereby a part of total investible funds are allocated by administrative rationing have importantly affected the pattern of investment.

1 To the extent that individuals—both lenders and borrowers—base their behaviour on predicted future rates of inflation, it may be argued that it is unexpected changes in these rates, in either an upward or downward direction, that tend to lead to a misallocation of resources.

While the negative effects of inflation are not immediately apparent within the Icelandic context as it has evolved, the problems associated with fluctuations in levels of real income appear to have been of considerably greater concern to the authorities. As these fluctuations have in essence originated from " external " factors, diversification of export industries could contribute towards a longer-term solution of the problem. In turn, the choice between the major alternative lines along which diversification of manufacturing industry could proceed—viz. whether greater emphasis be placed on traditional, labour-intensive industries or on large-scale, capital-intensive industries—necessarily involves consideration of other policy goals which may conflict in varying degree with that of diversification. Regional development objectives and the need to absorb a fast-growing labour force, as well as attitudes towards capital inflow and foreign ownership, may importantly influence growth strategies and hence the future pattern of economic development. The present Government, which assumed office in July last year, appears more favourably disposed towards according a more active role to medium-term economic planning. The benefits which can be expected to accrue from such exercises could include explicit identification of areas of conflict between different goals, allowing an assessment of the cost of policies on the basis of social and more general welfare criteria.

In any event, expansion of manufacturing industry will require the development of export markets. The EFTA's uncertain future so soon after Iceland's accession to membership must be regarded as particularly unfortunate and would emphasize the importance of reaching a suitable accommodation with the EEC. Extension of Iceland's fishing limits would be of clear benefit to the domestic fishing industry, both from the viewpoint of preserving the fish stock (while allowing for an increased catch by local fishermen) and of possibly contributing to stabilizing the volume of the catch. However, there would seem to be limitations on the longer-term capacity of the fisheries sector to maintain a fast rate of development and to absorb manpower.

Short-term strategies to reduce the impact of fluctuations in export earnings on the domestic economy revolve around demand management policies. The Price Stabilization Fund, which provides for the intertemporal redistribution of earnings in the fishing sector, is to be welcomed as a promising tool contributing to this end. However, in view of the actual and potential limitations of this scheme, further efforts should be made to increase the flexibility and the stabilizing influence of conventional instruments of general monetary and fiscal policy in response to changing economic conditions. The recent fiscal reform, which considerably increased the importance of direct taxation at the central level, provides the opportunity for devising more effective means of central management of the economy. However, while greater emphasis is to be placed on direct taxation, the PAYE system of assessment still remains to be introduced. Furthermore, the anticyclical role of fiscal policy could be further strengthened by adopting a more flexible attitude towards the budget balancing principle. Given the particular difficulties attaching to forecasting in Iceland, it would appear desirable not only that the built-in stabilizing response of the fiscal system be strengthened, but also that discretionary powers be accorded the authorities to modify tax rates and expenditure at short notice. An overall strengthening of fiscal policy would contribute to easing

the burden placed on monetary policy. Consideration should also be given to changing the timing of tax collections so as to ease the seasonal pattern of government financing needs. An attempt might also be made to satisfy these needs by selling Treasury bills to the commercial banks. In view of the difficulties in maintaining control over the money supply, greater emphasis could in addition be placed on a more active interest rate policy. Such an approach would have implications not only for short-term demand management but also in the longer run for the volume of, and return on, savings and investment. Although a proposal for distributing the benefits of a rise in export prices to the domestic sector by revaluing the Krona was rejected in 1970, the merits inherent in such an approach should justify its serious consideration at appropriate times in the future.

Certain features of the current situation could indicate the danger of a cumulative wage/price spiral developing during the course of 1972, with mounting difficulties in maintaining external equilibrium. Real growth last year, which was the fastest in the whole OECD area, was achieved with apparently negligible reserves of spare capacity. Private domestic demand rose strongly, entailing a progressive deterioration in the current balance of payments. The credit guidelines for 1971 were exceeded by a wide margin and the balance on current and fixed investment account of the Central Government deteriorated sharply contrary to initial plans. The growth of household incomes deriving from the December general wages settlement, combined with the forecast sharp rise in investment, particularly by the fisheries sector, is likely to sustain strong pressure on demand for imports. The export performance of the fishing industry will again be critical in determining the outcome for the balance of payments. As both volume and price predictions have in the past proved unreliable, scant guidance is available for assessing how closely the officially forecast increases of 4 per cent and 4½ per cent respectively are likely to approximate the actual outcome. Probably little help can be expected from aluminium—indeed, the forecast increase of 40 per cent in value of exports would appear, if anything, optimistic. The growth of wage rates seems certain to outstrip any likely productivity gains by a wide margin in 1972 and the revaluation of the currencies of the most important supplier countries in conjunction with the general realignment of parities in December will further contribute to cost-push pressures.

The expected strong pressure on prices in 1972 coincides with the ending of the formal price freeze which is being succeeded by a period of strict surveillance. It is important that this should be successful in restraining excessive increases in prices. In addition, after the 14 month price freeze, an attempt should be made to develop a more flexible form of incomes policy. The fact that contrary to past practice the recent general wage settlement covers a period of two years may provide an opportunity for formulating such a policy. The most buoyant factor in the increase of the money supply last year was the expansion of domestic credit. In 1972 priority should be given to restraining this growth with particular attention being required to prevent an excessive primary liquidity creation in the first half of the year. The 1972 budget proposals imply a tightening over the previous year's outcome. A considerable effort must, however, be made to avoid a recurrence of the wide divergences between actual and estimated outcome.

