The Economy of Iceland

CENTRAL BANK OF ICELAND

SEÐLABANKI ÍSLANDS

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Republic of Iceland

People	
Population	286,250 (December 1, 2001)
Capital	Reykjavík, population 112,268 (December 1, 2001)
Language	Icelandic; belongs to the Nordic group of Germanic languages
Religion	Evangelical Lutheran (91%)
Life expectancy	Females: 81.5 years, Males: 77.0 years
Governmental system	
Government	Constitutional republic
Suffrage	Universal, over 18 years of age; proportional representation
Legislature	Althingi with 63 members
Election term	Four years, last election May 8th 1999
Economy	
Monetary unit	Króna (plural: krónur); currency code: ISK
Gross domestic product	744 billion krónur (US$ 7.6 billion, EUR 8.5 billion) in 2001
International trade	Exports of goods and services 41% and imports of goods and services 41% of GDP in 2001
Per capita GDP	2.6 million krónur (US$ 26.6 thous., EUR 29.7 thous.) in 2001
Land	
Geographic size	103,000 km^2 (39,768 sq.m.)
Highest point	2,119 m (6,952 ft)
Exclusive economic zone	200 nautical miles (758,000 km^2 / 292,680 sq.m.)
Climate	Cool temperate oceanic; highly changeable, influenced by the warm Gulf Stream and Arctic currents

Republic of Iceland credit ratings

	Foreign currency		Domestic currency	
	Long-term	Short-term	Long-term	Short-term
Moody's Investors Service	Aaa	P-1	Aaa	P-1
Standard & Poor's	A+	A-1+	AA+	A-1+
Fitch	AA-	F1+	AAA	.

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1. This publication uses information available on November 15, 2002.

Tables

Charts

Appendix

Central Bank of Iceland publications in English

Annual Report
Monetary Bulletin, a quarterly publication
The Economy of Iceland
Central Bank of Iceland Working Papers

These publications are available on the Central Bank website. Also available on the website are Central Bank statistics (updated weekly) and a set of economic indicators prepared by Central Bank staff (updated in winter, spring and autumn).

Selected useful websites

Central Bank of Iceland	www.sedlabanki.is
Parliament of Iceland (Althing)	www.althingi.is
Government of Iceland........	www.government.is
Statistics Iceland........	www.statice.is
National Economic Institute of Iceland (NEI)[1]	www.ths.is
Iceland Stock Exchange	www.icex.is
National Debt Management Agency	www.bond.is
Trade Council of Iceland........	www.icetrade.is
National Association of Pension Funds	www.ll.is
Invest in Iceland Agency........	www.invest.is
The National Power Company........	www.lv.is

1. The National Economic Institute (NEI) was closed down on July 1, 2002. This website contains material produced by the NEI up to that date and directs visitors to the appropriate locations of the institutions that have taken over the tasks previously performed by the NEI.

1. Recent developments and prospects

During the second half of the 1990's Iceland experienced one of the highest growth rates of GDP among OECD countries. The growth was investment-led in the beginning, but became increasingly characterised by booming consumption and investment in the non-traded goods sector. In 1998 signs of overheating became increasingly visible, particularly in terms of an excessive current account deficit, rising inflation and unsustainable credit growth. In 2001/2002 the economy underwent rapid adjustment as the króna depreciated sharply, domestic demand contracted and the current account deficit shrunk. The depreciation of the króna in 2000/2001 rekindled inflation, which peaked at 9.4% in the beginning of 2002, but subsequently declined very rapidly

Table 1.1 The Icelandic economy

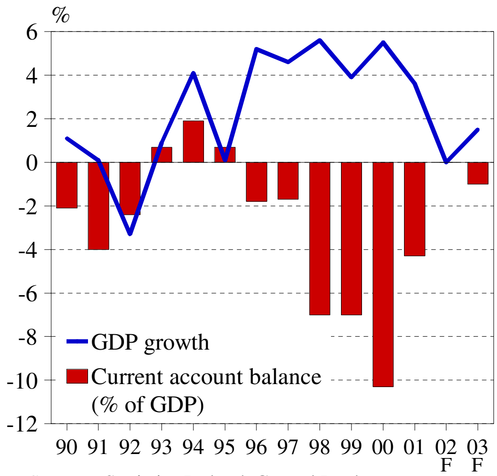
Growth of output and expenditure

% change in volume unless stated otherwise	Prelim. *2001*	Forecast[1] *2002*	*2003*
Private consumption	-3.0	-1½	½
Public consumption	3.2	2¾	2
Gross fixed investment	-4.4	-14	1
National expenditure, total	-3.0	-3¼	1
Exports of goods and services	7.8	5¼	4
Imports of goods and services	-9.0	-3¼	2½
Gross domestic product	3.6	0	1½
Balance on income in b.kr.	-27.4	-24.6	-27.1
Current account balance in b.kr.	-32.2	0.8	8.2
Current account balance as % of GDP	-4.3	0.0	-1.0

1. Central Bank of Iceland forecast, October 2002.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 1.1

Economic growth and current account balance 1990-2002



Sources: Statistics Iceland, Central Bank of Iceland.

as the króna recovered most of the value it lost since being floated at the end of March 2001. In 2002 there was increasing evidence of an emerging slack in the economy. Inflation fell rapidly along with the rebound in the króna and the emerging slack. The inflation target of 2½% was reached in November 2002. In the absence of power-intensive projects, which are nonetheless on the drawing board, the slack is predicted to increase in 2003.

Imbalances in the economy ...

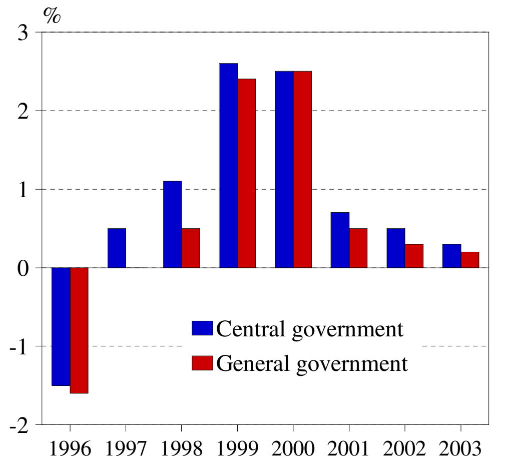
Growth over the period 1996-2000 averaged 4.8%. This period of growth was spurred by brighter prospects in the Icelandic economy following renewed interest in the construction of power-intensive industries and a recovery of fish stocks. Subsequently, a boom in consumption and investment in the non-traded goods sector became the driving force of growth and from 1998 it became increasingly clear that the economy had become overheated. The current account deficit widened sharply in 1998 and peaked at 10% of GDP in 2000. A simultaneous outflow of portfolio capital and direct investment implied that an extraordinary amount of financing in terms of foreign credit was required in 2000, equivalent to about 1/5 of GDP. During the upswing the Icelandic economy experienced a stock market bubble and a surge in real estate prices in the Greater Reykjavík Area. Considerable shortage of labour, and unemployment around 1.4% in 1999 and 2000, resulted in wage growth well in excess of productivity growth. Inflation soared and reached 6% in the spring of 2000.

... undermined exchange rate stability and rekindled inflation

The large imbalances in the economy were the underlying reason for a sharp depreciation of the króna in the latter half of 2000 and in 2001. After reaching a peak in the spring of 2000, the króna had depreciated by almost 30% when it

Chart 1.2

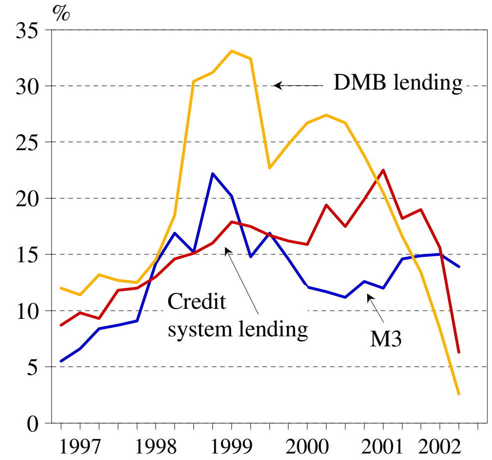
Treasury and public sector financial balance as % of GDP 1996-2003



Source: Treasury department

Chart 1.3

Growth of credit and monetary aggreagates Q1 1997 - Q2 2002

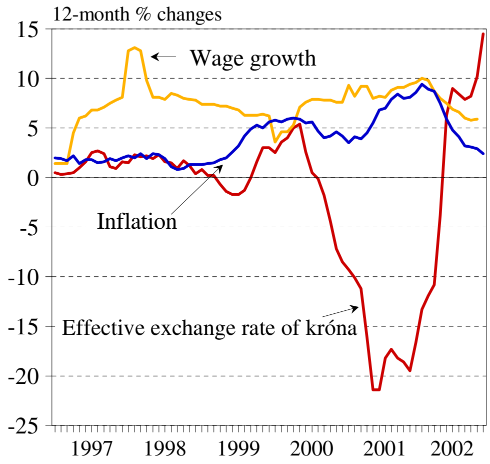


Source: Central Bank of Iceland.

bottomed out at the end of November 2001. In real terms the króna reached its lowest level for three decades. A policy of stable exchange rates, defined in terms of an exchange rate band with fluctuation limits of ±9% (±6% until February 2000), was abandoned at end of March 2001, when an inflation target was adopted (see Chapter 6). The depreciation of the króna rekindled inflation, which in the beginning of 2001 had abated somewhat from the peak of 2000. Also contributing to higher inflation was wage growth that exceeded productivity growth over a protracted period. Inflation in June 2001 exceeded the transitory 6% upper tolerance limits of the Central Bank of Iceland's inflation target and in January 2002 inflation reached a peak of 9.4%.

Chart 1.5

CPI inflation, wage growth and exchange rate of the króna, Jan. 1997- Nov. 2002



Sources: Statistics Iceland, Central Bank of Iceland.

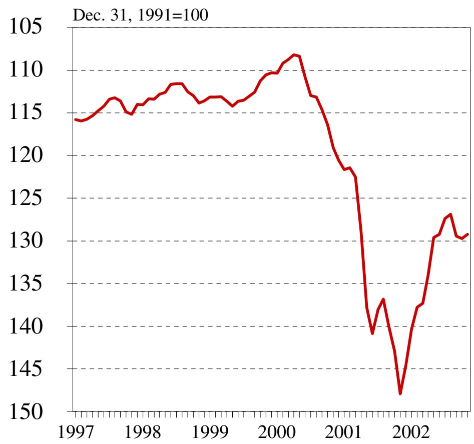
Contraction in domestic demand and vigorous export growth led to a rapid current account adjustment ...

In the face of inflation rising above the tolerance limits of the inflation target and a depreciation of the króna, the monetary stance was kept relatively tight. Together with the contractionary effect of diminishing capital inflow, falling business and consumer confidence and the inevitable slowdown in investment and consumer durable spending after years of rapid accumulation of household and business debt, this led to a considerable slowdown in the economy and a contraction of domestic demand. Reduced demand for labour and increasing unemployment slowed down wage growth and wage drift came to a halt. In 2001, private consumption contracted by 3%, investment by 4½% and imports by 9%. The contraction in consumption and investment has continued in 2002, albeit at a slower pace.

Export growth has been strong in recent years and has continued to be so in 2002. Merchandise exports in the first 8 months of 2002 were up by 12% in nominal terms from the same period last year, and by 9% in volume. Besides competitive currency, the brisk

Chart 1.4

The effective exchange rate of the króna, January 1997 - November 2002



Source: Central Bank of Iceland.

growth in exports can be attributed to favourable external conditions. Marine export prices remained quite favourable during the downswing. Advances in processing of marine products also resulted in significant value added. Furthermore, the preceding wave of investment led to increasing output of aluminium, and other emerging manufacturing and high-tech industries grew briskly. The combination of sharply reduced import and sturdy export growth led to a rapid narrowing of the current account deficit in the first half of 2002. According to the Central Bank of Iceland forecast the current account will be in balance in 2002.

... stabilising the exchange rate

The rapid adjustment of domestic demand and the return of a sustainable current account balance helped to stabilise the foreign exchange market. In Q3/2002 the króna was on average roughly 8% higher than in the same quarter in 2001. As the exchange rate stabilised and the inflation target seemed to be within reach, the Central Bank announced its intention to buy foreign currency for up to 20 b.kr. untill the end of 2003, to boost its reserves. The Bank's net reserves had been severely weakened in 2000 and 2001, when the Central Bank repeatedly sold foreign currency to support the króna, although the frequency of interventions declined significantly following the adoption of the new monetary policy framework.

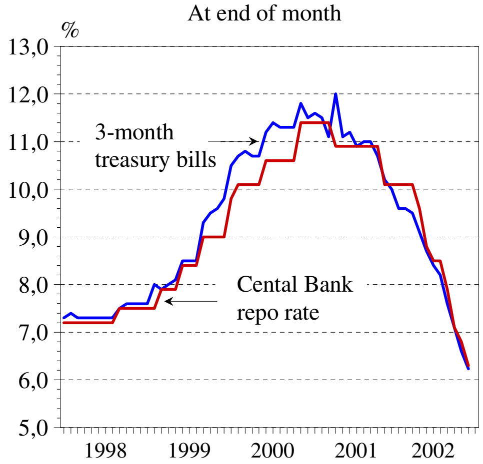
Inflation target has been reached

The appreciation of the króna as the economy returned to external as well as internal balance contributed to a rapid decline in inflation. In June 2002 it had moved within the upper tolerance limit of the Central Bank's inflation target for the year. The inflation target was reached in November 2002 when the 12-month rate of the CPI fell to 2.4%. A gradual lowering of interest rates had begun in 2001, but as signs of a

Chart 1.6

Central Bank repo rate and money market interest rates Jan. 1998 - Nov. 2002[1]

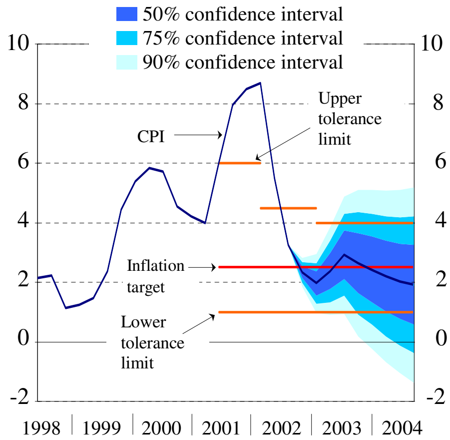
At end of month



1. Latest: Nov. 12. *Source:* Central Bank of Iceland.

Chart 1.7

Central Bank inflation forecast in November 2002



Source: Central Bank of Iceland.

substantial slowdown in domestic demand became increasingly visible and the outlook for attaining the inflation target improved, the process of easing the monetary policy stance gained momentum. By early November, the Bank's main policy interest rate had come down to 6.3%, after having been cut 9 times by a total of 3.8 percentage points from the beginning of the year.

Fiscal surplus is shrinking

Rapid growth of domestic demand and the current account deficit boosted public finances, particularly those of the treasury. The treasury surplus, excluding extraordinary items, averaged 2.7% of GDP in 1999-2000. As domestic demand contracted in 2001-2002, public finances deteriorated as revenues from consumption-related taxes fell sharply. As a result, expenditure growth has outpaced revenues and the similarly adjusted surplus fell to 1% of GDP in 2001 and is forecast around zero this year. However, the cyclically adjusted balance that was -1% of GDP in 2001 is expected to turn into a surplus in 2002. At the local government level, expenditure increases have been even greater, preventing the closing of a deficit which averaged ½% of GDP in 1999-2000.

Although market conditions temporarily put a stop to the sale of Landssíminn (Iceland Telecom) in March 2002, the privatisation programme is continuing. In 2002 the government has sold 65.8% of Landsbanki, one of the two banks it has held a majority stake in, and is in the process of selling its holdings in the other bank, Búnaðarbanki (see Chapter 6).

Outlook for 2003

The outlook for 2003 and over the medium term will depend to a great extent on whether current plans to double the capacity of Nordural aluminium plant and build a 300 thousand-tonne aluminium smelter owned by Alcoa on the east coast of Iceland and associated power plants are realised or not. Taken together these investments are large, estimated to be around 1½ times annual capital formation in Iceland. The result will be to double the export of aluminium from Iceland. The effect on the economy will be significant, both in the short and long run. It will call for monetary and fiscal policy tightening over the construction period in order to contain inflationary pressures. The smaller project is waiting for the authorisation of the Ministry of Environment, and a decision is due in November 2002. A memorandum of intent has been signed on the Alcoa project, but negotiations on a power contract and other issues are still taking place. If successful within the expected timeframe, it is assumed that construction of the hydropower plant will begin in 2003, to be completed in 2006, while work at the aluminium smelter will start in 2004, to be finished in 2007.

In the absence of the above mentioned projects economic growth is forecast to be relatively weak in 2003 and the slack in the economy will increase. According to the national economic forecast of the Central Bank of Iceland, which was published for the first time in November 2002 (see table 1.1), a zero growth of GDP is forecast in 2002 and 1½% in 2003. The small negative output gap that emerged in 2002 will thus widen in 2003. The Ministry of Finance forecast, published a month earlier, is almost the same in terms of economic growth but domestic demand is slightly weaker in the Central Bank's forecast which is compensated by stronger export growth.

2. Country and people

Geography

Iceland is located in the North Atlantic between Norway, Scotland and Greenland. It is the second-largest island in Europe and the third largest in the Atlantic Ocean, with a land area of some 103 thousand square kilometres, a coastline of 4,970 kilometres and an exclusive 200-nautical-mile economic zone extending over 758 thousand square kilometres in the surrounding waters.

Iceland enjoys a warmer climate than its northerly location would indicate because a part of the Gulf Stream flows around the southern and western coasts of the country. In Reykjavík, the capital, the average temperature is nearly 11°C in July and just below zero in January.

Iceland is mostly mountainous and of volcanic origin, with the highest peak reaching 2,119 metres. Lowlands stretch from the coast towards the interior, mainly in the south and the west. Several glaciers, one of them the largest in Europe, distinguish the landscape. The coasts are rocky and of irregular outline, with numerous fjords and inlets, except for the south where there are sandy beaches with no natural harbours. Only around 20% of the total land area is classified as arable land, most of it located in the southern and western part of the country and several fertile valleys stretching from the coast.

Iceland is endowed with abundant natural resources. These include the fishing grounds around the island, within and outside the country's exclusive 200-nautical miles economic zone. Furthermore, Iceland is blessed with abundant hydroelectric and geothermal energy resources, only a fraction of which has been harnessed.