STATISTICAL ANNEX

Table A **Supply and Use of Resources**
Kr. million, current prices

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970[1]
Private consumption	6 206	7 513	9 071	11 360	13 219	16 471	17 469	18 812	21 427	27 500
Public consumption	802	963	1 227	1 536	1 862	2 270	2 505	2 800	3 300	4 050
Gross fixed asset formation	2 195	2 829	3 853	4 979	5 506	7 003	7 984	8 725	8 568	10 478
Change in livestock	11	–33	–29	38	39	–18	–32	–12	–41	–58
EXPENDITURE ON FINAL DOMESTIC USE	9 214	11 272	14 122	17 913	20 626	25 726	27 926	30 325	33 254	41 970
Change in stocks of export products	152	–77	–142	22	372	87	74	–264	200	–295
NATIONAL EXPENDITURE	9 366	11 195	13 980	17 935	20 998	25 813	28 000	30 061	33 454	41 675
Exports of goods and services	4 290	5 611	6 137	7 045	8 342	9 091	7 882	9 510	16 132	21 195
Imports of goods and services	4 070	5 248	6 341	7 369	8 096	9 412	10 146	12 055	15 741	20 470
GROSS NATIONAL PRODUCT (market prices)	9 586	11 558	13 776	17 611	21 244	25 492	25 736	27 516	33 845	42 400
Depreciation	1 342	1 526	1 633	1 939	2 351	2 720	3 044	3 928	5 419	6 026
NET NATIONAL PRODUCT (market prices)	8 244	10 032	12 143	15 672	18 893	22 772	22 692	23 588	28 426	36 374
Indirect taxes	1 774	2 299	2 795	3 412	4 355	5 400	5 655	6 080	6 650	8 880
Subsidies	507	586	694	1 098	1 180	1 385	1 800	1 750	1 400	1 600
NET NATIONAL INCOME	6 977	8 319	10 042	13 358	15 718	18 757	18 837	19 258	23 176	29 094
Net income to abroad	128	106	110	137	176	202	252	410	612	460
NET DOMESTIC INCOME	7 105	8 425	10 152	13 495	15 894	18 959	19 089	19 668	23 788	29 554

1 Preliminary.
Source: Icelandic submission to the OECD.

Table B **Supply and Use of Resources**
Kr. million, 1960 prices

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970[1]
Private consumption	5 629	6 261	6 959	7 614	8 187	9 342	9 436	8 956	8 383	9 405
Public consumption	736	788	847	905	974	1 045	1 115	1 145	1 170	1 223
Gross fixed asset formation	1 946	2 274	2 971	3 500	3 429	3 997	4 505	4 111	3 122	3 391
Change in livestock	10	–28	–23	24	25	–10	–19	–7	–22	–26
EXPENDITURE ON FINAL DOMESTIC USE	8 321	9 295	10 754	12 043	12 615	14 374	15 037	14 205	12 653	13 993
Change in stocks of export products	164	–110	–116	—	211	45	45	–174	–4	–25
NATIONAL EXPENDITURE	8 485	9 185	10 638	12 043	12 826	14 419	15 082	14 031	12 649	13 968
Exports of goods and services	3 849	4 698	5 027	5 349	5 940	6 417	6 033	5 653	6 404	7 641
Imports of goods and services	3 928	4 721	5 589	6 326	6 914	7 938	8 489	7 790	6 924	8 754
GROSS NATIONAL PRODUCT	8 406	9 162	10 076	11 066	11 852	12 898	12 626	11 894	12 129	12 855
Effects of change in terms of trade	291	348	383	698	1 186	1 252	540	360	491	1 090
Export income	4 140	5 046	5 410	6 047	7 126	7 669	6 573	6 013	6 895	8 731
Income balance of goods and services	212	325	–179	–279	212	–269	–1 916	–1 777	–29	–23
GROSS NATIONAL INCOME[2]	8 697	9 510	10 459	11 764	13 038	14 150	13 166	12 254	12 620	13 945

NOTE Estimates of real income coincide with output in real terms on the assumption of unchanged terms of trade. Due to a particularly strong improvement in Icelandic terms of trade in the years 1964 and 1965 national expenditure in real terms could rise far above real gross national product without adverse effects on the balance of payments. This is explicity introduced in the Icelandic national accounts, as shown above. The item " Export income ", obtained throught the deflation of exports with the price index for imports, expresses the external purchasing power of the export earnings, and the difference between this item and exports, normally deflated with the export price index, is a measure of the real income " effect of changes in terms of trade ".

1 Preliminary.
2 Gross national product + effect of changes in terms of trade.

Source: Icelandic submission to the OECD.

Table C **Production and Employment**

		1963	1964	1965	1966	1967	1968	1969	1970
FISHERIES AND FISH PROCESSING									
Production: Value, current prices	Kr. mill.	3 756	4 640	5 789	5 812	4 116	4 090	7 758	9 947
1963 prices	Kr. mill.	3 756	3 954	4 500	4 353	3 381	2 860	3 331	3 540
Fishing fleet[1], end of year: Trawlers	GRT	30 027	28 046	26 708	22 876	21 491	20 104	16 837	16 981
Motor boats	GRT	45 144	51 637	54 063	57 431	64 619	63 955	62 509	61 698
Total	GRT	75 171	79 683	80 771	80 307	86 110	84 059	79 346	78 679
Employment in fish processing	1962 = 100	105.9	111.7	113.2	102.3	88.9	87.7	100.9	
AGRICULTURE									
Production: Value, current prices[2]	Kr. mill.	1 449	1 769	2 130	2 181	2 356	2 565	3 154	3 674
1960 prices	Kr. mill.	935	956	1 022	965	1 004	975	944	946
Capacity[3]: Cultivated grassland	1 000 hect.	78.1	78.8	84.1	88.4	91.7	96.5	100.9	104.5
Sheep	1 000 heads	827.3	786.4	812.8	846.7	850.2	829.1	820.2	780.5
Cattle	1 000 heads	55.9	57.2	59.7	59.5	54.5	52.3	52.3	53.4
MANUFACTURING (excl. fish processing)									
Production, volume	1962 = 100	106.9	111.6	113.9	117.1	114.9	117.9	128.7[4]	
Employment	1962 = 100	104.0	108.3	109.2	111.8	107.8	103.5	109.6	
DWELLING CONSTRUCTION									
Started	Number	1 773	1 481	2 126	1 609	2 052	1 041	1 030	1 469
Completed	Number	1 303	1 331	1 518	1 693	1 787	1 779	1 460	1 329
Under construction, end of year	Number	3 128	3 278	3 886	3 802	4 067	3 329	2 899	3 039

1 Including whale-catchers, excluding open boat.
2 Including change in livestock.
3 Beginning of year.
4 Excluding aluminium.

Sources: Icelandic submission to the OECD, Fjarmalatidindi and Hagtidindi.