With only 2.8 inhabitants per square kilometre, Iceland is one of the least densely populated countries in Europe. On December 1, 2001, the population of Iceland was 286,250. The annual rate of population growth 1991-2001 was 0.9%. Around 62% of the population lives in the capital city of Reykjavík and its surrounding municipalities. The largest town outside the capital area is Akureyri, in the north, with a population of 15,632. Most of the remainder live in small towns along the coast.

People

Iceland was settled in the ninth century. The majority of the settlers were of Norse origin, with a smaller Celtic element. A general legislative and judicial assembly, the Althingi, was established in 930 and a uniform code of laws for the country was established at the same time. In 1262, Iceland concluded a treaty establishing a union with the Norwegian monarchy. When the Danish and Norwegian monarchies were united in 1380, Iceland came under Danish rule, which lasted for more than five hundred years. Iceland was granted a new constitution in 1874 and obtained home rule in 1904. With the Act of Union in 1918, Iceland became a sovereign state in a monarchical union with Denmark. In 1944, Iceland terminated this union with Denmark and founded a Republic. The native language, Icelandic, belongs to the Nordic group of the Germanic languages.

Iceland has experienced substantial net immigration in recent years, causing the share of foreign citizens to rise to 3.4% of the total population at the end of 2001. Compared to most other developed countries the ratio still remains low. As in other advanced countries the population of Iceland is ageing, but at a relatively slower pace than in most OECD countries. In 2000, notwithstanding high life expectancy, the share of the total population aged over 65 was lower in only five OECD countries: Korea, Ireland, Mexico, the Slovak Republic and Turkey.

Society and the welfare state

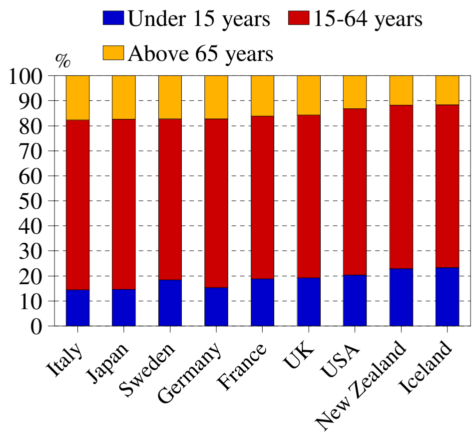
Iceland is a modern welfare state, which guarantees access by its citizens to universal health care, education and a high degree of social security. Spending on health, education, social security, welfare and other social affairs amounted to a quarter of GDP in 2001.

Life expectancy which is among the highest in the world and one of the lowest infant mortality rates (2.7 per 1000 live births in 2001) testify to the advanced status of health care in Iceland, both primary health care and hospitals. The Icelandic health care system is a tax-financed universal system for all persons who have been legally resident in Iceland for more than 6 months. Health care services are provided mostly free of charge, although user charges have been on the rise. The main exception is dental health care, where adult patients are charged the full cost of service, but children under 17 years of age have most of the cost refunded. In 2001, 14% of total employment was in health care and social work, and expenditures on health care amounted to 7.5% of GDP.

The standard of education is high and public education is compulsory between the ages of six and sixteen. A good command of English and the Scandinavian languages is widespread. Education is offered free of charge or at a low fee at three levels. First, there are 10 years of compulsory education at the primary level (age 6-16). Secondly, there are 4 years at the secondary level, which provides general education and vocational training in a wide range of fields. Finally, higher education is offered at several universities. In 2001, 16.1% of the employed labour force held a university degree. Roughly one out of every four university degrees held by Icelanders is obtained in other countries. As in most OECD countries, university enrolment has increased substantially in recent years, to 66% in 2000, compared to

Chart 2.1

Age structure of the population in selected countries 2000[1]



Ranked by share of population 65 and over.
Source: OECD.

45% in OECD countries on average. The ratio of pre-school enrolment is also one of the highest among OECD countries.

Political structure and external relations

The present constitution was adopted on June 17, 1944 when the Republic was established. Iceland has a parliamentary system of government. Legislative power is vested in the parliament (Althingi), and executive power in a cabinet headed by the Prime Minister. The government has to be supported by a majority of parliament in order to remain in power. The 63 members of the Althingi are elected from eight constituencies, on the basis of proportional representation, for a term of four years. A parliamentary bill becomes law when it is passed by the Althingi and signed by the President. The President is the head of state and is elected for a term of four years by a direct vote of the electorate.

Iceland has a tradition of political stability. Since Iceland gained autonomy from Denmark in 1918, governments have normally been formed by a coalition of two or more political parties that have held a majority in parliament. Since 1995 there has been a coalition government of the Independence Party and the Progressive Party, with a strong majority in parliament.

The results of the 1999 elections were as follows: The Independence Party obtained 40.7% of votes and 26 seats, the Social Alliance 25.8 percent and 17 seats, the Progressive Party 18.4% and 12 seats, the Left-Green Movement 9.1% and 6 seats, and the Liberal Party 4.2 and 2 seats. Others obtained 0.8% and no seats. The next general election is to be held in 2003.

Iceland has participated actively in international cooperation. Iceland belongs to a group of Nordic countries that includes Denmark, Sweden, Norway and Finland – as well as Greenland and the Faroe Islands. The Nordic countries have established wide-ranging cooperation in a variety of fields, including economic affairs and international representation. Iceland is a member of the Nordic Council and specialised institutions such as the Nordic Investment Bank.

Iceland became a member of the United Nations in 1946 and is an active participant in most of its affiliated agencies. Iceland is a founding member of the Bretton Woods institutions that were established in 1945, the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (World Bank). Iceland is one of the original members of the Organisation for Economic Cooperation and Development (OECD). It joined the Council of Europe in 1950 and has participated in the Organisation for Security and Cooperation in Europe since it was initiated in 1975.

In 1964, Iceland became a party to the General Agreement on Tariffs and Trade, the predecessor to the World Trade Organisation (WTO). Iceland joined the European Free Trade Association in 1970 and entered into a free-trade agreement with the European Community in 1972. In May 1992, the member countries of EFTA and the European Union signed an agreement to establish a free-trade zone, the European Economic Area (EEA), which took effect on January 1, 1994.

Iceland is a founding member of the North Atlantic Treaty Organisation, established in 1949. A defence treaty with the United States was concluded in 1951. A NATO military base, staffed by United States military personnel, is operated at Keflavík in the southwest of Iceland.

Table 2.1 Iceland's membership of international organisations

	Year of Association
International Monetary Fund (IMF)	1945
International Bank for Reconstruction and Development (World Bank)	1945
United Nations (UN)	1946
North Atlantic Treaty Organization (NATO)	1949
Organization for Economic Cooperation and Development (OECD)	1949
Council of Europe	1950
Nordic Council	1952
International Finance Corporation (IFC)	1956
International Development Association (IDA)	1961
General Agreement on Tariffs and Trade (GATT)	1964
European Free Trade Association (EFTA)	1970
Conference on Security and Cooperation in Europe (CSCE)	1975
Western European Union (WEU)	1992
European Economic Area (EEA)	1994
World Trade Organization (WTO)	1995

3. Economic development

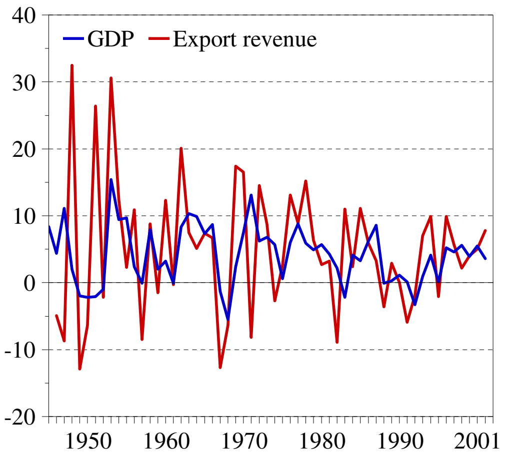
From agrarian subsistence to a services economy

In the late 19th century a large proportion of Iceland's population still lived near subsistence level. During the 20th century, Iceland made a remarkable transition from one of Europe's poorest and least developed economies to one of its more prosperous. At the beginning of the 20th century Iceland was largely an agrarian society. Almost 2/3 of the labour force worked in agriculture, about 1/7 in fisheries and approximately 1/5 was engaged in services, either private or public. By the end of the century only 2% of the labour force worked in agriculture, but almost 2/3 were engaged in services of some kind. In the final three decades of the century power-intensive industries were developed, primarily aluminium, making use of the country's vast hydroelectric and geothermal resources.

Chart 3.1

Growth of GDP and export revenue 1945-2001

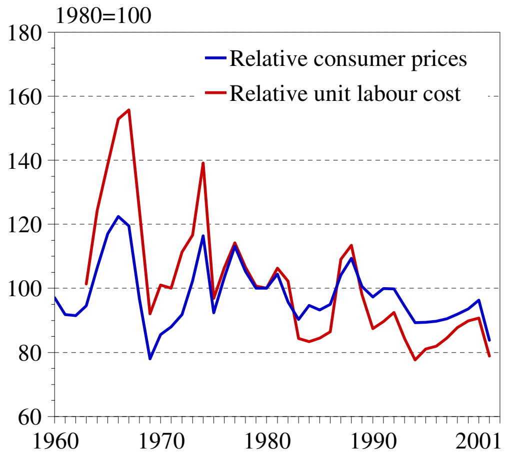
Annual percent changes



Source: National Economic Institute, Ministry of Finance.

Chart 3.2

Real effective exchange rate of the króna 1960-2001



Source: Central Bank of Iceland.

Fisheries become a motor of growth – and source of volatility

The first decade of the 20th century was characterised by the advent of fisheries. In the course of the century marine products became Iceland's main source of foreign currency revenue and growth. Swings in the fish catch and export prices of marine products were also the leading cause of fluctuations in the growth rate of GDP. By international comparison, post-WWII economic growth has been both significantly higher and more volatile than in other OECD countries. The average annual growth rate of GDP from 1945 to 2001 was about 4%. Studies have shown that the Icelandic business cycle has been largely independent of the business cycle in other industrialised countries.

From liberal trade to a controlled economy and on to European integration

The first three decades of the century were characterised by rapid growth, only interrupted by WWI. This growth occurred in the context of fairly liberal economic policies. In the wake of the depression and WWII, however, Iceland, like many other countries, became entangled in a web of trade barriers, capital controls and licences that took much of the remainder of the century to disentangle. This plethora of trade barriers and restrictions, including a complex system of multiple exchange rates, led to serious distortion of the price mechanism and misalignment of real exchange rates.

A radical departure from these policies occurred in 1960, when barriers to trade were lowered considerably in conjunction with a large devaluation of the króna, leading to more efficient allocation of resources. Trade barriers were further lowered when Iceland became a member of the European Free Trade Association (EFTA) in 1971 and further still when it became a founding member of the European Economic Area (EEA) in 1994, which integrated Iceland and other EFTA member countries (except Switzerland) into the internal market of the EU. The EEA negotiations intensified a trend towards liberalisation that started with deregulation of interest rates in the mid-1980s and culminated in the liberalisation of the bulk of cross-border capital flows in 1995. It was only during this period of liberalisation that fully fledged financial markets developed in Iceland.

Episodes of inflation and disinflation

A distinguishing feature of Iceland's economic

Table 3.1 Financial market liberalisation in Iceland: some important steps

Event	*Date*
Financial indexation permitted	1979
Liberalisation of domestic bank rates	1984-1986
Interest Rate Act-interest rates fully liberalised	1987
Stepwise liberalisation of capital movement begins	Summer 1990
Treasury overdraft facility in the Central Bank closed	1992-1993
New foreign exchange regulation marks the beginning of liberalisation of cross-border capital movements	1992
Interbank market for foreign exchange established	May 1993
Iceland becomes a founding member of the EEA	January 1994
Long-term capital movements fully liberalised	January 1994
Short-term capital movements fully liberalised	January 1995
Foreign direct investment liberalised in accordance with EEA agreement	1995

development in the post-WWII era has been the high and variable rate of inflation. Inflation surged in the 1970s, reaching a peak in 1983, when the 12-month rate of inflation briefly exceeded 100%. The inflationary tendencies can be explained by the combination of structural features of the economy, which generally make attaining price stability a difficult task, and excessively accommodative policies. Among structural factors were highly volatile export growth leading to frequent balance of payments problems, lack of competition in the domestic economy and underdeveloped or nonexistent financial markets. The problems resulting from these features were compounded by policies that undermined a quick return to low inflation in the aftermath of external shocks. Interest rates were kept artificially low, leading to highly negative real interest rates in the 1970s. Exchange rate policy was on several occasions excessively accommodative, preventing proper adjustment of the economy by keeping employment persistently below a level consistent with price stability. Adding to the effect of an overstretched labour market, wage indexation was frequently applied. Furthermore, devaluation was often not backed up by sufficiently restrictive fiscal policies. While Iceland has a history of inflation that has been one of the highest among OECD countries, it also provides one of the more remarkable examples of a successful disinflation strategy. Through a combination of less accommodative monetary and exchange rate policies, incomes policies that managed to reach a wide-ranging consensus on the need to reduce inflation, and broad-based structural reforms, inflation was brought down to the rate prevailing in major trading partner countries.

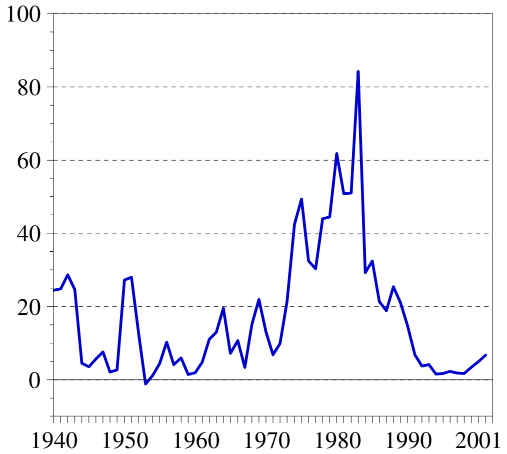
Towards a market-based approach to policy

A market-based approach to economic policy was adopted to an increasing extent during the late 1980s and the 1990s. Government inter-

Chart 3.3

CPI inflation 1940-2001

Percent change between annual averages

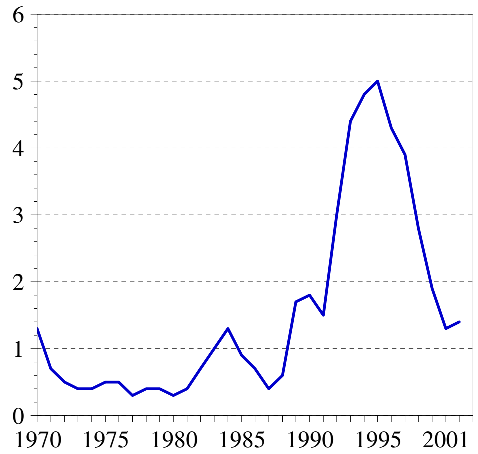


Source: Statistics Iceland.

Chart 3.4

Unemployment 1970-2001

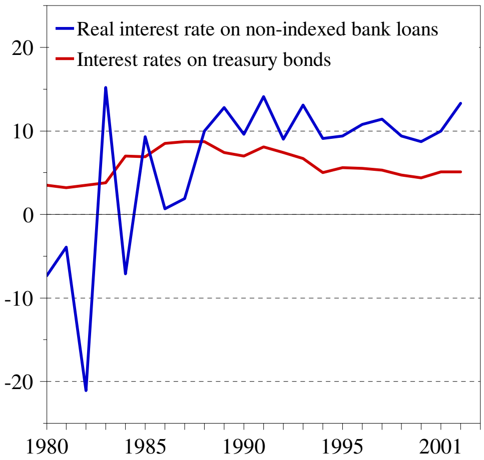
Percent of labour force



Source: Directorate of Labour.

Chart 3.5

Interest rates in Iceland 1980-2001
Annual averages



Source: Central Bank of Iceland.

ference with the allocation of credit was gradually reduced following the liberalisation of interest rates. A legacy of the controlled economy of the post-WWII years was that substantial segments of the economy became owned by either central or local governments, including areas such as transportation, fishing and fish processing, construction and various industries. A substantial share of the telecommunications industry and banking sector still remains in government hands, but is soon to be privatised.

An exception to the trend towards liberalisation has been agriculture, which became increasingly regulated during the 1980s. Government subsidies and interference in the price mechanism of agricultural products caused oversupply, insufficient productivity growth and prompted a system of production quotas in 1979 and the 1980s, which is still applied.

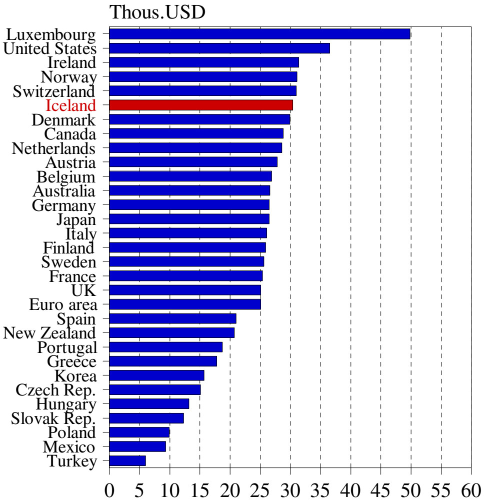
The emergence of a money market in the early 1990s and the establishment of an interbank market for foreign exchange in 1993 laid the foundation for modern monetary policy implementation. The liberalisation of capital movements also made monetary and exchange rate policies in some sense more challenging. In order to cope with those challenges, exchange rate policy became gradually more flexible, until formal commitment to keep the exchange rate at any specified level was relinquished in March 2001, as described in Chapter 7.

4. Structure of the economy

Size and income level
The Icelandic economy is the smallest within the OECD, generating GDP of USD 8.7 billion in 2001 in terms of Purchasing Power Parities (PPP). This was less than 1/1200 of the US economy, 1/20 of the Danish economy and 1/3 the economy of Luxembourg but 1/3 larger than the economy of Malta. The small size of the Icelandic economy mainly reflects the small size of the population, which was only 286 thousand at the end of 2001.

Iceland is a prosperous country, with all the characteristics of a modern welfare state. GDP per capita measured in terms of Purchasing Power Parities (PPP) amounted to 30,400 in 2001, the sixth highest in the world. In comparison to the Nordic countries, Iceland's GDP per capita is lower than in Norway but higher than in Denmark, Sweden and Finland and its size is somewhat above the EU average.

Chart 4.1
GDP per capita in OECD countries 2001
Based on PPP



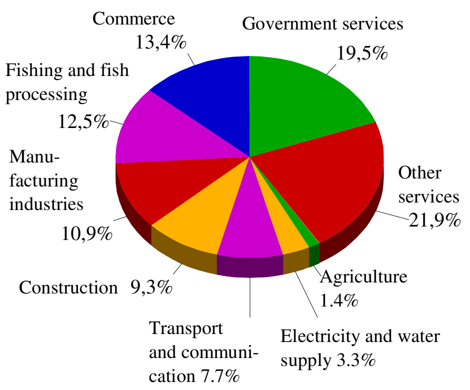
Source: OECD.

Composition of output and expenditures
Small size of population has not inhibited economic growth and prosperity in Iceland. This prosperity can be attributed to Iceland's ability to utilise its comparative advantage in the international division of labour, by exploiting its abundant natural resources, both marine and land-based, as well as human capital. As in other developed economies, services, which to a significant degree are non-tradable, form the bulk of economic activity, 64% of GDP in the last three years. Agriculture contributes only 1.5% of the country's GDP.[1] While the marine sector is the most important source of export revenue, its share of GDP has declined considerably in recent years, from 17% in 1980 to 12% in 2001. The share of manufacturing and electricity supply has risen. These develop-

1. It should be noted that fishing is not included in this figure. Agriculture and fisheries are often bracketed together in international statistics.

Chart 4.2

Breakdown of GDP by industry in 2001



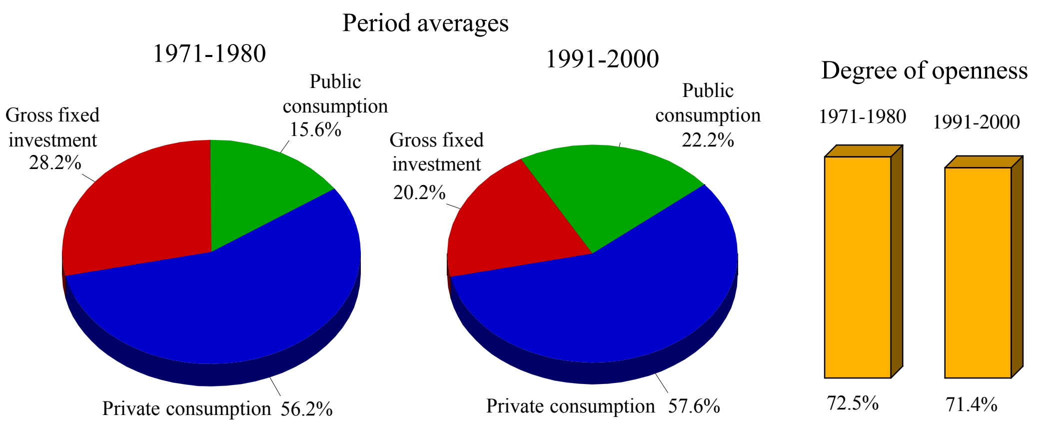
Source: Statistics Iceland.

ments reflect a transformation in the utilisation of natural and human resources. Scope for expanding the harvesting of Iceland's coastal fishing grounds has been limited in recent years, while the utilisation of its hydroelectric and geothermal power potential has intensified. At the same time, the advent of service industries such as tourism, and several emerging human capital-intensive activities such as ITC, biotechnology and financial services, has continued unabated. Significant progress has been made in high-tech activities such as medical equipment, technical solutions for food processing, fisheries equipment and pharmaceutical products.

Private consumption contributed on average about 57% of GDP in 1997-2001 and public consumption and gross fixed investment 23% each. The investment to GDP ratio has risen substantially in recent years, after falling below 1/5 in the mid-1990s. The ratio of public consumption has also risen somewhat over the past three years, after remaining broadly stable through most of the 1990s, and has almost doubled from the level 30 years ago. It should be noted that in 1998-2000 the econo-

Chart 4.3

Composition of total domestic demand and degree of openness[1]



1. Degree of openness is defined as the sum of exports and imports as a percentage of GDP.
Source: Statistics Iceland.

my underwent a boom in domestic demand, with the current account deficit peaking at 10% of GDP in 2000 before falling to 4% of GDP in 2001.

Foreign trade

Icelandic trade has many of the characteristics of small resource-based open economies, such as a high degree of openness, a large share of primary products and commodities, limited scope for export diversification and a small share of intra-industry trade. Nevertheless, the diversity of exports has increased significantly in recent years. In 2001, both imports and exports of goods and services amounted to 41% of GDP. While this can be seen as fairly an open economy, reflecting the small size of GDP, many larger economies have a considerably higher ratio. To some extent this can be explained by geographic distance from major population centres, but other factors, such as the limited intra-industry trade, natural resource-based export sector with high value added and extensive protection of domestic agriculture, may also be at work.

The mainstay of merchandise exports is still fish and other marine products, which in 2001 accounted for 62% of merchandise exports and 41% of total exports. Rapidly growing in importance has been export of manufactured products, which in 2001 accounted for one-third of merchandise exports. This is mainly the result of growth in the power-intensive industries, mostly aluminium smelting. Export of services grew rapidly over the past decade, as the economy became more service-oriented. Services now account for 36% of total export revenues.

Iceland imports a wide range of manufactured goods and commodities, reflecting both the small size of the economy and the limited range of natural resources. Imports of capital goods accounted for 30% of total merchandise imports in 2001. Industrial supplies and con-

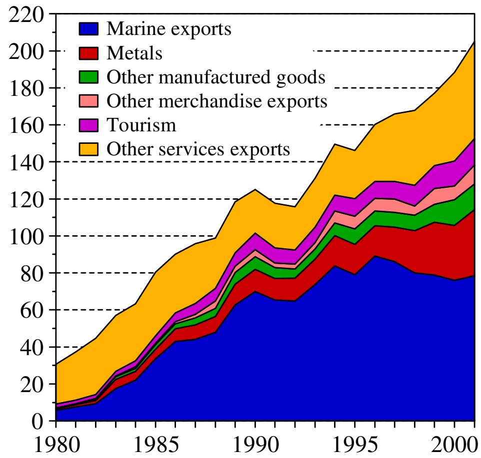
Table 4.1 Output and expenditure

Percentage distribution

	1971	*2001*
Private consumption	59.7	54.9
Public consumption	13.1	23.6
Gross fixed investment	30.6	22.3
Changes in stock	2.5	-0.3
National expenditure	105.9	100.5
Exports of goods and services	38.6	40.8
Goods, fob	23.1	26.4
Services	15.5	14.4
Less: Imports of goods and services	44.5	41.3
Goods, fob	30.7	27.2
Services	13.8	14.1
GDP	100.0	100.0
Current account balance	6.8	-4.3

Chart 4.4

Exports of goods and services 1980-2001 at constant prices



Source: Statistics Iceland.

sumer goods are roughly a quarter of imports each.

Iceland is the westernmost outpost of Europe and therefore an ideal base for business between Europe and North America. This strategic location is further enhanced by Iceland's membership of EFTA (The European Free Trade Association) since 1971 and the European Economic Area (EEA), which has integrated Iceland into the internal market of the EU since it went into effect on January 1, 1994. The EEA constitutes the world's largest market, with 380 million inhabitants. EEA membership implies that business legislation has been adapted to that of the EU, guaranteeing the free flow of goods, services, capital and labour.

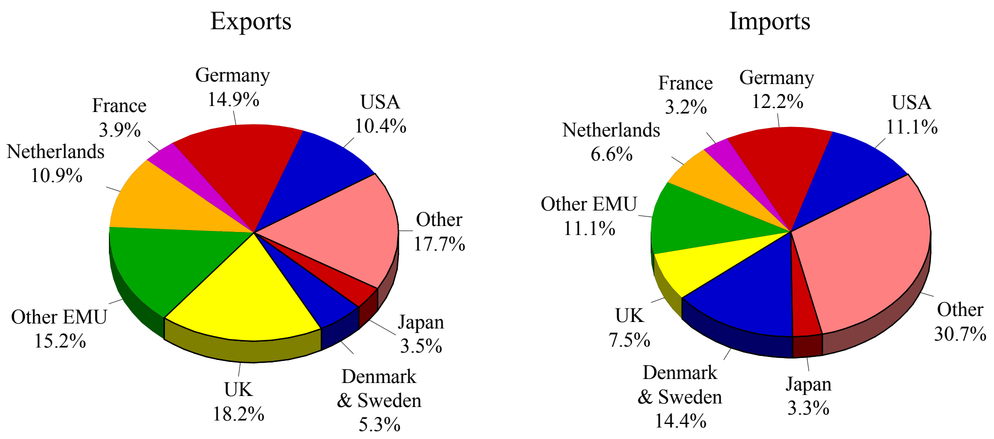
Iceland's free trade arrangements with Europe have stimulated trade with the region, causing the share of North America to fall. In 2001, 74% of merchandise exports went to the member countries of the EEA, which also were the source of 63% of imports. Currently, the largest trading partners countries are the UK, Germany, the USA and the Nordic countries. In terms of currency areas, the euro area constitutes the largest trading area, with 33% of imports and 45% of exports.

Iceland has normally had a trade surplus with Japan, the UK and the USA, but a substantial deficit with its Nordic neighbours. Iceland's trade in services as a share of total trade is one of the highest among OECD countries. In 1999, Iceland ranked third with a share of services trade (average of exports and imports of goods and services) near 30%. Data on the direction of services trade is not as reliable as merchandise trade data. Around 2/5 of Iceland's services exports in 2001 used USD as the vehicle currency. However, the US share in Iceland's revenue from tourism, estimated on the basis of number of tourists, hotel registration and currency receipts, has been around 1/5 in recent years.

Chart 4.5

Geographical division of merchandise trade in 2001

Percentage of total imports or exports



Source: Statistics Iceland.

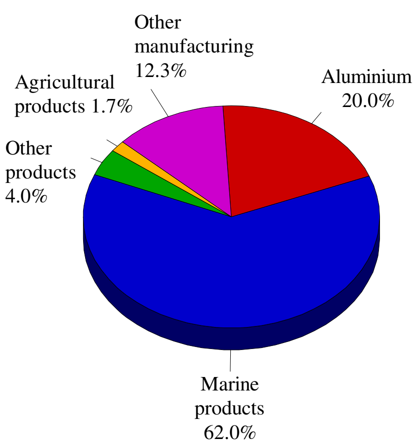
Marine sector

The marine sector is the main export sector. In 2001, fishing and fish processing contributed 62% of total merchandise exports. The importance of the marine sector has diminished dramatically in the last four decades. In the early 1960s, export of fish products constituted over 90% of merchandise exports. The principal part of the Icelandic marine sector is fishing and processing of groundfish species, mainly cod, haddock, saithe and redfish. The catch of demersals was around 460 thousand tons in 2001. Conservation measures led to substantial cuts in total allowable catch (TAC) in the 1990s, most substantially in cod quotas. Cod is considered to be the most valuable species in Icelandic waters. The decline in the cod catch has been offset by increased harvesting of other species, redfish, Greenland halibut, blue whiting and herring, inside and outside Iceland's exclusive 200-mile fishing zone. Efforts to enhance value added in processing, e.g. by product development, have partially succeeded in offsetting lower catch volumes in recent years. Efficiency in the fishing and fish processing industry has increased substantially. The industry is increasingly relying on information and communication technology, automation and modern management techniques to increase productivity. Icelandic fishing vessels are regarded as among the most modern and technically advanced in the world. In recent years a number of fisheries companies have merged in order to enhance efficiency. Several of the leading fisheries companies rank with the largest private companies in Iceland.

A comprehensive fisheries management system based on the individual transferable quota system (ITQ system) has been developed to manage fish stocks. Nearly all species are regulated within the ITQ system. The total allowable catch (total quota) for each year is set on the basis of biological assessment of the

Chart 4.6a

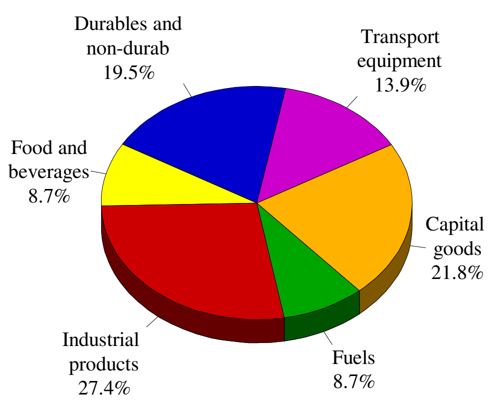
Merchandise exports by category in 2001



Source: Statistics Iceland.

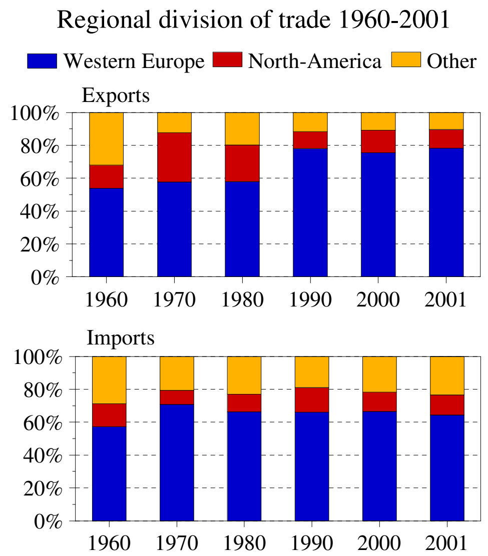
Chart 4.6b

Merchandise imports by category in 2001



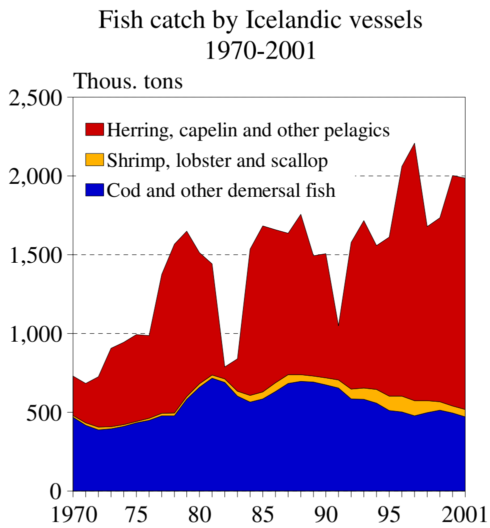
Source: Statistics Iceland.

Chart 4.7



Source: Statistics Iceland.

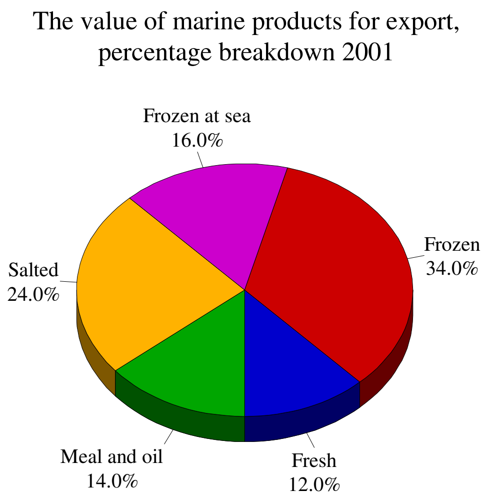
Chart 4.8



Source: Statistics Iceland.

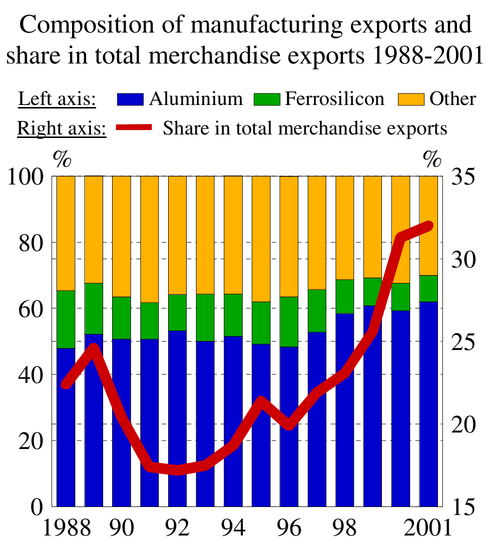
fish stocks and forecasts for their development in the near future. Quota is then allocated among individual fishing vessels on the basis of scientific assessment of the fishing stocks. In 1995 the Icelandic government introduced and enforced the so-called "catch rule". According to this catch rule, the total allowable catch (TAC) for the next consecutive

Chart 4.9



Source: National Economic Institute.

Chart 4.10



Source: Statistics Iceland.

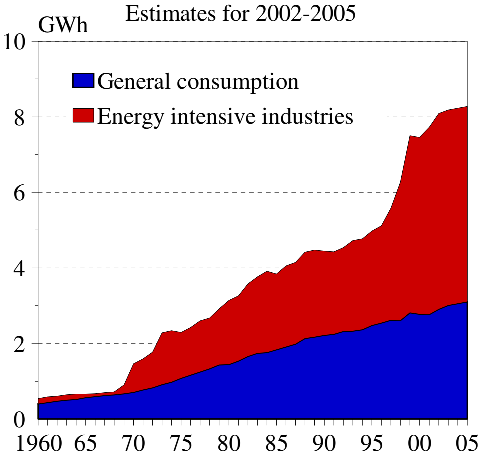
quota year is set 25% of the mean of the catchable biomass in the assessment year and the year after. The fishing quotas are mostly allocated free of charge, with only a nominal charge collected by the state for fisheries inspection purposes. Quota can be traded at market prices. The introduction of the ITQ system has led to substantial rationalisation and improved performance in the marine sector.

Manufacturing and power-intensive industries

The largest manufacturing industries in Iceland are power-intensive industries based on the use of electric power. They produce almost exclusively for export. A number of smaller-scale export-oriented manufacturing industries have emerged in recent years, in areas such as pharmaceuticals, capital goods for fisheries and food processing, medical equipment and other IT-intensive high-tech activities. In 2001 manufactured products accounted for 32% of total merchandise exports, of which power-intensive products (mainly aluminium) amounted to 23% and pharmaceuticals and other high-tech products to 6%. There has been a considerable increase in merchandise export in recent years, as it amounted only to 22% of total export in 1997, of which 12% was aluminium.

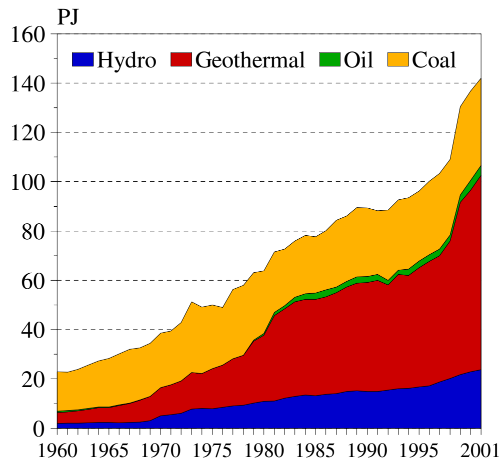
The development of power-intensive industries is mainly based on competitive energy costs and a highly educated and skilled labour force. The government has actively encouraged foreign direct investment in power-intensive industries. The largest manufacturing facility in Iceland is an aluminium smelter located near Reykjavík, owned and operated by Alcan Iceland Ltd., a wholly owned subsidiary of Alcan Inc.. Its total capacity is 171 thousand tpy, after being expanded by 60% in 1996-98. The second aluminium smelter is Columbia Venture (Nordic Aluminum) with a capacity of 90 thousand tpy. Icelandic Alloys plc. is a ferrosilicon plant with an annual capacity of 115 thousand tons. This company

Chart 4.11
Electricity production in Iceland[1]
1960-2005
Estimates for 2002-2005



1. Prospective new power intensive plants not included.
Source: National Energy Authority.

Chart 4.12
Primary energy supply in Iceland
1960-2001



Source: National Energy Authority.

is the only one in the power-intensive industry sector which is on Iceland Stock Exchange and Elkem ASA of Norway holds a majority stake in it.