Table D Gross Fixed Asset Formation
Kr. million, 1960 prices

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970[1]
GROSS FIXED ASSET FORMATION, TOTAL	1 946	2 274	2 971	3 500	3 429	3 997	4 505	4 111	3 122	3 391
Classification by end-use:										
INDUSTRIAL ASSET FORMATION	955	1 132	1 579	1 933	1 748	2 066	2 224	1 647	1 256	1 625
Agriculture	216	246	290	334	362	347	352	324	218	257
Fishing	108	151	287	366	134	193	427	101	53	256
Fish processing	93	179	174	154	171	226	131	66	40	87
Manufacturing other than fish processing	127	154	229	241	224	314	484	658	685	449
Transport equipment	234	223	296	572	515	565	436	264	65	282
Commercial buildings	111	110	152	142	190	216	160	116	140	179
Various machinery and equipment	66	69	151	124	152	205	234	118	55	115
RESIDENTIAL CONSTRUCTION	442	498	638	705	743	826	905	790	616	623
PUBLIC WORKS AND BUILDINGS	549	644	754	862	938	1 105	1 376	1 674	1 250	1 143
Electric power, generation and distribution	98	108	142	122	121	192	387	743	459	334
Geothermal heating and water supply	39	58	91	91	105	104	87	88	84	93
Communications	246	304	349	420	462	528	598	560	453	428
Public buildings	166	174	172	229	250	281	304	283	254	288
Classification by type of assets:										
MACHINERY AND EQUIPMENT	668	799	1 198	1 469	1 201	1 515	1 619	1 361	862	1 211
Electric power, generation and distribution	98	108	142	122	89	112	149	357	219	177
Various machinery and equipment	228	318	473	409	462	645	607	639	524	495
Ships and aircraft	222	255	385	795	504	537	674	238	77	441
Vehicles for industrial use	120	118	198	143	146	221	189	127	42	98
BUILDINGS	918	1 031	1 247	1 405	1 508	1 703	1 889	1 656	1 449	1 392
Residential construction	442	498	638	705	743	826	905	790	616	623
Other buildings	476	533	609	700	765	877	984	866	833	769
OTHER CONSTRUCTION	360	444	526	626	720	779	997	1 094	811	788

1 Preliminary.
Source: Icelandic submission to the OECD.

Table E **Balance of Payments**
$ million

	1963	1964	1965	1966	1967[1]	1968[1]	1969	1970[2]
Exports of goods, fob	95.1	111.1	129.3	139.1	98.7	82.8	106.9	145.8
Imports of goods, fob	–101.9	–120.3	–125.1	–146.2	–151.9	–130.8	–106.9	–143.2
Ships and aircraft	–8.8	–21.8	–13.6	–15.1	–18.6	–6.6	–0.6	–9.7
Straumsvik, Burfell[3]	—	—	—	–3.1	–6.4	–17.6	–14.2	–11.8
Imports to the Defence Force	–1.9	–0.7	–1.0	–0.7	–1.1	–1.5	–1.4	–1.7
Other imports	–91.2	–97.8	–110.5	–127.3	–125.8	–105.1	–90.7	–120.0
BALANCE OF TRADE	–6.8	–9.2	4.2	–7.1	–53.2	–48.0	0.0	2.6
Military receipts	9.0	6.7	8.2	10.4	15.2	10.9	11.3	14.4
Other services	–4.9	–2.9	–4.3	–7.6	–10.1	–0.9	0.1	–3.5
BALANCE ON GOODS AND NON-FACTOR SERVICES	–2.7	–5.4	8.1	–4.3	–48.1	–38.0	11.4	13.5
Interest from abroad	1.2	1.4	1.9	2.2	2.1	1.3	1.9	3.5
Interest on foreign debt	–3.5	–4.0	–4.9	–5.3	–6.4	–7.5	–8.6	–8.8
Transfer payments	0.7	0.1	—	–1.2	–1.4	–0.9	–0.8	–0.3
BALANCE ON CURRENT ACCOUNT	–4.3	–7.9	5.1	–8.6	–53.8	–45.1	3.9	7.9
Amortization of debt	–9.1	–9.5	–10.4	–13.5	–14.9	–16.7	–22.5	–20.0
Public borrowing	11.0	3.9	5.9	12.5	13.0	29.1	23.2	4.5
Private borrowing and direct investment	7.4	17.7	9.6	14.3	21.2	19.1	17.2	10.0
Other capital movements	–1.3	1.0	–1.5	–3.4	8.1	–2.3	–1.8	10.1
Errors and omissions	0.1	1.3	–1.3	–1.2	1.4	1.1	–0.8	1.1
OVERALL BALANCE	3.8	6.5	7.4	0.1	–24.9[4]	–14.8	19.2	13.6
Change in foreign exchange holdings:	3.8	6.5	7.4	0.1	–26.2[4]	–14.8	19.2	13.6
Convertible currencies	2.7	10.1	11.6	–1.3	–30.1	–13.6	18.7	13.3
Clearing currencies	1.1	–3.6	–4.2	1.4	3.9	–1.2	0.5	0.3

1 The exchange rate was changed on 24th November 1967 from 1 $ = Kr. 43.00 to 1 $ = Kr. 57.00 and to 1 $ = Kr. 88.00 on 12th November 1968. However, following the method utilised in the balance of payments statistics of the Central Bank of Iceland figures for 1967 and 1968 have been converted at exchange rates $ 1 = Kr. 43 and Kr. 57 respectively.
2 Preliminary.
3 Special imports for use in the construction of a power station at Burfell, a harbour at Straumsvik and an aluminium smelter. These imports reached a maximum in 1968 and fell almost completely off in 1969.
4 Difference resulting from loss of exchange holdings due to devaluation of sterling and other currencies.

Source: Central Bank Annual Report 1970.

Table F **Central Government Income and Expenditure**[1]

Fiscal year = Calendar year

Kr. million

	1963	1964	1965	1966	1967	1967	1968	1969	1970	1971[2]
CURRENT REVENUE	2 683	3 297	4 185	5 315	5 805	5 135	6 741	7 455	9 800	11 535
Direct taxes	199	281	374	522	739	687	1 332	1 515	1 727	2 186
Indirect taxes	2 450	2 987	3 815	4 714	4 955	4 270	5 326	5 820	7 834	9 207
Other	34	29	–4	79	111	178	83	120	239	142
CURRENT EXPENDITURE	1 983	2 766	3 075	3 688	4 544		5 116	5 619	6 821	8 111
Purchase of goods and services	716	882	1 062	1 309	1 510		2 009	2 529	3 123	3 208
Subsidies	627	1 016	1 086	1 273	1 678					
Interest	6	7	10	9	12		—	—	—	—
Current transfers[3]	634	861	917	1 097	1 344		3 107	3 090	3 698	4 903
Depreciation and other operating provisions	—	—	—	—	—	—	—	—	—	—
GROSS SAVING	700	531	1 110	1 627	1 261		1 625	1 836	2 979	3 424
Gross fixed asset formation	214	230	362	313	485		443	469	821	822
SURPLUS ON CURRENT AND FIXED INVESTMENT ACCOUNT	486	301	748	1 314	776		1 182	1 367	2 158	2 602
Lending, net[4]	101	83	–89	–34	–164		–48	–130	–110	241
Net capital transfers to other sectors	301	469	617	816	984		1 347	1 707	1 744	2 090
OVERALL BALANCE[5]	84	–251	220	532	–44		–315[6]	–210	524	271

1 The first part, 1963-1967, according to the OECD definition and the second part, 1967-1971, according to the Icelandic definition.
2 Approved budget.
3 Including subsidies for the second part, 1967-1971.
4 «—» = net borrowing.
5 Net change in floating debts and cash balances.
6 Including -198 for current receipts outstanding and other adjustments.