Energy

Iceland has extensive hydro and geothermal resources and is the only country in Western Europe that still has large-scale, competitively priced power remaining to be harnessed from such sources. Although electricity consumption per capita is one of the highest in the world, at some 28,200 kWh per person, only a fraction of the energy potential has been tapped.

Electric power potential from hydro and geothermal sources is now estimated to be 50 thousand GWh/year, taking into account economic and environmental considerations. Some 8,500 GWh/year of this power had been harnessed in 2001, or only about 17% of total energy potential. Economically exploitable electricity from hydro resources is estimated at around 30 thousand GWh/year. In 2001, total installed hydropower was 1,307 MW in 20 power plants capable of producing 8 thousand GWh per year. Installed geothermal power now amounts to 202 MW or 1,460 GWh/year. The largest single hydropower plant has an installed power capacity of 270 MW and the largest geothermal plant a capacity of 75 MW.

All the largest hydroelectric power plants as well as the inter-regional power lines are owned and operated by The National Power Company (Landsvirkjun). The company is jointly owned by the Icelandic state, the City of Reykjavík and the Town of Akureyri.

Iceland is a world leader in the use of geothermal energy for domestic and industrial purposes. Some 87% of all homes are heated by geothermal energy at less than half the comparable cost of fossil fuels or even electrical heating. Geothermal steam is applied in a number of industrial processes and increasingly also for electricity generation.

Both hydro and geothermal power are sustainable and environmentally friendly power resources, free from the harmful atmospheric emissions of fossil fuels and the potential danger of radioactive power sources.

Agriculture

Approximately one-fifth of the total land area of Iceland is suitable for fodder production and the raising of livestock. Around 6% of this area is cultivated, with the remainder devoted to raising livestock or left undeveloped. Production of meat and dairy products is mainly for domestic consumption. The principal crops are hay and potatoes. Cultivation of other crops, such as barley, has yielded promising results. Vegetables and flowers are cultivated in greenhouses heated with geothermal water and steam. A fur industry has developed in the last two decades.

The agricultural sector has undergone structural changes in recent years. Demand for traditional products, especially lamb, has declined substantially while consumption of white meat (pork and poultry) has risen in line with changes in taste and relative prices. Price support and export subsidies for the traditional products of sheep and dairy farming have been replaced with subsidies in the form of direct income payments to farmers in these segments. In 2001, such direct payments are estimated to have amounted to 48% of farmers' income in lamb and mutton production and 47% of the producers' price for milk production. Total on-budget transfers to farmers amounted to about 1.2% of GDP in 2002. Imports of meat, dairy products and vegetables that compete with domestic production are subject to high tariffs, controls to prevent diseases, and quotas. Imports are likely to increase as tariffs go down in line with WTO agreements on trade in agricultural products.

In terms of total agricultural support, Iceland ranks 4th-5th highest in the OECD, with a PSE (producers' support estimate) of 59, behind Switzerland, Norway, Korea and Japan with PSEs of 69, 67, 64 and 59 respectively. Producers' support amounts to 35 on average in the EU and 31 in the OECD countries.

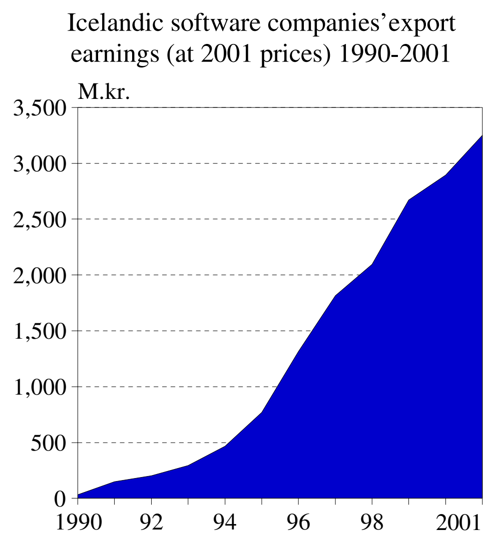
Transport and communications

The domestic transportation network consists of roads, air transportation and coastal shipping. Car ownership is widespread. In 2000, Iceland had 572 passenger cars per 1,000 inhabitants, the third highest ratio within the OECD after the USA and Australia. Several airlines operate in Iceland. Icelandair (Flugleiðir) is a private company with international routes and direct flights from Iceland to a number of cities in Europe and the United States. Air Atlanta mainly operates as a charter airline on international routes outside Iceland. Some foreign airlines also operate to Iceland from time to time. The domestic market is dominated by Air Iceland (Flugfélag Íslands), owned by Icelandair. It serves routes between several towns and villages around the country and also operates services to Greenland and the Faroe Islands.

Iceland has numerous harbours that are almost without exception free of ice throughout the year. In exceptionally cold years, drift ice from Greenland can close harbours in the northern part of the country. The two main shipping companies, Eimskip and Samskip, operate regular liner services to the major ports of Europe and the United States.

In January 1998, Iceland Post and Telecom (Póstur og sími) was divided into two separate entities, Iceland Post (Íslandspóstur) and Iceland Telecom (Landssíminn). The telecommunication system operated by Iceland Telecom is both extensive and modern, with satellite earth stations, optical fibre cables and a wide-reaching cellular mobile phone system. Iceland Post and Iceland Telecom are limited liability companies and have been state-owned until now. First steps in privatising Iceland Telecom were taken in September 2001 and the government's policy is that it will be fully privatised in the near future. As a result of technological developments, deregulation and enhanced competition, telephone charges in Iceland, both at residential and business rates, are among the lowest within the OECD. The telecommunication sector is developing rapidly and competition is increasing. New private companies are being established, offering various services such as Internet connections and GSM services. Recently, the new private com-

Chart 4.13



Source: Central Bank of Iceland.

panies have been increasing their rage of services. The cellular mobile telephone network is extensive. In 2001, Iceland had the second-highest mobile telephone penetration in the world, surpassed only by Finland.

The National Broadcasting Service (Ríkisútvarpið) operates two radio channels and one television channel, covering virtually the whole country. The Icelandic Broadcasting Corporation (Norðurljós) is a private company that operates television and radio channels. Skjáreinn is a new television company. There are several private radio stations and a few local television stations. In addition, dozens of foreign TV channels are widely received via satellite, cable or UHF relay.

Service industries

The tourism sector has been one of the fastest-growing industries in recent years. The number of foreign visitors in 2001 is estimated at 295 thousand, compared to 142 thousand in 1990. Foreign exchange revenues generated by tourism in 2001 amounted to approximately 38 b.kr.

Besides tourism there is an expanding array of emerging services industries in Iceland and others have been fundamentally transformed in recent years. Important structural changes, for instance, have been implemented in the financial sector in the last two decades, as described in Chapter 5. Rapid growth has also taken place in other business services including computer services and software development.

The Icelandic software industry has extensive know how and long practical experience in design of software for sophisticated food and fish processing equipment. Icelandic software developers are also actively engaged in multimedia and Internet applications, e-commerce, real-time communication, medical software and general office and database systems. An emerging industry is biotechnology which is based on Iceland's genetic resources.

The labour market

The Icelandic labour market has one of the highest participation rates among OECD countries. Over the past 10 years it has consistently been well above 80%. This is explained partly by the fact that the rate of unemployment has normally been one of the lowest among OECD countries. The participation rate of women has also been very high by international comparison. In 2001, female participation was in fact one of the highest in the OECD countries, with women accounting for 46.5% of the labour force. Participation rates among the young and the elderly have also been quite high. Icelanders tend to work long hours. The participation rate and number of jobs are positively correlated with economic growth, dampening cyclical movements in unemployment.

Table 4.2 Number of foreign tourists and revenues at constant prices

	1990	*1995*	*2000*	*2001*
Foreign visitors (thous.)	141.7	189.8	302.9	295.0
Revenues from tourism (million ISK, at constant prices)	18,572	22,893	30,459	35,358

Iceland's EEA membership facilitates movement of labour within the area. The Icelandic labour market tends to attract both foreign and Icelandic nationals during upswings and the opposite applies during downswings. Furthermore, a high degree of interregional and intersectoral labour mobility prevents large differences in regional unemployment from emerging, even in the case of significant shifts in sectoral or regional employment.

The influx of foreign labour has increased substantially in recent years, both from within and outside the EEA area. In 1998-2000 it is estimated that foreign nationals filled approximately one out of every four new jobs. Nevertheless, as this is a rather recent phenomenon, the share of foreign nationals in the labour force remains at a modest level. In 2001 approximately 3½-4% of the labour force was foreign.

The wage bargaining process in Iceland is highly centralised and usually leads to more or less nationwide settlements. More than 90% of the labour force is unionised and the employers are also highly organised. The government has frequently been involved in wage settlements, either through tax concessions and social transfer or legislative acts aiming to accomplish moderate settlements. In addition, a decentralised system of sectoral and firm-level negotiations makes it possible to take specific sectoral conditions into account.

Notwithstanding its high degree of centralisation, the Icelandic labour market appears to be quite flexible. Substantial and increasing labour mobility, flexible hours and variable participation rates serve to dampen the effects of external shocks. Furthermore, various studies indicate that real wages respond quickly to external shocks and therefore reduce their employment effect, although the measured flexibility may to some extent be the result of high inflation.

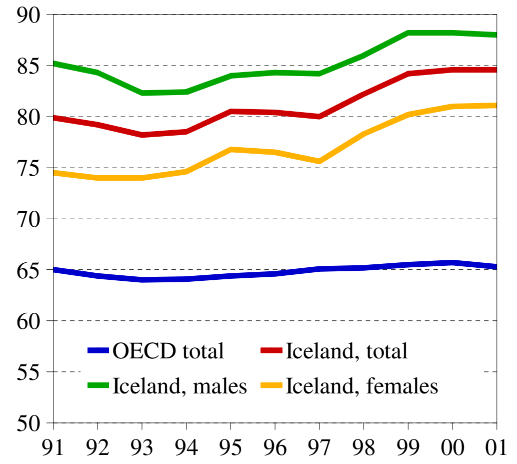
The environment

Compared to other industrial countries, Iceland is relatively unpolluted and faces few immediate environmental problems. Soil erosion, however, has been a longstanding problem, as a result of the combined effects of climatic changes, volcanic activity and overgrazing. The intensity of grazing has fallen sharply since the 1970s and considerable work is being carried out to reclaim eroded land.

Electricity and geothermal heating, Iceland's main energy sources, are generated by the use of renewable resources. Utilisation of hydroelectric power, however, requires the building of dams and large reservoirs that can affect the landscape. The acid disposition over Iceland is very low, due to its geographic location and limited emissions of pollutants.

Chart 4.14

Labour force participation rate in Iceland and OECD countries 1991-2001



Sources: OECD, Statistics Iceland.

Emission of greenhouse gases from Iceland in 2000 is estimated to be 14% higher than in 1990. If emissions from new power-intensive industries are excluded, emissions in 2000 did not exceed the 1990 level. The emission limit set for Iceland in the Kyoto Protocol for the period 2008-2012 entails a 10% increase from the 1990 levels. In addition, emissions from single projects, which increase total emissions by more than 5%, can be reported separately but not included in the above set limit. The largest source of emissions is the fishing fleet, followed by the transport sector, then by various industrial processes. The marine environment around Iceland is relatively unpolluted.

5. The financial system

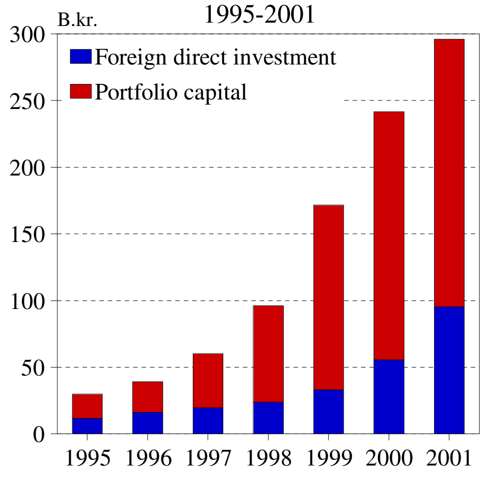
Overview and recent developments

In recent years the Icelandic financial system has been in transition, the result of liberalisation and legislative reform. A changed domestic and international business environment as well as increased competition have necessitated the restructuring of Icelandic capital markets and financial institutions. Financial services in Iceland have become more international in character due to increased cooperation between Icelandic and foreign financial institutions and adoption of international financial legislation and standards. In order to keep pace with international developments substantial amendments have been made to the financial legislative framework in Iceland.

Iceland participates in the European Single Market for financial services. As a member of the European Economic Area (EEA) since 1994, Iceland is obliged to transpose into national law all existing and future EU legislation in the field of financial services. Iceland has thus implemented all the EC directives on banking, insurance and securities trading. The

Chart 5.1

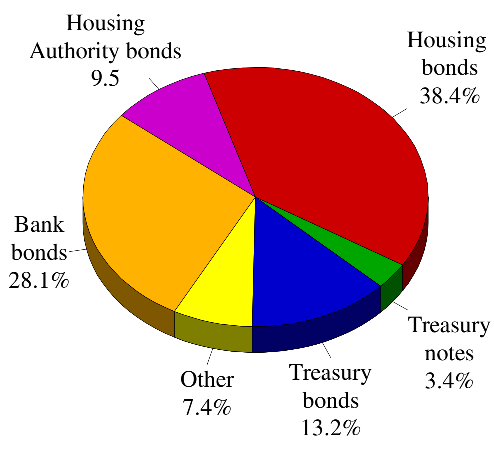
Foreign direct investment and portfolio capital owned by residents abroad 1995-2001



Source: Central Bank of Iceland.

Chart 5.2

The Icelandic bond market at end of 2001



Source: Central Bank of Iceland.

general objective of these directives is to accomplish an integrated market for financial services, in particular with respect to the right of establishment, provision of services, prudential rules and capital movements. Iceland's obligations to the EEA have prompted a major reform of financial legislation and its framework in Iceland is now in line with that in other EFTA states and EU member states. This has facilitated the offering of financial services by Icelandic financial institutions across borders, and the establishment of operations abroad.

The European financial market is constantly developing. A series of policy objectives and specific measures will be adopted on the basis of the Financial Services Action Plan from 1999. This will enhance harmonisation, competition and effectiveness of financial services, payment systems and electronic commerce throughout Europe. The Icelandic authorities, in close cooperation with market participants, have already begun the necessary preparatory work for implementation of the Action Plan.

A new Act on the Central Bank entered into force in 2001. The Act provides for important changes. It simplifies and clarifies the objectives of the Central Bank, provides full independence for applying its monetary instruments and increases its financial independence.

Capital movements

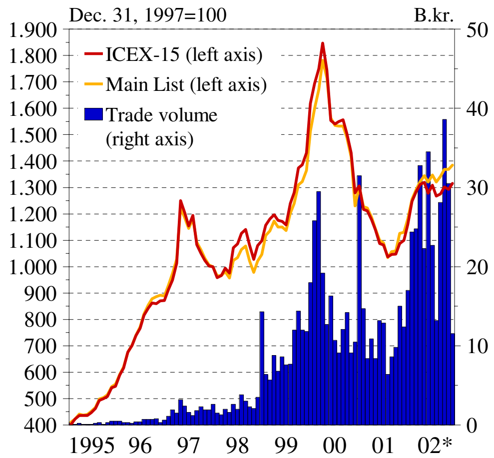
Since the beginning of 1995, in accordance with the EEA agreement, capital movements have been fully liberalised, with the exception of certain restrictions that apply to foreign direct investments in fisheries and fish processing, energy production and distribution, and aviation companies. The restrictions on investment by foreign entities in fisheries are the only ones that apply to EEA residents. They have the purpose of protecting the nation's exclusive rights to the fishing grounds around Iceland. Foreign ownership in fisheries companies is restricted to 25% (up to 33% in certain circumstances). Energy harnessing rights and production and distribution of energy are restricted to EEA entities. Entities domiciled outside the EEA must not own more than 49% of the shares in Icelandic aviation companies.

The liberalisation of cross-border capital movements has led to a profound change in the composition of residents' financial asset portfolios. Before full liberalisation in 1995 residents owned only approximately 13 b.kr. in foreign securities. By the end of 2001 these assets had risen fifteen-fold, equivalent to 27% of GDP.

Foreign borrowing by the treasury requires authorisation by parliament. These authorisations are listed in the annual budget approved by parliament. In addition there is a standing

Chart 5.3

Equity market: Monthly trade volume and prices at month-end 1995-2002



* To Nov 15, 2002.
Source: Iceland Stock Exchange (ICEX).

authorisation to refinance outstanding public debt.

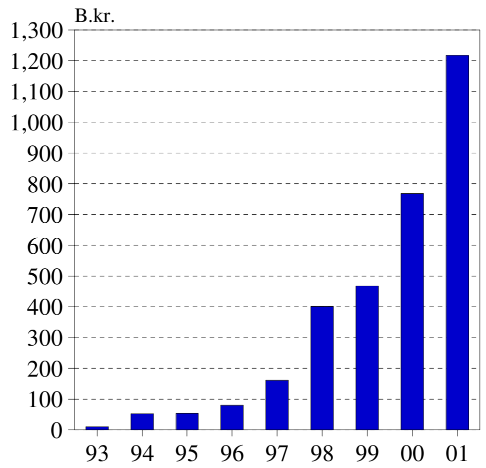
The bond market

The Icelandic bond market consists of a primary market which usually takes the form of bond auctions, and a secondary market which is mainly operated on the Iceland Stock Exchange (ICEX). Icelandic bond issues can be broadly divided into four categories: 1) Government bonds, issued by the treasury, are indexed against inflation and paid up with accrued interest at maturity date. 2) Treasury notes and treasury bills, which are non-indexed, zero coupon bonds. 3) Housing bonds and Housing Authority bonds which are interest-bearing bonds in an annuity format. The annuity format of the former is realised by a lottery of all issued bonds at preset intervals. 4) Bonds that are issued by government agencies, private firms or institutions such as banks.