Source: Icelandic submission to the OECD.

Table G Fish Catch, Wages and Prices

	Fish catch (thous. tons)					Wages and prices (1963 = 100)									
							Cost of living index[2]						Export prices of fish products[4]			
	Total	White fish etc.	Herring	Capelin	Shrimp and lobster	Hourly wage rates, unskilled workers[1]	Total	Goods and services			Rent	Building cost Reykjvik[3]	Salted white fish	Frozen cod fillets	Herring oil	Herring meal
								Total	Food	Other						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1964	972	415	544	9	3	122.3	119.2	119.7	125.0	114.2	105.2	115.7	122.4	108.3	145.9	107.5
1965	1 199	382	763	50	5	138.6	127.9	128.6	133.3	123.5	113.7	133.8	134.3	125.0	150.9	132.1
1966	1 240	339	771	125	5	162.5	141.6	145.3	153.1	136.7	124.9	155.2	151.3	138.3	127.7	128.2
1967	896	333	462	97	4	170.6	146.3	150.0	155.2	144.1	135.6	159.1	148.1	112.9	100.6	106.4
1968	599	373	143	78	5	183.1	167.9	171.8	182.7	160.2	142.7	176.4	132.9	107.3	69.9	87.9
1969	686	451	57	171	7	213.1	205.5	214.5	232.3	197.9	151.7	219.3	119.3	112.7	73.9	101.5
1970	729	477	51	192	9	261.6	233.4	246.1	271.2	224.9	160.8	256.9	146.4	138.2	148.7	139.3
1971							250.3	264.5	275.6	249.6	170.3					
Quarterly:																
1968 1	166	86	6	73	1	181.2	162.3	165.5	175.8	154.3	141.0	167.7	151.5	116.5	60.9	87.1
2	179	171	2	5	1	183.6	165.5	169.2	176.3	159.4	141.0	177.3	145.5	109.0	76.1	84.8
3	146	76	68	—	2	186.1	167.9	171.7	181.2	160.6	143.8	..	122.2	108.3	65.7	95.9
4	108	40	67	—	1	195.9	175.8	180.8	197.4	166.5	144.8	184.2	121.9	100.7	69.4	86.1
1969 1	290	119	3	167	1	195.9	194.3	202.1	214.2	188.7	146.6	206.1	114.1	109.7	66.3	105.2
2	194	181	7	4	2	219.4	201.7	209.9	225.2	195.1	151.2	223.2	122.9	108.1	72.6	98.3
3	126	96	27	—	3	226.2	210.5	220.2	241.9	202.1	154.0	..	120.9	111.9	68.3	103.5
4	76	55	20	—	1	230.2	215.3	225.6	247.7	205.5	155.1	228.6	110.7	119.6	104.0	142.0
1970 1	276	119	—	155	2	234.0	220.2	230.5	252.9	208.5	155.1	234.4	153.3	127.6	—	135.2
2	261	215	7	37	2	279.2	226.6	238.7	261.6	219.2	159.3	256.3	146.1	132.2	148.2	139.0
3	109	85	21	—	3	290.9	236.2	248.5	275.6	228.3	162.2	..	143.1	133.9	147.6	143.4
4	83	58	23	—	2	290.9	250.7	266.5	294.7	243.5	166.4	279.9	160.4	162.6	158.8	140.2
1971 1	285	105	4	173	3	290.9	249.1	261.6	273.8	246.6	167.8	284.1	200.4	194.0	—	147.3
2	192	180	9	—	3	290.9	250.7	264.9	277.3	249.6	170.6		210.8	187.0	161.1	145.4
3						296.7	249.1	263.2	273.8	249.6	170.6		194.5	195.9	—	127.3
4							252.3	268.1	277.3	252.7	172.0					

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. Aggregates for 1968 calculated with new weights.
3 February, June and October.
4 Unit values calculated from export statistics, converted to dollars at current exchange rates.

Sources: Icelandic Statistical Bulletin (col. 6) and Hagtidindi.

Table H Foreign Trade, Total and by Area

$ million, monthly rates

	Total imports cif		Imports by area						Total exports fob		Exports by area					
			OECD countries[1]			Non-OECD countries					OECD countries[1]			Non-OECD countries		
	Orig.	Adj.	Total	EEC	EFTA	Eastern Europe	Other developed countr.	Developing countr.	Orig.	Adj.	Total	EEC	EFTA	Eastern Europe	Other developed countr.	Developing countr.
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1964	10.9	..	8.9	2.0	4.4	1.8	0.02	0.3	9.3	..	7.4	1.5	4.0	1.3	0.01	0.6
1965	11.4	..	9.2	2.5	4.4	1.8	0.02	0.3	10.8	..	8.9	2.2	4.5	1.2	0.00	0.6
1966	13.3	..	11.4	3.0	5.5	1.5	0.03	0.3	11.7	..	9.7	2.4	4.7	1.4	0.01	0.6
1967	13.5	..	11.5	3.3	5.5	1.6	0.03	0.5	8.1	..	6.3	1.2	3.6	1.5	0.00	0.2
1968	11.5	..	9.7	3.2	4.8	1.4	0.03	0.4	6.8	..	5.6	1.0	2.5	1.0	0.01	0.2
1969	10.3	..	8.3	2.8	4.2	1.3	0.03	0.7	9.0	..	7.4	1.4	3.3	1.0	0.05	0.5
1970	13.1	..	10.8	3.6	5.7	1.4	0.03	0.9	12.2	..	10.7	2.1	4.7	1.2	0.05	0.2
1971	17.5	..							12.5	..						
Quarterly:																
1968 1	8.1	10.8	6.9	2.1	3.2	0.9	0.00	0.2	5.0	6.5	3.6	0.8	1.6	1.2	0.00	0.2
2	13.4	11.3	11.8	3.5	5.8	1.3	0.03	0.3	7.3	7.4	5.9	1.0	2.4	1.2	0.00	0.2
3	12.7	13.5	10.3	3.6	5.0	1.7	0.07	0.6	5.9	6.5	4.9	1.0	1.8	0.8	0.00	0.1
4	11.9	10.7	9.9	3.5	5.1	1.5	0.03	0.5	9.2	6.6	7.9	1.4	4.2	0.8	0.01	0.5
1969 1	7.7	10.3	6.3	2.3	3.0	1.0	0.01	0.3	5.7	7.5	4.2	0.6	1.9	1.1	0.01	0.4
2	10.4	9.3	8.9	3.0	4.6	1.0	0.03	0.4	8.3	8.7	6.6	1.3	2.9	1.2	0.00	0.5
3	10.8	11.6	8.6	2.5	4.8	1.6	0.04	0.5	10.0	11.0	8.7	1.6	3.5	1.0	0.01	0.3
4	12.3	11.1	9.3	3.4	4.5	1.4	0.03	1.5	11.9	9.1	10.0	1.9	4.9	1.0	0.15	0.7
1970 1	8.9	11.9	7.3	2.1	3.9	1.0	0.01	0.6	8.9	12.4	7.7	1.5	3.6	0.8	0.03	0.3
2	12.5	11.4	9.9	3.2	5.2	1.5	0.01	1.1	13.4	13.6	11.4	1.5	5.4	1.8	0.02	0.1
3	12.9	13.8	10.4	3.3	5.5	1.4	0.06	0.9	14.1	15.4	12.3	2.8	4.6	1.7	0.09	0.1
4	18.2	15.6	15.5	5.7	8.0	1.7	0.04	0.9	12.5	9.5	11.4	2.3	5.1	0.7	0.05	0.3
1971 1	13.4	17.9	10.5	3.4	5.4	1.7	0.03	1.1	9.1	12.8	8.4	1.3	3.2	0.5	0.01	0.3
2	19.7	17.0	16.8	4.9	8.6	2.1	0.05	0.8	14.6	15.1	12.4	1.9	5.1	2.1	0.02	0.1
3	16.7	18.2	14.0	4.7	7.2	1.7	0.09	0.9	14.4	15.7	12.9	1.2	4.4	1.4	0.01	0.1
4	20.1	17.6							11.7	9.4						

1 Including Finland.

Sources: OECD Main Economic Indicators and OECD Foreign Trade Statistics, Series A.

Table I Foreign Trade by Commodity Group

$ 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 fillets	Herring, salted	Herring and capelin meal	Other fish and misc. prod.	Agricultural prod.	Aluminium prod.	Other manufac. prod.
	SITC No.	73		0	6	71.72										
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
1964	131.2	29.7	101.5	13.2	29.7	19.8	38.8	111.1	102.3	25.5	12.0	13.8	1.6	5.5	—	1.7
1965	137.2	22.6	114.6	13.7	34.8	21.9	44.2	129.3	122.2	26.7	11.4	21.9	1.5	4.3	—	1.3
1966	159.4	26.1	133.3	13.9	39.2	30.1	50.1	140.6	130.1	24.6	13.5	26.0	1.4	5.8	—	3.3
1967	163.4	28.1	135.3	15.8	39.0	30.1	50.4	96.9	87.4	20.4	8.7	16.7	0.7	5.8	—	3.0
1968	138.4	13.2	125.2	15.4	34.8	26.9	48.1	82.3	72.1	22.8	9.9	4.3	1.3	7.2	—	1.7
1969	123.4	4.0	119.4	14.4	32.1	26.8	46.1	107.6	88.0	33.2	4.8	4.3	2.4	6.9	5.9	4.4
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
Quarterly:																
1968 1	24.3	1.4	22.9	3.4	6.5	5.0	8.0	15.1	13.4	3.1	4.4	1.2	0.1	1.3	—	0.3
2	40.2	7.7	32.5	4.2	9.3	6.9	12.1	21.8	20.0	6.9	0.9	1.4	0.2	1.1	—	0.5
3	38.0	1.8	36.2	4.0	9.8	6.9	15.5	17.6	16.1	6.9	0.5	1.0	0.3	0.7	—	0.5
4	35.9	2.3	33.6	3.8	9.2	8.1	12.5	27.8	22.6	5.9	4.1	0.7	0.7	4.1	—	0.4
1969 1	23.0	0.5	22.5	3.3	6.8	4.5	7.9	17.1	15.1	5.8	1.6	1.0	0.4	0.9	—	0.7
2	31.1	0.9	30.2	3.3	7.0	9.6	10.3	24.9	22.4	7.1	—	2.5	0.4	1.2	—	0.8
3	32.3	1.1	31.2	4.1	8.9	5.5	12.7	29.9	26.3	10.8	0.6	0.7	0.5	0.5	1.9	0.8
4	37.0	1.5	35.5	3.7	9.4	7.2	15.2	35.7	24.2	9.5	2.6	0.1	1.1	4.3	4.0	2.1
1970 1	26.8	1.2	25.6	3.8	8.1	4.5	9.2	26.7	19.7	7.6	3.3	0.4	0.2	1.1	4.6	1.1
2	37.4	2.6	34.8	4.0	8.7	6.1	16.0	40.2	33.1	14.0	0.2	4.2	0.6	1.3	4.1	1.1
3	38.6	3.1	35.5	4.3	10.6	7.2	13.4	42.3	33.8	15.4	0.3	0.8	0.2	0.7	5.9	1.7
4	54.5	12.3	42.2	5.0	9.6	8.9	18.7	37.4	28.0	11.7	1.4	0.2	0.7	1.9	4.8	2.0
1971 1	40.1	3.0	37.1	4.8	9.3	8.3	14.7	27.5	21.5	10.2	1.5	1.1	0.2	1.3	3.0	1.5
2	59.1	12.6	46.5	4.4	11.5	11.6	19.0	43.8	39.6	16.3	0.1	3.7	0.2	1.2	1.3	1.5
3	50.1	5.1	45.0	4.3	12.4	11.5	16.8	43.3	37.7	20.1	0.1	0.2	0.3	0.6	2.6	2.1

Sources: OECD Foreign Trade Statistics, Series B, Icelandic Statistical Bulletin (col. 41 to 48).