An active market-making scheme on the stock exchange ensures sufficient liquidity in the market for benchmark government bonds, Housing bonds and Housing Authority bonds. A primary dealer system is in place for treasury notes and bills. Primary dealers have an exclusive right to bid at auctions and must actively engage in market making on the stock exchange. Most new issues are registered in the Icelandic Securities Depository Ltd. and trading is done on a payment versus delivery basis. Settlement takes place on a T+1 basis.

Chart 5.4

Volume traded in the interbank market for foreign exchange 1993-2001



Source: Central Bank of Iceland.

The Icelandic bond market has several outstanding features which set it apart from those in other countries. Firstly, indexed bonds dominate the market. Major issues of maturity exceeding 5 years are linked to the CPI. At the end of 2001 the share of indexed bonds was 67.7% of the bond market's value. Secondly, the majority of bonds carry a state guarantee, including Housing bonds, which are the market's most liquid issues. Thirdly, yields on the Icelandic bond market have tended to be high by international comparison. Over the past decade real yields of indexed housing and government bonds have fluctuated in the range 4% to 8%, and recently between 5% and 6%. In May 2002 the treasury issued non-indexed notes that mature in 2013. At the end of June 2001, the market value of marketable bonds amounted to USD 6.6 billion. Turnover on the bond market in 2001 was USD 5.3 billion.

The money market

The money market can be divided in two parts: the secondary market in treasury bills, bank bills and other short-term bonds on the Stock Exchange, and the interbank loan market. Turnover on the secondary market on the Stock Exchange in 2001 was over USD 630 million. The interbank market is operated by the Central Bank of Iceland and consists of unsecured loans between the members of the market. Members must display indicatory bid and ask yields on various maturities, ranging from overnight loans to 12-month loans. Yields are published on a closed Reuters page and trades must be reported to the Central Bank. Once a day, the Central Bank fixes REIBID and REIBOR rates for the market. In 2001, turnover on the interbank market for krónur amounted to USD 4.1 billion and it was USD 2.5 billion in the first six months of 2002. There is also a primary market in treasury bills.

The equity market

Icelandic equities are traded on ICEX, which in 2000 became a member of NOREX, the cooperative framework for Nordic exchanges. The four member exchanges (Copenhagen Stock Exchange, Oslo Börs, Stockholmsbörsen and ICEX) share a joint trading system, SAXESS. The regulatory environment of ICEX, through various recent reforms, has reached a similar status to that of markets in other countries. With still a few exceptions, listed shares are registered electronically. Market capitalisation has increased in recent years as a growing number of Icelandic companies have gone public and equity prices have soared. In September 2002, a total of 59 companies were listed, as well as 7 equity mutual funds. Market capitalisation of those companies was 483 b.kr. (USD 5.6 billion), or 61% of GDP. Since 1998, Icelandic share prices have broadly followed a similar trend to that in foreign markets, reaching an all-time high in early 2000 and subsequently dropping considerably. In 2002, the trend has been reversed since Icelandic share prices have gained 12% in the nine months to end-September, as measured by the ICEX-15 index. Combined on- and off-exchange trading volume in January-September 2002 is already more than in any single year, bringing the 12-month turnover ratio up to 55%.

The foreign exchange market

The foreign exchange market is an interbank market run by the Central Bank of Iceland. Participants are market makers and the Central Bank. Market makers are subject to stringent rules requiring them, for example, to quote a binding bid and ask price every five minutes to each other if requested. The spread between bid and ask prices must be within a set limit. The interbank market for foreign exchange was established in 1993. In the beginning, the Central Bank was a dominant player on the market, but with increasing market depth and as the exchange rate regime became more flexible, the Central Bank withdrew from daily activity, limiting its role to discretionary interventions. Activity on the market is highly variable; total turnover in 2001 was USD 12.2 billion. In November 2001 an informal FX swap interbank market was launched. The Central Bank of Iceland issued rules for that market on March 2002.

Credit institutions

The Icelandic Act on Commercial Banks and Savings Banks and the Act on Other Credit Institutions provide a legislative framework for credit institutions equivalent to other European banking legislation and international banking standards. These acts stipulate rules on points including the establishment, authorisation, management and activities of banks, liquidity and own funds requirements, annual accounts and mergers, as well as activities of foreign banks in Iceland. Several regulations have been adopted on the basis of these laws, in areas such as annual accounts and capital adequacy requirements, which are consistent with European requirements.

In June 2002, domestic commercial and savings banks provided 26% of total credit in Iceland. Foreign credit institutions provided around 27%, pension funds 16% and the Housing Financing Fund 11%.

There are currently five commercial banks in Iceland, i.e. Búnaðarbanki Íslands hf., Íslandsbanki hf., Landsbanki Íslands hf. (The National Bank of Iceland), Kaupþing banki hf. (Kaupthing Bank) and Sparisjóðabanki Íslands hf. (Icebank). The first three provide all conventional banking and securities services. There are 24 savings banks in Iceland and Icebank serves as a banking institution for them. Total assets of commercial and savings banks amounted to USD 10 billion at the end of 2001, with the commercial banks accounting for 84% of this figure. Twelve other credit institutions currently operate in Iceand, four of which are investment banks[1], four are investment funds[2], three are leasing companies[3] and then the Housing Financing Fund which is owned by the state and arranges loans to individuals, local authorities, companies and non-governmental organisations with respect to their acquisition of private dwellings, whether for own use or for leasing out.

Several investment funds were merged and subsequently privatised in 1998. The merged investment bank, FBA, was granted a licence to operate as a commercial bank and subsequently merged with Íslandsbanki in April 2000. The merged bank is Iceland's largest commercial bank. The state has sold its majority stake in partially privatised commercial bank Landsbanki in 2002 and is in the process of selling its holdings in Búnaðarbanki in which it still holds a majority stake. In January 2002 Kaupþing Bank hf. was granted a licence to operate as a commercial bank but had until then been licensed as an investment bank.

Securities firms and brokerages

Icelandic legislation on securities firms and securities brokerages is based on the European framework legislation in this field. The law regulates fields including authorisation, public offerings, confidential information, insider trading, market manipulation, annual accounts and supervision. A number of regulations have been adopted on the basis of these laws. There are currently six securities firms and three securities brokerages operating in Iceland.

The Act on Undertakings for Collective Investments in Transferable Securities (UCITS) provides for rules on, among other things, authorisation, registration, articles of association of UCITS, management and depository companies, investment policy, management, annual accounts and supervision. There are currently ten UCITS authorised in Iceland and six management companies of UCITS.

The Iceland Stock Exchange Ltd. and the Icelandic Securities Depository Ltd.

The Stock Exchange Act stipulates that a stock exchange must be a limited liability company where public listing of securities and securities trading are carried out. A stock exchange must have authorisation from the Minister of Commerce. There is currently one stock exchange operating in Iceland, i.e. the Iceland Stock Exchange Ltd. (ICEX). ICEX is also licensed to operate a market for securities

1. Greiðslumiðlun hf. (VISA Ísland), Frjálsi fjárfestingarbankinn hf., Eignarhaldsfélagið Alþýðubankinn hf. and Kreditkort hf. (Europay Ísland).
2. The Tourism Fund, Agricultural Loan Fund, Regional Development Institute and Harbour Improvement Fund.
3. Glitnir hf., Lýsing hf. and SP-Fjármögnun hf.

which are not officially listed on a stock exchange. The Stock Exchange Act furthermore regulates listing, takeover bids, disclosures and flagging in the event of the acquisition of major shareholdings and accompanying rights. The Stock Exchange is a member of the Nordic Stock Exchanges (NOREX).

Icelandic law provides that the electronic issue of securities and registration of titles to electronic securities can only be carried out by a securities depository authorised by the Minister of Commerce. The Icelandic Securities Depository Ltd. has been authorised as a securities depository. The main activities of the Icelandic Securities Depository Ltd. are the issue of electronic securities, registration of titles to electronic securities, electronic depository of securities and settlement of electronic securities. The Iceland Stock Exchange Ltd. and the Icelandic Securities Depository Ltd. are both owned by the same holding company as of June 2002.

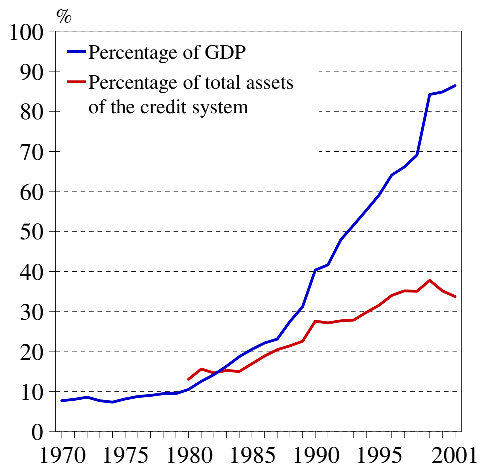
The pension system

Iceland will face fewer problems due to the ageing of the population during the coming decades than most other developed nations. There are three main reasons for this. Firstly, the nation is younger and will continue to be so during the coming decades. The old-age dependency ratio, i.e. over 64-year-olds as a ratio of 15- to 64-year-olds, was 18% in 2000, compared to 22% on average in the EU and 19% in the US. Secondly, labour participation rates among the elderly are high and the pension system does not give special incentives for early retirement. The official retirement age is 67 and 36% of 65- to 74-year-olds worked at least one hour a week in 2001. Thirdly, membership of a fully funded occupational pension fund is mandatory for all employees and self-employed. The Icelandic old age pension system is composed of a tax-financed public pension scheme, mandatory funded occupational pension schemes and voluntary pension saving with tax incentives.

Public pensions are fully financed by taxes. The public pension system provides an old age pension, disability pension and survivors' pension. The old age pension is in most cases paid from the age of 67. It is divided into a basic pension and supplementary pension. Both are means-tested but pensions received from other sources are treated differently from other income. These do not affect the basic pension and the level at which they begin to reduce the supplementary pension is higher than for other income. The basic pension amounts to around 15% of the average earnings of unskilled workers but the maximum total old age pension to around 65% of the same earnings. The occupational pension funds have been increasing their share in pensions relative to the pub-

Chart 5.5

Net assets of pension funds 1970-2001



Source: Central Bank of Iceland.

lic system as they approach maturity and means testing reduces the public pension. In 2001 the share of the two pillars was almost equal, 21 b.kr. or 2.8% of GDP in the case of the public pension system and 22 b.kr. or 3% of GDP in the case of pension funds.

It is mandatory to pay at least 10% of total wages and salaries to pension funds. Many of the funds were established through a collective labour agreement in the late 1960s. Most are managed jointly by representatives from the trade unions and employers. The funds have grown by leaps and bounds in recent years (Chart 5.5) as their coverage has become almost total and the return on their assets has been good. Assets were equivalent to 85.9% of GDP in 2001 and are predicted to reach at least 1½ times GDP around the middle of the twenty-first century. Pension funds in Iceland are large relative to GDP by international comparison as Iceland ranked fourth in 2000 among EU and EFTA countries on this criterion.

At the end of 2001 there were 43 fully operational pension funds in Iceland, thereof 13 with employer guarantees from the government, municipalities or banks. Funds without employer guarantee are required under current legislation to be fully funded. The ten largest pension funds had around 70% of the net assets of all pension funds in 2001, and the two largest ones accounted for 30.8%. The average fund had net assets of around 12 b.kr. (USD 115 m.), while the biggest had assets of a little over 100 b.kr. (about USD 1 b.)

The benefits paid by occupational pension funds without employer guarantee will ultimately depend on their net return and will therefore vary from one fund to another. But the investment risk is born collectively by the members of each fund and there are no individual accounts as in pure DC plans. It has been estimated that a typical general occupational pension fund will, at full maturity, be able to pay a pension amounting to 50-60% of full-time earnings, giving a total replacement ratio of 60-70% when the basic public pension is added.

In the third pillar of pension saving, employees are allowed to deduct from their taxable income a contribution to authorised individual pension schemes of up to 4% of wages. Employers contribute in such cases 2% of wages and an additional 0.4% of wages is financed by lowering the social security tax to an equal degree. The pension schemes have to be authorised by the Ministry of Finance. They are in most cases defined contribution individual accounts. The pension saving is not redeemable until the age of 60 and has to be paid in equal instalments over a period of at least seven years. It is estimated that 40% of wage earners were paying into such schemes at the end of 2001.

Pension funds used to invest most of their assets in government-guaranteed bonds, housing finance and loans to members. During the last decade a significant shift took place in the asset allocation of pension funds, with the shares of equities and foreign assets increasing strongly. The proportion of equities was just over 1% of total assets in 1990 but had increased to 27% in 2001. The share of foreign assets went up from less than 2% in 1995 to over 21% at the end of 2001. Current legislation sets upper limits on the share of equities in a pension fund's portfolio at 35% and restricts exposure to exchange rate risk to 50% of net assets.

The buildup of the pension funds has contributed a great deal to the development of financial markets in Iceland. It is estimated that their assets were equivalent to 33.7% of the size of the credit system in 2001. The funds held 44% of the stock of marketable bonds in the same year and around half of the stock of housing bonds. At the end of 2001 the funds owned domestic equities and shares in equity funds that amounted to around 14% of the size of the organised equity market. This figure really underestimates their importance, due to extensive cross-ownership of listed companies. Finally, foreign asset accumulation of the pension funds is very significant in terms of the national economy. Their foreign assets accounted for over 68.5% of all foreign portfolio assets of Icelandic residents at the end of 2001 and over 33% of total foreign assets as recorded in the international investment position of the country.

Insurance companies

Icelandic insurance law consists of two main acts, i.e. the Act on Insurance Activities and the Act on Insurance Contracts. An insurance company must only conduct insurance activities and specifically defined ancillary activities. Life insurance activities must be separated from other types of insurance services. Icelandic insurance law is based on the EC insurance law.

There are 13 insurance companies authorised to operate in Iceland, with total assets of USD 0.8 billion at year-end 2001. Sjóvá-Almennar Tryggingar hf., Vátryggingafélag Íslands hf. and Tryggingarmiðstöðin hf. are by far the largest. The life insurance companies represent only 7% of total assets of insurance companies. In addition, 172 foreign insurance companies have licences to provide services in Iceland, two of which have established branches.

Supervision and deposit insurance

The Bank Inspectorate of the Central Bank and the Insurance Supervisory Authority were merged into a separate entity, the Financial Supervisory Authority (FSA), on January 1, 1999. The FSA has a Board of Directors appointed by the Minister of Commerce. The institution supervises commercial banks, savings banks and other credit institutions, insurance companies, companies and individuals acting as insurance brokers, undertakings engaged in securities services, UCITS, management companies, stock exchanges and other regulated markets, central securities depositories (CSD) and pension funds. The FSA also supervises other activities as authorised in accordance with specific laws.

The main task of the FSA is to ensure that the activities of the above institutions and firms are conducted in accordance with the relevant laws and regulations and that they remain sound in other respects. These institutions and firms are obliged to provide all the information considered necessary by the FSA to facilitate statutory supervision of their activities.

A deposit insurance scheme is in force. The commercial and savings banks have annually contributed 0.15% of their deposits to this scheme (until the limit of 1% of total insured deposits is reached, which was the case at year-end 2000). Since the beginning of 2000, the Insurance Fund of the commercial banks and the savings banks has been a private institution. An insurance scheme also comprises equity investors that are covered in a special department of this institution.

By law, the Central Bank of Iceland sets rules for the liquidity ratio of credit institutions, i.e. the ratio of liquid claims to liquid liabilities, and for their foreign exchange balance.

Other prudential regulations on financial markets are either sanctioned by law or adopted by government minister or the FSA. The regulation on liquidity aims to ensure that credit institutions always have sufficient liquidity to meet foreseeable and conceivable payment liabilities over specific periods. For instance, the ratio of claims to liabilities which fall due or can be liquidated within 3 months must not be lower than 1. The following limits on the balance of foreign denominated assets and liabilities are stipulated. Firstly: exposure in individual currencies is restricted to 15% of equity, except for the US dollar and the Euro where the limit is 20%. Secondly, total foreign exchange exposure is limited to 30% of equity.

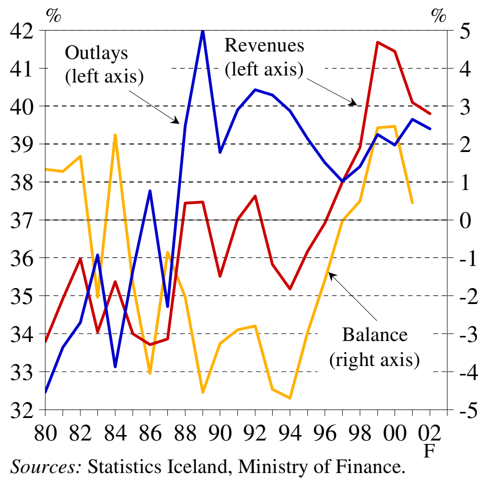
6. The public sector

After heavy deficit spending in the eighties, public sector finances stabilised in the mid nineties and recorded healthy surpluses by the end of the decade. Since then, the public sector balance[1] has been significantly above the OECD average, and Iceland has fully met the European Union's Maastricht criteria for general government finances since 1995.

Iceland, like many other OECD countries, ran up a large public sector deficit in the late eighties and early nineties, with deficits averaging 3% of GDP in 1985 to 1995 inclusive. To some extent the early nineties deficit was the result of a prolonged slowdown which depressed revenues and increased social spending. With booming national expenditure and a growing wage share of GDP, treasury revenue, excluding privatisation profits, shot up from 30% of GDP in 1996-98 to 32½% in 1999, in spite of cuts in personal income tax rates. With private consumption and investment contracting in 2001, revenue fell again to 30% of GDP. Local governments have continued deficit spending in spite of hikes in municipal income taxes. Nevertheless, the overall public sector budget remained in a slight surplus in 2001 on the strength of the treasury's performance.

Chart 6.1

General government finances 1980-2002
% of GDP



Sources: Statistics Iceland, Ministry of Finance.

The size and nature of the government sector

Compared to its neighbours, Iceland has a relatively small public sector, with expenditures equivalent to around 40% of GDP. This is significantly lower than in the Nordic countries and the mainland countries of the European Union, higher than the US and Japan and somewhat above the OECD average. An obvious reason for the modest size of the government sector is the absence of defence expenditures. However, what matters most are lower expenditures on social affairs in general. For this there are several explanations besides a difference in politics and tradition. Firstly,

1. General government in the terminology of national accounts.

unemployment has been historically quite low in Iceland. Secondly, occupational fully funded pension funds are becoming the dominant pillar of the pension system, in contrast to public pay-as-you-go systems in many other OECD countries (See Chapter 5). The relatively young population and high retirement age also contribute to the lowering of overall pension expenditures.