Table J Money and Credit (end of period)

	Central Bank		Non-bank sector			Bank liquidity				Credits granted by banks					Foreign exchange	
			Money supply			Commercial and savings banks					*of which*[1] *to:*					
	Central Bank discount rate	Net position of Treasury	Orig.	Adj.	Savings deposits	Blocked deposits	Rediscounted bills	Net free position with Central Bank	Net foreign assets	Total	Agriculture	Fishery and fish processing	Manufacturing and commerce	Dwellings	Official gold and foreign exchange[2]	Commercial banks' position
	Per cent	*Kr. million*													*$ million*	
	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
1964	6.25	113	2 155	2 221	4 983	1 090	777	440	–214	6 621	733	1 498	2 210	699	41	–5
1965	5.00	103	2 680	2 748	6 196	1 391	1 165	404	–156	8 288	1 009	1 830	2 615	816	51	–3
1966	5.25	434	2 832	2 897	7 183	1 730	1 311	81	–313	9 715	1 058	2 227	3 084	914	54	–7
1967	5.25	–23	2 605	2 667	7 799	1 908	1 304	–281	–475	10 617	1 146	2 421	3 430	997	32	–10
1968	5.25	–265	2 894	2 969	8 417	2 073	1 438	–606	–833	11 949	1 189	2 868	3 936	1 052	25	–11
1969	5.25	–640	3 810	3 919	10 134	2 640	1 898	102	–14	12 865	1 348	2 629	4 357	1 248	39	–1
1970	5.25	–176	4 648	4 772	12 624	3 359	1 744	55	–320	15 443	1 719	2 125	5 548	2 013	54	–4
1971	5.25				15 152										61	–6
Quarterly:																
1968 1	5.25	–225	2 468	2 625	7 946	1 939	1 185	–339	–401	10 595	1 082	2 367	3 551	1 000	27	–9
2	5.25	–468	2 822	2 751	8 021	2 050	1 414	–395	–417	11 253	1 066	2 703	3 775	1 025	27	–9
3	5.25	–650	2 785	2 762	8 001	2 117	1 439	–601	–552	11 470	1 046	2 773	3 845	1 035	21	–11
4	5.25	–265	2 894	2 969	8 417	2 073	1 438	–606	–833	11 949	1 189	2 868	3 936	1 052	25	–11
1969 1	5.25	–523	3 054	3 229	8 676	2 204	1 481	–480	–773	12 112	1 121	2 998	4 053	1 064	35	–10
2	5.25	–737	3 505	3 407	9 006	2 353	1 893	–276	–472	12 604	1 079	3 353	4 092	1 105	32	–6
3	5.25	–759	3 680	3 661	9 275	2 436	1 919	–80	–260	12 772	1 056	3 124	4 251	1 178	37	–4
4	5.25	–640	3 810	3 919	10 134	2 640	1 898	102	–14	12 865	1 348	2 629	4 357	1 248	39	–1
1970 1	5.25	–965	4 085	4 299	10 661	2 824	1 572	57	176	13 047	1 236	2 365	4 552	1 271	44	1
2	5.25	–1 130	4 751	4 612	11 287	3 138	1 657	391	90	13 938	1 192	2 634	5 004	1 391	50	1
3	5.25	–913	4 873	4 859	11 614	3 225	1 688	387	–99	14 702	1 365	2 494	5 051	1 559	53	–1
4	5.25	–176	4 648	4 772	12 624	3 359	1 744	55	–320	15 443	1 719	2 125	5 548	2 013	54	–4
1971 1	5.25	–572	5 075	5 352	13 249	3 541	1 701	–15	–396	16 437	1 521	2 633	5 798	2 005	53	–5
2	5.25	–507	6 049	5 867	13 666	3 779	2 146	237	–436	17 823	1 536	3 135	6 031	2 242	60	–7
3	5.25	–108	6 299	6 286	14 155	4 008	1 956	176	–475	18 319	1 620	2 977	6 204	2 384	64	–7
4	5.25				15 152										61	–6

1 Excluding credits granted by minor savings banks.
2 Excluding IMF position.

Sources: Icelandic Statistical Bulletin (col. 50, 54, 55, 57, 58), International Financial Statistics (col. 49, 51, 52, 53), OECD Main Economic Indicators (col. 63, 64) and Icelandic submission to the OECD.

				Austria	Belgium	Canada	Denmark	Finland	France	Germany	Greece	Iceland	Ireland
POPULATION		End of 1970	Thousands	7 398	9 691	21 561	4 906[2]	4 603[1]	51 004	61 846	8 842[2]	205.1	2 955
Net average annual increase		1960 to 1970	%	0.47	0.54	1.77	0.72[5]	0.35	1.06	1.04	0.65[5]	1.46	0.44
EMPLOYMENT	Total civilian	1970	Thousands	3 142	3 747	7 879	2 294[2]	2 142	20 410	26 705	(3 662)[2]	79	1 058
	Agriculture		% of total	18.3	4.8	7.7	11.9[2]	22.7	14.0	9.0	(48.2)[2]	(19.0)	27.5
	Industry[7]			41.0	44.7	31.4	38.5[2]	35.5	38.8	50.3	(22.5)[2]	(36.7)	30.0
	Other			40.7	50.5	60.9	49.6[2]	41.8	47.2	40.7	(29.3)[2]	(44.3)	42.5
PRODUCTION	GNP per head	1970	$[8]	1 940	2 670	3 550	3 200	2 180	2 920	3 020	950[2]	2 290	1 320
GDP by sector:	Agriculture	1969	% of total	7.0	5.3	5.9[9]	8.9	14.7	6.0[11]	3.0[11]	20.3	..	19.7[2]
	Industry			46.8	41.6	38.5[9]	40.1	41.3	48.1[11]	53.9[11]	28.2	..	34.0[2]
	Other			46.2	53.2	55.6[9]	51.0	44.0	45.9[11]	42.5[11]	51.5	..	46.3[2]
GNP[15] annual volume growth		1970	%	7.1	5.5	3.3	3.2	7.4	6.0	4.9	8.1	7.9	1.4
		1965 to 1970		5.1	4.5	4.5	4.0	4.8	5.8	4.5	7.0	2.1	4.0
INDICATORS OF LIVING STANDARDS		1969											
	Private consumption per head		$	970	1 470	2 050	1 770	1 060	1 680	1 390	640	1 190	830
	Expenditure on education		% of GNP[9]	4.40	5.57	5.65[17]	6.00[2]	6.30[18]	4.81	3.00[19]	2.40[2]	4.80	4.20
	Dwellings completed, per 1 000 inhabitants		Number	6.6	5.6[21]	9.3	10.1	7.9	8.5	8.2	14.7	7.2	4.3
	Passenger cars[22], per 1 000 inhabitants			152	205	311	210	137	231	215	15	185[18]	130
	Television sets[18], per 1 000 inhabitants			154	196	294	249	198	184	246	5	160	155
	Telephones[18], per 1 000 inhabitants			169	190	425	311	215	149	185	87	330	94
	Doctors[18], per 1 000 inhabitants			1.60	1.55	1.14[2]	1.41[2]	0.93	1.22[2]	1.50	1.49	..	1.09
GROSS FIXED INVESTMENT[23]	Total	1965-69 average	% of GNP	24.8	21.5	23.7[24]	22.8	25.0	25.3	25.4	25.9	29.7	20.9
	Machinery and equipment			12.5	8.9	9.6	11.3	8.8	11.0	11.1	10.2	8.2	9.2
	Residential construction			4.3	5.4	3.8	4.4	5.5	6.6	5.7	6.4	6.3	4.1
	Other construction			8.0	7.1	10.4	7.0	10.6	7.7	8.6[29]	9.6	15.2	7.6
GROSS SAVING		1965-69 average	% of GNP	26.6[25]	22.9	23.9[25]	19.5	27.8	25.9	26.7[25]	21.0	..	18.6[25]
PUBLIC SECTOR[30]	Total current revenue	1969	% of GNP	37.5[2]	34.2	35.2[2]	37.1	35.9	38.1	37.9	26.9	33.9[2]	30.7[2]
WAGES/PRICES	Hourly earnings[33]	Annual increase 1965 to 70	%	8.2[33]	8.2	7.3[34]	10.9[35]	8.4	9.2[36]	7.4	10.8[49]	13.5[37]	10.8[34]
	Consumer prices			3.2	3.5	3.9	6.4	4.7	4.3	2.7	2.5[49]	12.9	5.3
	GNP deflator			3.3	3.4	4.1	6.3	5.6	4.8	3.4	2.7[49]	12.4	5.8
FOREIGN TRADE	Imports[46]		$ million[8]	3 550	10 000	15 800[2]	4 410	2 420	21 880	32 220	1 930	180	1 550
			% of GNP	28.5	43.9	25.3	31.6	26.5	15.7	21.0	23.0	46.1	45.4
	Exports[46]		$ million[8]	3 590	10 190	15 490[2]	4 070	2 430	21 040	36 100	1 090	180	1 330
			% of GNP	28.8	44.7	24.8	29.1	26.6	15.1	23.6	12.9	47.2	39.1
BALANCE OF PAYMENTS	Current balance	1966-70 average	% of GNP	–0.5	1.7[21]	–0.3	–2.6	–1.2	–0.4	1.0	–3.6	–5.7	–2.9
Official reserves[47], end-1970: per cent of a year's imports[48]			%	49.5	25.1[21]	35.2	11.1	18.2	26.0	45.6	19.9[18]	34.6	44.3
	Change	December 1970 - December 1971	$ million	585	626[21]	1 020	237	235	(3 275)	5 052	215	16	300
NET FLOW OF RESOURCES TO DEVELOPING COUNTRIES[50]			% of GNP	0.67	1.23	0.77	0.60	— [51]	1.24	0.80	— [52]	— [51]	— [51]
EXPORT PERFORMANCE[53]	Growth of markets[54]	1969 to 1970	%	19.4	16.9	11.5	17.0	16.9	18.9	16.3	18.4	..	13.6
		1960 to 1970 (average)		11.1	11.2	13.4	9.9	10.2	9.1	10.5	11.2	..	7.5
	Gains or losses of market shares[55]	1969 to 1970	%	–1.0	–1.7[21]	3.5	–5.8	–0.7	0.5	–0.1	–2.3	..	2.6
		1960 to 1970 (average)		–1.6	1.0[21]	–2.0	–1.3	–1.6	0.8	0.9	0.9	..	0.9