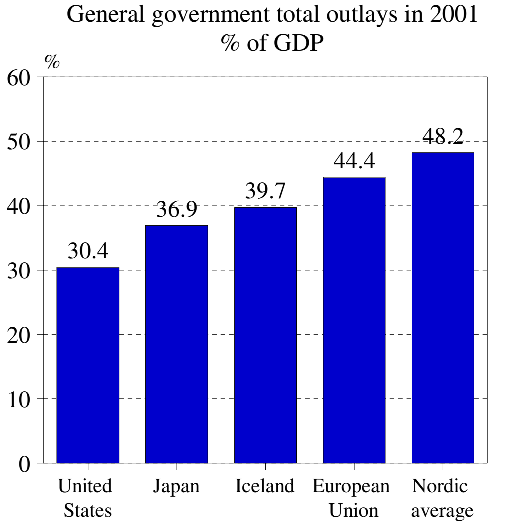
Division of responsibilities

The government sector in Iceland is organised in two stages, the central government as described in the treasury accounts, and municipal or local governments. In the last few years, local government expenditures have been climbing from around 10% to around 11% of GDP as against a central government budget of around 30% of GDP. The central government regulates local governments, legislates their authority to collect revenue and actually collects more than 80% of local government tax revenues. The centre administrates and finances the bulk of the social security sector of government.

Central government is responsible for the police, courts and foreign affairs, education after 10th grade, health services, institutional care for the disabled and elderly, general support and services for industry and most infrastructure construction and maintenance not obviously specific to individual municipalities. It administrates basic means-tested benefits for elderly and disabled persons and the bulk of supplementary old-age and disability pensions, rebates on housing-related interest payments and benefits to families with dependent children, all means-tested as well.

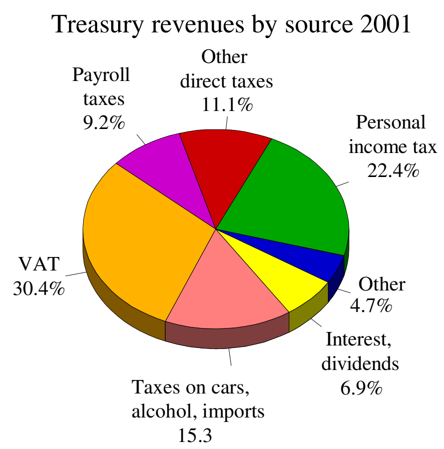
Local governments are responsible for local planning, most local infrastructure, day care and education from pre-school to the 10th grade, and welfare services of various kinds, in particular services for the elderly except for health care. They are also responsible for solv-

Chart 6.2



Source: OECD Economic Outlook, June 2002.

Chart 6.3



Source: Treasury accounts 2001.

ing the housing needs of low-income households. This is done via rent support, partially financed by the central government, and by providing rental housing for those who cannot find housing on their own. Local governments provide supplementary assistance to general programmes of pensions otherwise run by the central government.

Central government finances

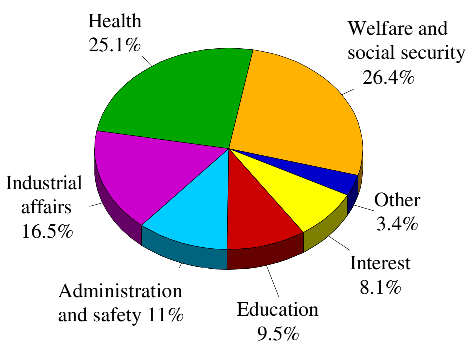
Central government revenues as presented in the treasury's accounts amounted to around 32% of GDP in 2001. The composition of treasury revenues is shown in Chart 6.3.

In 2001, treasury expenditures, as presented in the treasury's accounts, amounted to around 31% of GDP. By far the largest part of central government expenditure goes to social security, welfare and health. A quarter of this was spent on health and about as much on other social and cultural issues, mainly social security and welfare. Chart 6.4 shows the functional breakdown of central government expenditure according to the treasury accounts as a percent of GDP. The latest available figures based on the internationally standardised national accounts date from 1998 and show a similar distribution of expenditures. A final detail to note is that the discretionary part of treasury expenditures is quite low and has been falling. In particular, expenditure on fixed capital and capital transfers has fallen considerably in recent years, as is evident from Chart 6.5.

An interesting aspect of treasury finances concerns the cyclical properties of the budget, especially revenues. The improvement in the budget in the mid to late 1990s is largely explained by the sensitivity of treasury revenues to the business cycle and associated swings in the current account. First, the upswing in the economy and the associated consumption boom expanded revenue from taxes on expenditure relative to GDP from 14.4% of GDP in 1995 to 17% in 1999 and

Chart 6.4

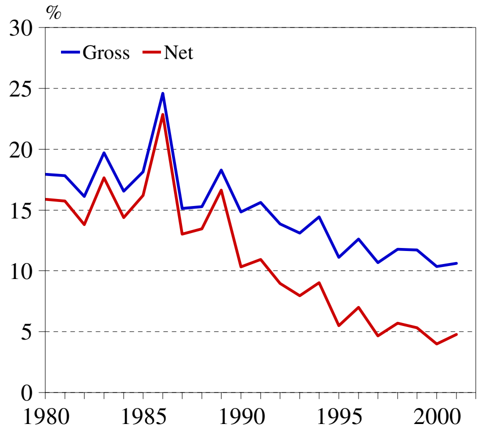
Central government expenditure by function 2001



Source: Treasury accounts for 2001.

Chart 6.5

Central government fixed investment and capital transfers (% of expenditure)



1. Net of depreciation and transfers received.
Source: Statistics Iceland.

16.1% in 2000. Second, a cut in personal income tax rates in 1997 was outweighed by a reduction in cut-off levels of taxable personal income relative to average income. Between 1995 and 2000, the tax-free income ceiling under the combined state and local income tax has been raised by 9% while wages have risen by around 45%. Thus the tax applies to a rapidly growing share of gross income. This has more than outweighed a cut in the main marginal rate from 33.2% in 1995 to 26.4% in 2000, and personal income tax revenues rose by 70% between 1995 and 2000 while average taxable income in tax returns rose by 49%. As a result, the personal income tax yield rose from 5.8% of GDP in 1995 to 7.1% in 2000 in spite of lower tax rates. Third, the upswing, along with policy changes, lowered expenses on unemployment benefit, child benefits and interest rebates to homeowners from a total of 2.6% of GDP in 1995 to 1.4% in 2000.

With smaller boosts from corporate income taxes, payroll taxes and the introduction of a tax on capital income of individuals in 1997, the combined effect was upward of 5% of GDP between 1995 and 2000 which explains the transformation of the treasury's balance[2] from -2.6% of GDP in 1995 to +2.5% in 2000. With the domestic business cycle topping off and the current account deficit dwindling, revenue from expenditure taxes shrank from 16% to 14% of GDP, causing a corresponding trimming of the treasury surplus. Furthermore, although the bracket creep in personal income tax and social benefits will not be reversed automatically, it may come under pressure given that it was justified with the desirability of counter-cyclical budget policy.

Treasury surpluses since 1997, asset sales, contracting lending activity and strong economic growth contributed to a fall in gross treasury debt from 51% of GDP in 1995 to 34% in 2000, while net debt fell from 34% to 19% of GDP. In 2001, gross treasury debt rose to 38½% as the treasury borrowed funds for two reasons: a) to strengthen the balance sheet of the Central Bank to back the Bank's new inflation targeting policy again, and b) to work down the government's civil service pension liabilities, which are generally not classified as debt in international comparisons, even if the wrongfulness of the omission is universally recognised. Treasury debt, with and without pension liabilities, is shown in Chart 6.6.

Local government finances

According to very preliminary estimates for 2001, local governments ran a deficit of the order of 5 b.kr. or 9% of revenues. Local government revenues were around 10½% of GDP in 2000 and preliminary figures show little change in this ratio in 2001. In the former year, approximately 52% of revenues came from a municipal income tax, another 10% from real estate taxes, 5% from the Municipal Equalisation Fund and 20% and 12% respectively from service fees and contributions to capital formation such as fees on building permits.

Local government expenditures amounted to 11% of GDP in 2000 and seem to have grown in tandem in 2001. The breakdown for 2000 shows 29% of the total going to education, 19% to welfare services, 12% to recreational services and 10% to street works. The response of local government budgets to the business cycle is quite different from that of the treasury budget. Municipal income tax is a fixed percentage of an individual's gross income with minimal exemptions and is much

1. Excluding extraordinary items.

more stable than the treasury's share of income taxes. There is a lagged cyclical effect of real estate prices in real estate taxes which, however, only account for around 10% of local government revenues. On the expenditure side, there is a much larger discretionary factor in local budgets than those of the central government. In particular, gross investment accounts for upwards of 20% of local government budgets compared to around 10% for central government.

The size of local government budgets has grown in recent years from an average of 6½% of GDP in the early eighties to around 11% in 2001, mainly because of new and expanded tasks in the area of primary education. In spite of cumulative deficits of around 31% of one year's revenue, or 3% of GDP, since 1994, gross local government debt has hovered around 7% of GDP and net debt around 5% in the period 1994-2000, as asset sales and economic growth have helped municipalities hold ground on the debt front. Preliminary results show this to hold for 2001 as well.

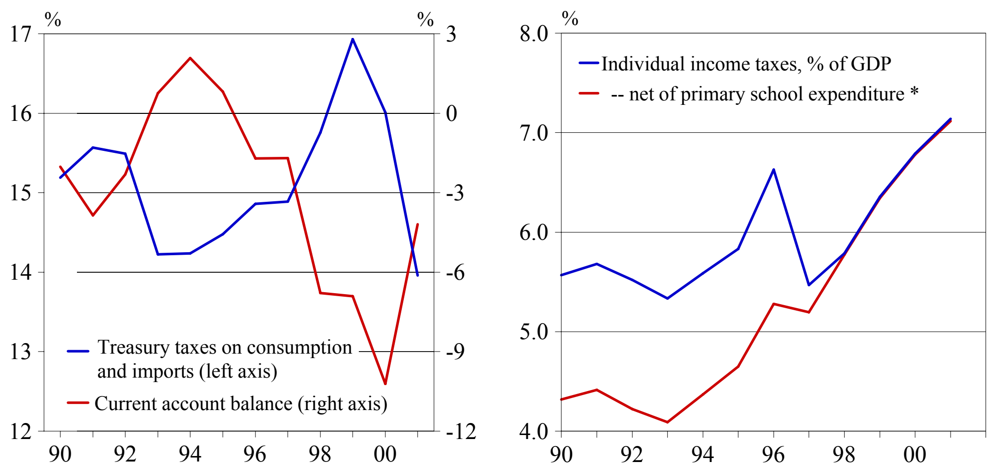
Divesting government holdings in the business sector

In Iceland, both central and local government have traditionally been heavily involved in the business sector, notably in the operation of utilities and banking institutions.

The central government has long been a major player on the domestic business scene, its involvement considered necessary because of the small size of the economy. At the end of the 1980s, it ran a boat company and owned factories producing fertiliser, cement, ferrosilicon and pharmaceuticals. Furthermore, the central government held shares in the largest airline, owned a majority share in the dominant electricity producer, most of the power grid and electricity distribution networks outside the Reykjavík area. It owned the sole operator of telephone services and postal services and

Chart 6.6

Central government revenue 1990-2001 in % of GDP



*Handed over to municipal governments in 1997 along with a share of personal income taxes. The 1988 jump marks a large-scale overhaul. *Sources:* Treasury accounts, budget documents.

Table 6.1 Highlights of recent and prospective privatisation

Year	*Company sold*	*Action taken*	*B.kr*
1998			5.7
	Icelandic Alloys Ltd.	Sale of 26.5% treasury holding	1.0
	FBA Ltd. (investment bank)	Sale of 49% treasury holding	4.7
1999			16.5
	State fertilizer plant	Sale of entire 100% treasury holding	1.3
	FBA Ltd. (investment bank)	Sale of remaining 51% treasury holding	9.7
	Búnaðarbanki Íslands hf. (commercial Bank)	Sale of 13% treasury holding	2.2
	Landsbanki Íslands hf. (commercial bank)	Sale of 13% treasury holding	3.3
2000			0.1
	Intis Ltd. (internet company)	Sale of 22% treasury holding	0.1
2001			1.1
	National telephone company	Sale of 2.7% out of the treasury's 100%	1.1
2002	(January-October)		17.2
	Steinullarverksmiðja (rockwool factory)	Sale of entire 30% treasury holding	0.2
	Landsbanki Íslands hf. (commercial bank)	Sale of 68% of the company	17.0
	Total		40.6
	Dilution through issue of new stock		
1998	Landsbanki Íslands hf. (commercial bank)		1.7
1998	Búnaðarbanki Íslands hf. (commercial bank)		1.1
	Prospective privatisation:		
	Búnaðarbanki Íslands hf. (commercial Bank)	Sale of remaining 73% authorised, planned soon	
	National Telephone company	Sale authorised, on hold	
	IAV (building contractors)	Sale of half of 40% share authorised	

the dominant broadcasting service, as well as financial institutions responsible for more than 60% of domestic credit.

During the last 10 years the central government has embarked upon an extensive plan of privatisation. Ships, fertiliser plants, a pharmaceuticals company, airline shares and two-thirds of the shares in the ferrosilicon plant have been sold, as well as sizeable chunks of the financial institutions and sundry other holdings. The first of the three dominant banks was privatised in 1990, after running into financial trouble in the late eighties, and Íslandsbanki, the second largest bank in Iceland, was founded after a merger with smaller private banks. At the beginning of 1998, the government created an investment bank, FBA or the Icelandic Investment Bank, by merging four sectoral investment credit funds specified in fisheries and manufacturing. FBA was privatised in two steps in 1998 and 1999, and merged into Íslandsbanki in 2000, creating the largest bank in Iceland. In 1998, the government stakes in the two remaining state banks, Landsbanki and Búnaðarbanki, were diluted by equity issues equivalent to around 15% of each bank. A 13% share in each bank was sold in 1999 and further dilution occurred in both banks in connection with acquisitions abroad. At the end of 2001, the state held 68% and 57% in Landsbanki and Búnaðarbanki, respectively. A further 20% of Landsbanki was sold through subscriptions to the public in the summer of 2002, and during the autumn all but 2.5% of its remaining share was sold. Preparations are under way to sell the remainder of Búnaðarbanki. In 2001, an attempt to sell 24% of the national telecom company failed, with subscriptions reaching only a tenth of the proposed sale. The sale has been put on hold for the time being, but the company now faces competition from new entrants in the communications market. The loss-making postal service remains in government hands. It too faces competition in specialised postal delivery. After the pending sales, the state's most important business holdings will be large stakes in the production and distribution of electricity, as well as the Housing Financing Fund, the Student Loan Fund and a few smaller financial institutions, altogether responsible for around 25% of credit in the economy. Thus state involvement in the business sector has already shrunk significantly since 1990 and looks set to continue doing so for the next few years.

The current wave of privatisation actually started at the local government level in 1985, when the townships of Reykjavík and Hafnarfjörður sold their respective municipal trawler operations. Historically, local governments tended to be deeply involved in the fisheries sector, but most of those holdings have been divested in the last 15 years. Local governments, however, still own more than half of all electricity production capacity in Iceland, notably through holdings in the national power company, Landsvirkjun. They almost invariably own geothermal power companies responsible for central heating for most homes. Many own their local distributor of electricity and they generally own operating companies for the harbours. Until recently, they had a legal mandate to hold 40% of seats on the boards of specially chartered savings banks, which accounted for some 20% of the banking sector in the year 2000, but this requirement was dropped in the spring of 2001. In 1998, local governments were barred from providing loan guarantees for non-governmental businesses, a practice which in the past had led to significant municipal involvement and ownership in troubled enterprises.

The tax system

The central government or treasury derived around 90% of its revenue from taxes in 2000. The largest share of revenue, or 32%, came from direct taxes on income and wealth, 30% from value-added tax, 9% from payroll taxes and 16% from various excise taxes on imports, production and consumption. A 25.8% tax is levied on personal income up to 3.9 m.kr. for individuals, while an additional 7% is charged on higher income. A personal tax-free allowance of 312 thousand kr. per year entails that an individual's annual income of up to around 1.2 m.kr. or USD 14 thousand is tax-free (exch. rate at end of Aug. 02). For individuals with lower income than that, the unused allowance applies towards the local government income tax, which ranges from 11.2% to 13% of gross income and accounts for around 70% of local government revenue. Accordingly, individuals with an annual income of up to around USD 9,000 are exempt from the combined local and state income taxes.

Interest, dividends, rental income of individuals and capital gains of individuals are taxed at a lower rate of 10%.

The corporate income tax has been lowered significantly in the last 12 years, from 50% in 1991 to 18% as of the beginning of 2002. Capital income of corporations is treated like other revenue for tax purposes.

A payroll tax of 5.23%, rising to 6% in 2003, is charged on wages to offset in part the revenue loss associated with other tax reductions. In addition, employers must contribute at least 6% to a pension fund to match an employee contribution of at least 4%. Although membership is mandatory and the charters and investment guidelines must be approved by the treasury, pension funds are independently managed and considered independent of the government.

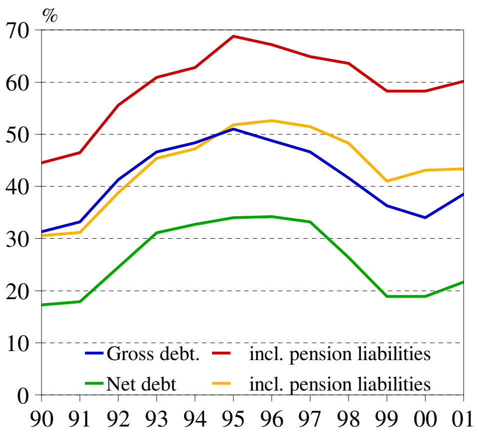
A net wealth tax of 1.2% is assessed on net assets exceeding 4.7 m.kr. for individuals, with an additional 0.25% applying to net assets above 6.3 m.kr. Corporations pay 1.45% tax on net assets. From 2002 net wealth taxes of both individuals and corporations will be cut to 0.6%. There is a 1.5% stamp duty on most debt instruments, a 0.25% duty on bills of exchange and 0.5% on the issue of equity shares.

The largest single source of treasury revenue is value-added tax, which is levied at 24.5% on most goods and services. Food, heating fuel and some services are taxed at 14%, while a few specific sectors are exempt, notably financial services, education, health services and passenger transportation.

A general excise tax is levied on a range of goods at three rates, while unit fees are charged on some goods. Customs duties range from 0 to 30% of cif value, but most imports from EFTA and EU countries are exempt. The revenue from general excise taxes and import duties has fallen from around 2% and 3% of GDP respectively in the early 1980s to around a total of less than 1% in 2001.