	Italy	Japan	Luxem-bourg	Nether-lands	Norway	Portugal	Spain	Sweden	Switzer-land	Turkey	United Kingdom	United States	Yugo-slavia[4]
POPULATION	54 683	103 990	339.8	13 119	3 892	(9 588)[2]	33 824	8 083	(6 202)	34 828[3]	55 812[3]	206 017	(20 540)
Net average annual increase	0.82	1.06	0.76	1.28	0.80	(0.86)[5]	1.06	0.75	(1.34)	2.53[5]	0.60[6]	1.23	(1.05)
EMPLOYMENT Total civilian	18 774	50 940	144	4 567	1 497	3 030	12 372	3 854	(2 767)	(13 519)[3]	24 709	78 627	3 706[2]
Agriculture	19.6	17.4	11.1	7.2	13.9	33.0	29.6	8.1	(7.0)	(72.1)[3]	2.9	4.4	6.7[2]
Industry[7]	43.7	35.7	46.5	41.0	37.3	35.7	37.4	38.4	(51.4)	(11.6)[3]	46.6	(32.3)	46.8[2]
Other	36.7	46.9	42.4	51.8	48.8	31.3	33.0	53.5	(41.6)	(16.3)[3]	50.5	(63.3)	46.5[2]
PRODUCTION GNP per head	1 700	1 910	2 940	2 400	2 900	660	970	3 820	3 260	350	2 150	4 850	518[2]
GDP by sector: Agriculture	11.3	8.7[12]	6.2[9]	7.0	6.5	17.7	15.0	5.9[9 11]	6.4[10]	32.2[13]	3.0[14]	2.9[11]	19.5[2]
Industry	38.9	39.1[12 13]	50.9[9]	41.6	38.6	42.8	35.3	45.2[9 11]	49.6[10]	27.4[13]	45.8[14]	35.8[11]	42.5[2]
Other	49.8	52.2[12 13]	42.9[9]	51.4	54.9	39.7	49.6	48.9[9 11]	44.0[10]	40.5[13]	51.3[14]	61.3[11]	38.0[2]
GNP[15] annual volume growth	5.1	10.9	2.9	6.0	3.6	6.4	6.3	4.8	4.4	4.8	2.1	–0.4	..
	6.0	12.1	3.4	5.2	4.4	6.2	6.4	3.9	3.7	6.8	2.1	3.3	..
INDICATORS OF LIVING STANDARDS													
Private consumption per head	960	840	1 300[9]	1 220	1 410	430	600	1 790[2]	1 740	..	1 230	2 850	275[2]
Expenditure on education	5.80[2]	4.54[17]	5.00[18]	6.71	5.81	1.44[17]	2.14[2]	7.80[2]	6.30	3.70	4.15[17]	5.10	4.59
Dwellings completed, per 1 000 inhabitants	5.2	11.9	..	8.6	8.6	4.3	8.2	13.7	9.5	3.3	6.9	7.7	6.4
Passenger cars[22], per 1 000 inhabitants	166	68	250	179	183	42	61	277	209	4	207	426	28[18]
Television sets[18], per 1 000 inhabitants	150	208	154	207	194	29	162	296	164	0	279	409	64[2]
Telephones[18], per 1 000 inhabitants	143	171	290	226	271	69	113	497	437	13	232	543	31[2]
Doctors[18], per 1 000 inhabitants	1.79[22]	1.09[9]	1.01	1.18	1.35	0.83[2]	1.30	1.24	1.31	0.36[2]	1.18[2]	1.64	1.10[2]
GROSS FIXED INVESTMENT[23] Total	19.4	35.5	25.5	27.1	29.2	19.3	24.8	24.0	27.2	17.1	18.5	16.7[26]	..
Machinery and equipment	7.4	29.0[27]	7.4	12.6	15.1	7.1	12.9	8.2	9.3	..	9.0	7.1[26]	..
Residential construction	6.4	6.5	18.1[28]	5.3	4.6	4.5	4.4	6.1	6.9	3.6	3.6	3.5	..
Other construction	5.7	— [27]	— [28]	9.2	9.5	7.8	7.7	9.7	11.0	..	5.9	6.1	..
GROSS SAVING	23.2	37.9	28.1[25]	27.1	28.1	..	22.8	23.9[25]	28.3	..	18.3	18.4	..
PUBLIC SECTOR[30] Total current revenue	33.3	21.2	36.0[9]	41.9	43.4	..	22.4	48.1[2 31]	28.1	..	39.0	31.5	32.6[2]
WAGES/PRICES Hourly earnings[33]	8.2[38]	14.7[39]	..	8.9[40]	8.8[41]	9.7[33]	12.8[42]	8.9[43]	5.2[44]	..	6.7[45]	5.3[34]	..
Consumer prices	2.9	5.5	3.0	4.9	4.9	6.4	5.1	4.4	3.5	8.1	4.6	4.2	10.6
GNP deflator	3.4	4.7	4.9	4.8	5.0	4.8	5.1	4.3	4.0	5.5	4.6	4.0	..
FOREIGN TRADE Imports[46]	14 890	16 690	600[2]	13 540	4 070	1 620	4 870	6 080[2]	6 280	..	24 790	53 560	1 991[9]
	18.2	10.0	77.2[2]	48.0	41.8	28.2	16.9	23.8	33.4	..	22.7	5.6	21.0[9]
Exports[46]	16 810	19 080	640[2]	13 640	4 170	1 400	3 910	5 920[2]	7 120	..	26 720	55 510	1 875[9]
	20.5	11.4	81.8[2]	48.3	42.8	24.4	13.6	23.1	37.8	..	24.4	5.9	19.7[9]
BALANCE OF PAYMENTS Current balance	2.5	0.9	—	–0.6	–0.5	2.5	–1.2	–0.6	1.6	–1.5	0.2	0.1	..
Official reserves[47], end-1970: per cent of a year's imports[48]	35.5	25.6	—	24.2	21.8	96.2	38.2	10.9	72.7	48.5	13.0	36.3	6.4
Change	1 491	10 396	—	563	338	451	1 434	348	1 087	342	3 755	–1 297	36
NET FLOW OF RESOURCES TO DEVELOPING COUNTRIES[50]	0.78	0.93	— [51]	1.42	0.59	1.02	— [52]	0.73	0.66	— [52]	1.06	0.61	— [52]
EXPORT PERFORMANCE[53] Growth of markets[54]	16.6	12.6	—	18.3	17.3	14.6	15.8	17.2	17.3	18.1	16.3	13.5	..
	10.5	9.7	—	10.7	9.8	10.7	10.2	10.1	10.8	4.7	9.5	9.5	..
Gains or losses of market shares[55]	–4.2	8.2	—	–0.2	–5.8	0.4	9.8	2.0	–6.6	–8.5	–4.9	0.1	..
	3.2	7.8	—	0.5	1.3	1.0	2.7	–0.1	–0.2	1.3	–3.2	–1.8	..

1 Does not include total net migration between Finland and the other Nordic countries.
2 1969.
3 30-6-1970.
4 National source.
5 1959-1969.
6 30-6-60 - 30-6-70.
7 According to the definition used in OECD Labour Force Statistics: mining, manufacturing, construction and utilities (electricity, gas and water).
8 At current prices and exchange rates.
9 1967.
10 The estimates for GDP by sector for Switzerland have been published in " la Vie économique ", November 1969.
11 GDP at market prices.
12 Net domestic product.
13 Electricity, gas and water works included in " other activities ".
14 Including stock appreciation.
15 At constant (1963) prices.
16 1962-1967.
17 1965.
18 1969.
19 1966.
20 1964.
21 Including Luxembourg.
22 1970.
23 At constant (1963) prices.
24 Excluding transfer costs of land and existing assets.
25 1964-1968.
26 Government and government enterprise expenditure on machinery and equipment is included in government current expenditure.
27 " Other construction " included under " machinery and equipment ". Work in progress on heavy equipment and ships for the domestic market are included in fixed asset formation.
28 " Other construction " included in " residential construction ".
29 Including transfer costs of land.
30 General government.
31 Including depreciation.
32 Industry.
33 Monthly.
34 Manufacturing.
35 Including bonuses.
36 Hourly rates in manufacturing.
37 Hourly wages rates, unskilled workers.
38 Hourly rates in manufacturing, excluding family allowances.
39 Monthly earnings in manufacturing. Cash payments including bonuses, regular workers.
40 Hourly rates in industry, males.
41 Males.
42 Excluding family allowances.
43 Mining and manufacturing, males.
44 Hourly rates.
45 Hourly rates in manufacturing, males.
46 Goods and services, including factor income, 1969.
47 Including reserve position in the IMF and special drawing rights.
48 Imports of goods in 1970.
49 1964 to 1969.
50 1970. According to the DAC definition. Including flows to multilateral agencies and grants by voluntary agencies.
51 Not Development Assistance Committee members.
52 Considered as a developing country for purposes of DAC reporting.
53 Values, percentage change. Figures are subject to many limiting factors. For an explanation see OECD Economic Outlook, simple definition, December 1970, pp. 65 and 69.
54 The growth which would have occurred in a country's exports if it had exactly maintained its share in total OECD exports to each of 19 broad geographical zones.
55 The difference between the growth rates of markets and exports.

NOTE Figures within brackets are estimates by the OECD Secretariat.

Sources: Common to all subjects and countries, except Yugoslavia (for special national sources see above): OECD: Labour Force Statistics, Main Economic Indicators, National Accounts, Balance of Payments, Observer, DAC and Statistics of Foreign Trade (Series A). Office Statistique des Communautés Européennes, Statistiques de base de la Communauté. IMF, International Financial Statistics.

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