Chart 6.7

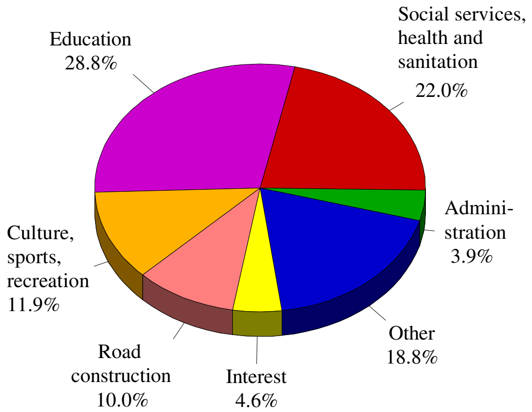
Central government debt
% of GDP 1990-2001



Source: Treasury accounts.

Chart 6.8

Local government outlays by function 2000



Sources: Statistics Iceland, local government accounts 2000.

Taxes on imports and ownership of motor vehicles and excise taxes on motor fuel made up 8½% of treasury revenue in 2001, while 4% derived from charges on the sale of alcohol and tobacco. The taxes described above accounted for 86% of treasury revenues and 96% of tax revenues in 2001. Non-tax income accounts for just over 10% of treasury revenue and consists mostly of service charges, interest income, dividends, profits and the sale of government assets.

Government guarantees

Besides debt on the books of government entities, state and local governments guarantee certain debts of various enterprises. Even though state guarantees must be authorised explicitly in budget legislation, historically they were granted to private as well as public enterprises in order to facilitate their borrowing. In recent years, guarantees have mostly been confined to government enterprises and institutions related to government. In 1998, local governments were legally prohibited from granting loan guarantees except to their own subsidiary institutions.

Treasury accounts for 2001 show treasury guarantees of around 571 b.kr., or 73% of GDP. Of this, 40% represents government backing of residential mortgages and another 29% is due to insurance granted to airlines in the wake of the terrorist attacks on New York and Washington. These guarantees lapsed at the end of August 2002, as markets for catastrophic insurance of this kind reopened. On top of this, the treasury guarantees the debt of the national power company Landsvirkjun, in which the treasury is a 50% partner and whose debt is guaranteed in solidum by the treasury and the townships of Reykjavík and Akureyri. Landsvirkjun's total debt stood at 89 b.kr. at the end of 2001, or 12% of GDP. While these guarantees are large in amount, both the mortgage debt and the power company debt must be viewed as bearing very low risk.

7. Monetary policy

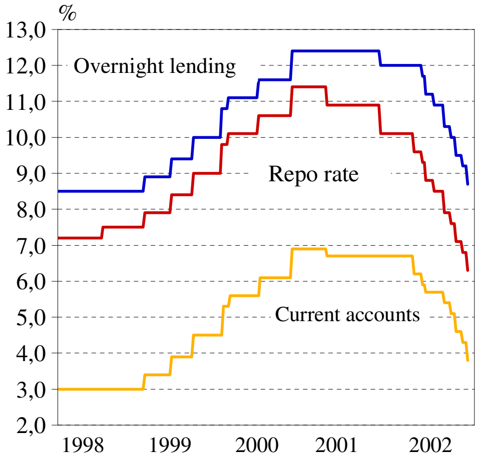
The Central Bank

The Central Bank of Iceland was established as a separate institution in 1961. The current Central Bank Act entered into effect in May 2001 and involved substantial changes from the previous Act. In the new Act, ensuring price stability was defined as the Bank's single main objective. Furthermore, the Bank was granted instrument and financial independence, the transparency and accountability provisions were strengthened and provisions were included which serve to strengthen the capital position of the Bank. The legislation grants the Central Bank of Iceland full independence to implement monetary policy as defined by the inflation target, without interference from the government, and formally closes any direct access by the government to Central Bank financing. Simultaneously, the legislation aims to improve the transparency of monetary policy and make the Bank more accountable towards the government and the public at large. The monetary policy decision-making authority continues to be vested in the Board of Governors consisting of three governors appointed by the Prime Minister to seven-year terms. The new Act specifically authorised the adoption of an inflation targeting policy.

The activities of the Central Bank have evolved over the years. Foreign exchange control, for example, disappeared with the liberalisation of capital flows and the supervisory responsibilities of the Bank were moved to a separate Financial Supervisory Authority at the beginning of 1999. In recent years the Bank, like many other central banks, has put increasing emphasis on monitoring financial stability.

Chart 7.1

Central Bank of Iceland interest rate corridor, March 3, 1998-November 15, 2002



Source: Central Bank of Iceland.

Inflation targeting

In 2001, Iceland joined a growing number of countries that have adopted a formal inflation target as a framework for monetary policy.

Table 7.1 Monetary policy arrangements in Iceland since 1970

1970-1973	After the collapse of the Bretton-Woods system the Icelandic króna followed an adjustable peg against the US dollar.
1974-1983	Implementation of exchange rate policy became increasingly flexible and can be described as a managed float. The króna was first pegged against the US dollar and then against various baskets of trading partner countries' currencies.
1984-1989	Exchange rate policy became more restrictive, with increasing emphasis on exchange rate stability. In 1989, however, the króna was devalued ten times in small steps.
1990-1995	More emphasis was again put on exchange rate stability as the anchor of monetary policy. Until 1992 the currency peg was specified against a basket of 17 currencies, weighted according to merchandise trading shares, with ±2¼% fluctuation bands. The basket was redefined in 1992, with the ECU given a 76% weight, the US dollar a 18% weight and the Japanese yen a 6% weight. The króna was devalued twice in this period, in November 1992 by 6% and in June 1993 by 7½%.
	In September 1995 the fluctuation band was widened to ±6% in response to the abolition of capital controls. The currency basket was also changed. The new basket contained 16 currencies, weighted by their share in Iceland's trade in goods and non-factor services.
1996-2000	Fluctuation of the króna within the bands increased as the foreign exchange market deepened and the emphasis on price stability relative to exchange rate stability increased. Reflecting this, the exchange rate band was widened to ±9% in February 2000.
2001-	The fluctuation band was abolished in March 2001 and an inflation target adopted. The Central Bank gained full independence in setting monetary policy to attain this target without interference by the government[1].

1. The current framework for monetary policy has been described in detail in the Central Bank's *Monetary Bulletin,* available on its website (www.sedlabanki.is).

Currently, nearly 20 countries, including Australia, Canada, New Zealand, Norway, Sweden, Switzerland and the United Kingdom, have adopted a formal inflation target. The inflation target was specified in a joint declaration of the government and the Central Bank of Iceland on March 27 2001 as inflation of 2½%, measured in terms of the twelve-month rate of change in the consumer price index (CPI). To reflect the Central Bank's imperfect control of inflation, there are symmetric tolerance limits. If the inflation rate breaches these limits the Bank is obliged to submit a report to the government, explaining the causes for the deviation, how it intends to respond and when it expects the inflation target to be reached again. The report shall be made public.

Given the relatively high rate of inflation at the time the inflation targeting regime was adopted, the upper tolerance limit was set at 6% for the year 2001 and at 4½% for 2002. From 2003 onwards, the upper tolerance limit will be 4%. The lower tolerance limit is 1% from 2001 onwards. Hence, the Bank aims to attain the 2½% inflation target by no later than the end of 2003 with the tolerance limits specified as ±1½% from the beginning of 2003 onwards.

To guide monetary policy, the Bank publishes a quarterly inflation forecast, projecting two years ahead. These forecasts will more or less serve as the intermediate target of monetary policy instead of the previous currency peg. The króna will therefore float freely without interventions by the Bank, unless it deems this necessary in order to attain the inflation target or to preserve financial stability.

New Central Bank legislation was passed by parliament on May 23, 2001, which defines the role of the Central Bank in the formulation of monetary policy in accordance with the new monetary policy framework and brings the Bank's status into line with best practice around the world. The new legislation sets price stability, as defined by the inflation target, as the main goal of monetary policy. Hence, monetary policy may only be applied to achieve other economic goals, to the extent deemed by the Bank to be consistent with the inflation target.

Exchange rate policy

Under the current monetary policy framework, exchange rate developments are a cause of concern for the Central Bank only insofar as they affect the prospects for price stability or are likely to threaten financial stability. This was a significant departure from earlier policies, since Iceland has had a long history of using the exchange rate as a monetary anchor, although with a varying degree of commitment, as can be inferred from the table on p. 53.

Foreign exchange reserves

One of the functions of the Central Bank is to preserve Iceland's foreign exchange reserves. Investment guidelines for the reserves are laid out in a resolution by the Board of Governors. The resolution prescribes the minimum amount of reserves, the currency composition and the investment categories of the portfolio. Currently the size of the reserves should not be smaller than the value of 3 months' imports. The portfolio consists mainly of deposits and investment grade bonds. The Central Bank holds a small position of gold reserves amounting to about 62 thousand ounces and Iceland has a quota of SDR 117.6 million at the International Monetary Fund.

The reserves are also supported by committed and uncommitted credit lines. Since 1962 the Central Bank has been a party to an agreement between Nordic central banks (currently with Denmark, Sweden and Norway) which consists of an exchange of credit lines. According to the agreement The Central Bank of Iceland can draw up to EUR 200 million. Additional committed credit lines amount to USD 525 million. The Central Bank also has access to uncommitted interbank lines with a number of international banks.

Monetary instruments

The main monetary instrument of the Central Bank of Iceland is the interest rate in its weekly repurchase auction. Usually the Bank auctions two-week contracts. So far the auctions have been fixed-price, with unlimited access subject to collateral. No reverse repurchase agreements have been issued. However, there is scope for reverse repurchase auctions within the rules. Repurchase agreements are secured with collateral in the form of listed securities that the Bank recognises. The Central Bank offers an overnight loan facility to the banks, subject to collateral requirements. The Bank can issue notes of deposit to a bank and these can be submitted as collateral against repurchase agreements and overnight loans. Banks are subject to reserve requirements and can deposit money at will on an interest-bearing account with the Central Bank. The required reserve base is the balance sheet total less equity and interbank liabilities at the end of the preceding month. Currently, the required reserve ratio is 1.5% for the part of the required reserve base which is for one year or longer, and 4% for the part tied for a shorter term. The Central Bank of Iceland can intervene on the interbank foreign exchange market and participate in the interbank FX swap market.

8. Foreign debt

Treasury foreign debt

The Republic of Iceland has been a modest borrower in international markets. In recent years, the surplus on government finances has led to reductions in total outstanding debt. The ratio of treasury foreign debt to GDP fell from 28% in 1995 to 21% in 2000 but *i.a.* due to the sharp depreciation of the Icelandic króna it rose again in 2001 to an estimated 27% of GDP. The strengthening of the króna this year has contributed to lowering this ratio to an estimated 23% at the end of 2002

A primary aim in debt management is to spread the amortisation of foreign debt evenly over coming years as well as to maintain a favourable composition of the debt in regard to interest rates, maturity and currency denomination. In recent years prepayment options have been exercised in order to refinance debt on more favourable terms. Interest rate and currency swaps have also been used to achieve debt and risk management objectives.

In November 2002, the treasury's long-term foreign debt amounted to 154.5 b.kr. and the outstanding stock of Euro-commercial paper stood at 35.2 b.kr. Around 32% of the treasury's foreign obligations were denominated in US dollars, 47% in euros, 9% in Japanese yen, 9% in sterling and 3% in Swiss francs.

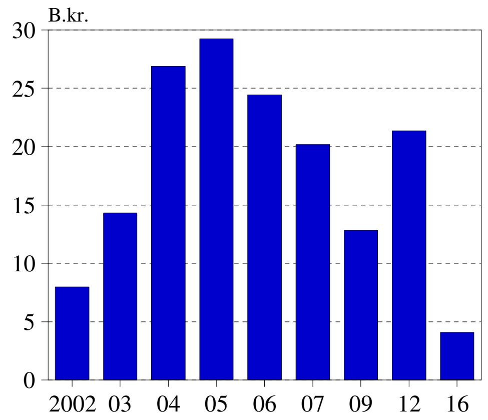
Currently, 40% of the treasury's total foreign debt carries fixed interest rates. Of the long-term debt, 49% of loans carried fixed rates of interest. The average maturity of foreign long-term debt was approximately 4 years and the average duration 2.2 years.

The Republic of Iceland has established three financial programmes to facilitate its financing requirements. These are a Euro-Commercial Paper (ECP) programme amounting to 500 million USD, a United States Commercial Paper (USCP) programme amounting to one billion USD, and a Medium-Term Note (MTN) programme amounting to 1.5 billion

Chart 8.1

Maturity profile of treasury external long-term debt in billons of ISK

September 30, 2002



Source: Central Bank of Iceland.

Table 8.1 Republic of Iceland foreign bond issues 1995-2002

Currency	*Amount*	*Issue date*	*Maturity*
JPY	15,000,000,000	31.1.1995	31.1.2005
EUR	36,000,000	5.5.1995	5.1.2007
EUR	40,000,000	28.8.1995	25.7.2005
DEM	250,000,000	11.4.1996	11.4.2001
DEM	63,000,000	5.6.1996	20.5.2006
DEM	100,000,000	25.7.1996	11.4.2001
DEM	150,000,000	18.3.1997	18.3.2000
CHF	100,000,000	22.10.1999	22.10.2002
EUR	200,000,000	14.3.2000	1.3.2007
EUR	250,000,000	6.4.2001	6.4.2006
USD	100,000,000	5.10.2001	5.4.2004
EUR	90,000,000	5.10.2001	5.10.2005
EUR	87,000,000	8.10.2001	10.10.2005
USD	100,000,000	5.10.2001	5.4.2004
EUR	250,000,000	10.04.2002	10.04.2012
EUR	150,000,000	30.09.2002	30.09.2009

USD. The ECP programme was originally established in 1985 and the MTN and USCP programmes were introduced in 2001.

In 1990, the National Debt Management Agency (Lánasýsla ríkisins, NDMA) was established. Under the legislation setting up the NDMA, borrowing and debt management functions of the treasury and government guarantees were assigned to it. Under a special agreement with the Minister of Finance, the Central Bank is responsible for the execution of foreign borrowings for the treasury.

The Republic of Iceland has always paid when due the full amount required in respect to principal, interest and sinking fund instalments for all internal and external obligations.

National debt

The total external debt of the economy, private as well as public, amounted to 895 b.kr by mid 2002. The net external debt of the Icelandic government, financial institutions and the private sector (international investment position) amounted to 569 b.kr. (around USD 6.6 billion), or 76% of GDP, down from 79% at the end of 2001.

Credit ratings

In 1996 and 1997 Moody's and Standard & Poor's upgraded Iceland's credit rating to reflect better the country's increased creditworthiness. Standard & Poor's announced in 1996 that it had upgraded the credit rating for the Republic of Iceland's long-term foreign currency-denominated debt from A to A+, and short-term debt from A-1 to A-1+. Furthermore, Standard & Poor's assigned a first-time rating of AA+ to Iceland's long-term local currency debt. In July 1997, Moody's upgraded the Republic's foreign currency rating to Aa3 and assigned an Aaa rating to the Republic's long-term ISK bonds. In October 2002 Moody's upgraded the foreign currency rating to Aaa.

In February 2000 Fitch assigned an AA- long-term foreign currency rating for Iceland. A short-term rating of F1+ and an AAA rating for long-term local currency were also assigned.

In February and March 2001, Moody's, Standard & Poor's and Fitch confirmed their previous ratings on long-term debt. All three agencies also confirmed their highest ratings for the short-term debt. However, Standard & Poor's amended its previous positive economic outlook to a neutral one and in October changed the outlook to negative. In November 2002 Standard & Poor's confirmed their rating but moved the outlook back to stable. Fitch changed their outlook on the rating in February 2002 from stable to negative.

Table 8.2 Ratings for Icelandic treasury bonds

	Foreign currency		*Domestic currency*	
	Long-term	*Short-term*	*Long-term*	*Short-term*
Moody's	Aaa	P-1	Aaa	P-1
S&P	A+	A-1+	AA+	A-1+
Fitch	AA-	F1+	AAA	.

From the reports issued by the ratings agencies it can be inferred that Iceland's creditworthiness has strengthened significantly over the past decade, supported by a fiscal consolidation programme, achievements in structural reforms and the increased flexibility of the economy. The reports have cited robust GDP growth in recent years, but all three expressed concerns about imbalances that emerged in the economy during this period of expansion. However, the rating firms have recently underlined the flexibility of the Icelandic economy and its capacity to sort out these imbalances.

9. Appendix

Table A1 **Economic development**[1]

	2001
Population size Dec. 1, 2001 (thous.)	286.3
Average annual population growth (%)	
in last 10 yrs.	0.99
in last 20 yrs.	1.06
in last 30 yrs.	1.09
GDP in billions of krónur	744.2
GDP in billions of USD	7.6
GDP in billions of euros	8.5
GDP/capita in USD	26.7
GDP/capita in USD in terms of PPP	30.4
Rank among OECD countries	6
Average annual growth rate of GDP (%)	
in last 10 yrs.	2.7
in last 20 yrs.	2.5
in last 30 yrs.	3.5
Average annual inflation rate (%)	
in last 10 yrs.	3.2
in last 20 yrs.	15.4
in last 30 yrs.	22.4

	2001
Labour force participation rate, males (%)	88.0
Labour force participation rate, females (%)	81.1
Rate of unemployment (%)	1.4
Infant mortality (% of 1,000 live births)	2.7
Life expectancy (males) (1999-2000)	77.6
Life expectancy (females) (1999-2000)	81.4
Live births per 1,000 women	2.08
Energy consumption per capita (thous. kWh)	28.2
Physicians per 1,000 inhabitants (1999)	3.4
Passenger cars per 1,000 inhabitants (2000)	562
Access to Internet (% of population, 16-75 yrs.)	76.9
Share of exports in GDP	40.8
International investment position at year-end (% of GDP)	-75.4
Share of government revenue in GDP	40.1
Share of government expenditures in GDP	39.6
General government gross debt as a share of GDP	45.4

1. Data refers to 2001 unless otherwise indicated.
Sources: Ministry of Labour, National Economic Institute, OECD, Statistics Iceland.

Table A2 **Structure of the economy**

A Components of GDP	*At current prices (b.kr.)* 1961	1981	2001	*% of GDP* 1961	1981	2001	*Average volume change (%)* 1961-2001	1981-2001
Private consumption	0.061	15.0	408.4	60.6	59.2	54.9	4.3	2.4
Public consumption	0.010	4.2	175.5	10.1	16.7	23.6	5.3	3.6
Gross capital formation	0.024	6.2	166.2	24.3	24.6	22.3	4.2	2.3
National expenditure	0.096	25.7	748.0	96.5	101.5	100.5	4.3	2.5
Exports of goods and services	0.043	8.6	303.4	42.8	33.9	40.8	4.5	3.0
Imports of goods and services	0.039	8.9	307.3	39.3	35.4	41.3	5.3	3.0
GDP	0.100	25.3	744.2	100.0	100.0	100.0	4.1	2.5
Current account balance	0.002	-1.0	-32.2	2.2	-4.0	-4.3	.	.

B GDP by sectors	*% of GDP* 1973	1981	2001[1]
Agriculture	5.3	4.8	1.4
Fisheries and fish processing	15.5	16.0	12.5
Aluminium and ferrosilicon	...	...	1.5
Other manufacturing industry	12.6	11.4	9.5
Electricity and water supply	2.9	3.8	3.3
Construction	12.1	9.1	9.3
Wholesale & retail trade, restaurants & hotels	10.2	10.8	13.4
Transport, storage, communication	9.3	8.5	7.7
Other services	20.3	20.6	21.9
Government services	11.8	14.9	19.5
Total industries	100.0	100.0	100.0

C Breakdown of employment by Industry	*Thous. man-years* 1963	1981	2001	*Percentage breakdown* 1963	1981	2001[1]
Agriculture	9,054	8,203	...	13.4	7.4	3.3
Fisheries	4,463	5,587	...	6.6	5.0	3.9
Fish processing	6,542	10,133	...	9.7	9.1	5.1
Manufacturing industry	10,520	16,258	...	15.6	14.6	12.1
Construction, electricity and water	7,472	11,825	...	11.1	10.6	10.3
Wholesale & retail trade, restaurants & hotels	9,217	14,564	...	13.7	13.1	16.7
Transport, storage and communication	6,459	7,843	...	9.6	7.1	6.7
Finance, insurance, real estate, business serv.	1,840	6,647	...	2.7	6.0	9.5
Producers of government services	6,381	19,003	...	9.5	17.1	18.9
Other services	4,709	7,895	...	7.0	7.1	13.4
Other	659	3,145	...	1.0	2.8	-
Total employment[2]	67,316	111,103	...	100.0	100.0	100.0

1. Estimate. 2. Unemployed are not included.
Sources: National Economic Institue, Statistics Iceland.

Table A3 **Structure of foreign trade**

A Merchandise exports and imports by basic categories 1980-2001

	B.kr. at current prices (fob)				*% of total merchandise exports/imports*			
	1980	*1990*	*2000*	*2001*	*1980*	*1990*	*2000*	*2001*
Exports of goods and services	5.8	124.9	231.6	303.4	100.0	100.0	100.0	100.0
Imports of goods and services	6.1	120.0	278.6	307.3	100.0	100.0	100.0	100.0
Merchandise exports	4.5	92.6	149.3	196.4	76.7	74.1	64.4	64.7
Marine products	3.3	69.9	94.5	121.8	57.4	55.9	40.8	40.2
Manufacturing goods	1.0	18.9	46.7	63.5	16.6	15.1	20.1	20.9
Other goods	0.2	3.8	8.1	11.1	2.6	3.1	3.5	3.7
Merchandise imports[1]	4.8	88.1	187.3	203.1	78.4	73.4	67.2	66.1
Consumption goods	1.6	...	59.3	60.8	25.6	...	21.3	19.8
Capital goods	1.5	...	57.7	57.5	24.6	...	20.7	18.7
Industrial supplies	1.7	...	70.0	84.4	28.3	...	25.1	27.5
Services exports	1.4	32.5	82.4	107.1	23.3	26.0	35.6	35.3
Transportation	0.6	12.9	40.8	50.9	10.7	10.4	17.6	16.8
Travel	0.1	8.8	18.0	22.9	1.9	7.0	7.8	7.5
Other services	0.6	10.7	23.6	33.3	10.7	8.6	10.2	11.0
Services imports	1.3	32.3	91.9	104.8	21.9	26.9	33.0	34.1
Transportation	0.8	9.8	32.7	39.9	12.7	8.2	11.7	13.0
Travel	0.3	16.6	37.1	36.4	4.3	13.9	13.3	11.8
Other services	0.3	5.9	22.1	28.5	4.9	4.9	7.9	9.3

1. At cif values in 1980. *Sources*: National Economic Institute, Statistics Iceland.

B Merchandise exports by commodity groups 1980-2001

	B.kr. at current prices (fob)				*% of total merchandise exports*			
	1980	*1990*	*2000*	*2001*	*1980*	*1990*	*2000*	*2001*
Total merchandise exports	4.5	92.6	149.3	196.4	100.0	100.0	100.0	100.0
Marine products	3.3	69.9	94.5	121.8	74.9	75.5	63.3	62.0
Salted and/or dried fish	0.9	13.2	20.3	26.2	20.1	14.2	13.6	13.4
Fresh fish	0.2	12.0	10.9	14.0	4.9	12.9	7.3	7.1
Whole-frozen fish	0.1	5.2	9.5	11.9	1.9	5.6	6.3	6.1
Frozen fish fillets	1.2	26.0	27.3	32.8	27.6	28.0	18.3	16.7
Frozen shrimp	0.1	4.5	10.0	12.6	1.5	4.8	6.7	6.4
Fish meal	0.3	3.1	9.3	13.0	6.6	3.4	6.2	6.6
Fish oil	0.2	1.0	1.9	4.0	3.7	1.1	1.3	2.0
Other marine products	0.4	5.0	5.3	7.2	8.6	5.4	3.5	3.7
Agricultural products	0.1	1.8	2.6	3.3	1.9	1.9	1.7	1.7
Manufacturing products	1.0	18.9	46.7	63.5	21.7	20.4	31.3	32.3
Aluminium	0.5	9.6	27.7	39.4	12.1	10.4	18.6	20.0
Ferrosilicon	0.1	2.4	3.9	5.1	1.8	2.6	2.6	2.6
Other manufacturing products	0.3	6.9	15.1	19.0	7.7	7.4	10.1	9.7
Other products	0.1	2.0	5.5	7.8	1.5	2.2	3.7	4.0
Ships and aircraft	0.0	1.2	3.1	3.3	1.0	1.3	2.1	1.7
Other products	0.0	0.8	2.4	4.5	0.5	0.9	1.6	2.3

Source: Statistics Iceland.

Table A3 (continued) **Structure of foreign trade**

C Merchandise imports by economic category, 1990-2001

	B.kr. at current prices (fob)				*% of total merchandise imports*			
	1990	*1995*	*2000*	*2001*	*1990*	*1995*	*2000*	*2001*
Total merchandise imports	88.1	103.5	187.3	203.1	100.0	100.0	100.0	100.0
Food and beverages	6.7	10.3	15.0	17.6	7.6	10.0	8.0	8.7
Primary, mainly for industry	0.3	2.5	4.7	4.8	0.4	2.4	2.5	2.3
Primary, mainly for household consumption	1.8	1.3	1.5	2.0	2.1	1.3	0.8	1.0
Processed, mainly for industry	0.7	0.9	0.9	1.1	0.8	0.9	0.5	0.5
Processed, mainly for household consumption	3.9	5.6	8.0	9.8	4.4	5.4	4.3	4.8
Industrial supplies not elsewhere specified	23.1	28.9	43.4	55.6	26.2	27.9	23.2	27.4
Primary	0.9	1.2	2.1	2.5	1.0	1.2	1.1	1.2
Processed	22.2	27.7	41.3	53.1	25.2	26.7	22.1	26.1
Fuels and lubricants	8.7	7.3	17.3	17.7	9.9	7.1	9.2	8.7
Primary	0.2	0.3	0.5	0.6	0.2	0.3	0.3	0.3
Motor spirit	1.9	1.5	3.6	3.5	2.1	1.4	1.9	1.7
Other	6.6	5.6	13.2	13.6	7.5	5.4	7.1	6.7
Capital goods (except for transport)	16.3	22.1	44.3	44.4	18.5	21.3	23.7	21.8
Capital goods (except transport)	10.1	14.2	30.3	28.5	11.5	13.7	16.2	14.0
Parts and accessories	6.1	7.9	14.0	15.9	7.0	7.6	7.5	7.8
Transport equipment	16.2	12.9	31.9	28.3	18.4	12.4	17.0	13.9
Passenger motor cars (excl. buses)	3.1	4.6	12.2	7.5	3.5	4.4	6.5	3.7
Transport equipment (excl. ships, aircraft)	1.8	1.4	4.9	3.0	2.1	1.4	2.6	1.5
Other, non-industrial	0.2	0.2	0.4	0.5	0.3	0.2	0.2	0.2
Parts and accessories	2.7	2.9	4.6	4.3	3.1	2.8	2.5	2.1
Ships	1.4	3.0	5.8	6.4	1.6	2.9	3.1	3.2
Aircraft	7.0	0.8	3.9	6.6	7.9	0.8	2.1	3.2
Consumer goods not elsewhere specified	17.0	21.9	35.1	39.1	19.3	21.1	18.8	19.3
Durable	3.8	4.5	8.5	8.8	4.3	4.3	4.5	4.3
Semi-durable	6.8	8.7	13.7	14.6	7.7	8.4	7.3	7.2
Non-durable	6.3	8.7	12.9	15.7	7.2	8.4	6.9	7.8
Goods not elsewhere specified	0.1	0.2	0.2	0.4	0.2	0.2	0.1	0.2

Source: Statistics Iceland.

Table A3 (continued) **Structure of foreign trade**[1]

D Geographic distribution of foreign trade 1970-2001

	Share of total					*B.kr.*
Merchandise exports, fob	*1970*	*1980*	*1990*	*2000*	*2001*	*2001*
European Union	52.8	52.3	70.7	67.4	68.5	134.4
Euro area	25.4	30.2	37.6	42.3	44.9	88.2
Other EU countries	27.4	22.0	33.1	25.1	23.5	46.2
United Kingdom	13.2	16.5	25.3	19.3	18.2	35.8
Other Western European countries	2.8	2.3	3.4	7.8	10.2	20.0
Eastern Europe and former Soviet Union	9.6	8.8	2.9	1.4	2.2	4.4
Russia	6.8	5.4	2.5	0.4	0.4	0.7
United States	30.0	21.6	9.9	12.2	10.4	20.3
Japan	0.1	1.5	6.0	5.2	3.5	6.8
Other OECD countries	0.5	0.6	0.5	2.0	1.5	2.9
Developing countries [2]	4.2	12.9	5.5	3.0	2.8	5.6
Other countries	0.0	0.0	1.1	1.0	1.0	2.0
Total	100.0	100.0	100.0	100.0	100.0	196.4
Merchandise imports, cif						
European Union	64.9	58.0	59.9	57.0	54.9	121.3
Euro area	32.0	33.2	35.5	33.5	32.9	72.7
Other EU countries	33.0	24.8	24.4	23.6	22.0	48.6
United Kingdom	14.3	9.5	8.1	9.0	7.5	16.6
Other Western European countries	5.4	8.1	5.2	9.7	9.5	21.1
Eastern Europe and former Soviet Union	10.4	10.9	6.5	5.7	6.1	13.4
Russia	7.2	9.7	5.0	1.8	1.6	3.6
United States	8.2	9.4	14.4	11.0	11.1	24.5
Japan	2.9	4.0	5.6	4.9	3.3	7.3
Other OECD countries	0.4	5.8	3.7	4.5	4.6	10.2
Developing countries [2]	7.2	2.7	3.1	5.6	9.0	19.9
Other countries	0.6	1.1	1.4	1.5	1.4	3.1
Total	100.0	100.0	100.0	100.0	100.0	220.9

1. Country groups are based on the year 2000. 2. International Monetary Fund's definition.
Source: Statistics Iceland.

Table A4 **National accounts overview**

	B.kr. at current prices					Volume change on previous year (%)[1]				
	1997	*1998*	*1999*	*2000*	*2001*	*1997*	*1998*	*1999*	*2000*	*2001*
Private consumption	293.2	325.9	358.7	389.6	408.4	3.3	10.1	7.3	4.0	-3.0
Public consumption	112.8	127.8	142.1	156.7	175.5	2.5	3.4	4.4	3.7	3.2
Gross fixed capital formation	103.3	138.8	135.0	156.5	166.2	2.0	33.0	-3.7	14.8	-4.4
Industries	63.4	92.8	87.8	101.0	103.3	17.8	39.0	-5.8	14.9	-9.3
Housing	20.8	21.8	22.3	25.5	30.5	-9.3	-1.1	0.3	10.5	12.9
Public works and buildings	19.1	24.3	24.9	30.0	32.3	6.6	22.9	0.9	18.1	-0.7
Changes in stock	0.1	0.9	0.1	2.5	-2.1	0.0	0.1	-0.1	0.4	-0.8
National expenditure	509.4	593.4	635.9	705.3	748.0	2.9	13.5	4.0	6.7	-3.0
Exports of goods and services	190.9	204.2	212.2	231.6	303.4	4.4	2.0	4.0	5.0	7.8
Exports of goods	131.2	136.6	144.9	149.3	196.4	1.5	-2.6	7.1	-1.3	7.1
Exports of services	59.7	67.6	67.2	82.4	107.1	12.3	13.2	-2.5	19.3	9.1
Imports of goods and services	187.7	230.1	241.5	278.6	307.3	7.1	23.4	4.2	8.0	-9.0
Imports of goods	131.0	161.6	167.3	186.8	202.5	5.1	24.3	3.2	2.8	-10.0
Imports of services	56.8	68.4	74.2	91.9	104.8	12.7	21.2	6.9	21.5	-6.9
Gross domestic production (GDP)	512.7	567.6	606.6	658.3	744.2	2.0	5.5	3.9	5.5	3.6
Current account balance	-8.9	-39.5	-42.6	-68.0	-32.2	.	.	.	.	.
Current account balance, % of GDP	-1.7	-7.0	-7.0	-10.3	-4.3	.	.	.	.	.

1. Volume changes indicate percentages of GDP of the previous year at fixed prices. *Source*: Ministry of Finance.

Table A5 **Financial sector indicators**

Financial institutions (number of, unless otherwise indicated)	*1990*	*1995*	*2000*	*2001*
Commercial banks	3	4	4	4
Savings banks	33	29	26	24
Average number of employees in commercial and savings banks	2,831	3,038	3,326	3,524
Total assets of commercial and savings banks (billions of ISK)	213.4	274.2	868.0	1,033.0
Investment banks	.	.	4	4
Investment funds	12	11	5	4
Leasing companies	4	3	3	3
Pension funds	88	75	56	54
Insurance companies	19	16	12	14
Financial markets				
Number of listed companies on Iceland Stock Exchange (ICEX)	2	27	75	71
Market capitalisation of listed companies at end of period (billions of ISK)	...	49.7	397.2	428.0
Market capitalisation of listed companies at end of period (% of GDP)	...	11.0	59.5	57.1
Annual turnover in listed equities (billions of ISK)	-	3.8	198.8	138.3
Annual turnover in listed bonds (billions of ISK)	2.5	68.1	335.9	610.7
Annual turnover on the Icelandic interbank market for foreign exchange (billions of ISK)	...	54.5	768.0	1,218.0
Annual turnover on the interbank currency swap market (billions of ISK)[1]	...	...	...	20.8
Annual turnover on the interbank market for krónur (billions of ISK)	...	0.0	524.3	426.1

1. Started on November 26, 2001.
Sources: Financial Supervisory Authority, Iceland Stock Exchange, Central Bank of Iceland.

Table A6 **Government sector indicators**

General government revenues and outlays % of GDP[1]

	1970	*1980*	*1990*	*2000*	*2001*
Revenues	30.1	33.8	35.5	41.4	40.1
Taxes	28.9	31.7	33.1	39.0	37.0
on income and wealth	8.9	8.9	11.6	19.6	19.7
on production/imports/consumption	20.0	22.7	21.5	19.5	17.3
Interest	0.6	1.9	1.5	1.5	1.8
Other	0.6	0.3	0.9	0.9	1.3
Outlays	28.9	32.5	38.8	39.0	39.6
Public consumption	12.7	16.5	19.7	23.8	23.6
of which depreciation	1.0	0.6	1.8	2.0	2.0
Interest	0.6	1.6	3.7	3.5	3.7
Subsidies	3.3	3.5	3.4	1.8	1.8
Current transfers	5.5	5.0	6.9	7.2	7.4
Fixed investment	4.6	3.6	4.3	3.8	3.9
Captial transfers	3.1	2.9	2.6	1.1	1.2
Financial balance	1.2	1.3	-3.3	2.5	0.5

Government expenditure by function in percent of GDP[1,2]

Central government	*1970*	*1980*	*1990*	*1998*[3]
Total expenditure	21.4	26.9	31.7	28.7
Administration and safety	2.3	2.2	2.5	2.8
Education	3.3	3.4	3.7	2.5
Health services	3.3	5.1	6.7	7.1
Social security	4.1	4.8	6.3	6.6
Other social affairs	1.4	1.1	1.2	1.2
Economic services	7.0	7.8	7.2	4.5
of which transportation	2.7	2.4	2.0	1.7
Interest expenditure	0.4	1.3	3.3	3.3
Other expenditure	-0.3	1.1	1.0	0.8

Local government	*1970*	*1980*	*1990*	*2000*
Total expenditure	7.8	6.5	7.1	10.7
Administration and safety	0.6	0.5	0.7	0.7
Education	0.9	0.9	1.1	3.6
Health	0.1	0.7	0.1	0.1
Social security	2.3	0.8	1.3	2.2
Other social affairs	1.4	1.5	1.7	2.4
Economic services	1.9	1.5	1.2	1.5
o.w. transportation	1.0	1.2	1.1	1.3
Interest expenditure	0.2	0.3	0.4	0.5
Other expenditure	0.3	0.3	0.5	-0.2

1. On SNA basis. 2. Without depreciation. 3. Newest data available.
Sources: National Economic Institute, Statistics Iceland.

Table A7 **Balance of payments 1990-2001**

Millions of krónur	*1990*	*1995*	*2000*	*2001*[1]
Current account	-7,708	3,390	-68,005	-32,194
Balance on goods, services and income	-7,508	3,696	-67,243	-31,235
Exports	129,776	166,527	243,216	318,926
Imports	-137,284	-162,831	-310,459	-350,161
Balance on goods and services	4,978	16,525	-47,005	-3,848
Exports	124,937	161,250	231,632	303,444
Imports	-119,959	-144,725	-278,637	-307,292
Balance on goods	4,796	13,356	-37,480	-6,123
Merchandise exports f.o.b.	92,453	116,607	149,272	196,394
Marine products	69,897	83,873	94,497	121,844
Aluminium and ferrosilicon	12,018	15,514	31,572	44,412
Ships and aircrafts	1,039	4,109	3,136	3,311
Other goods	9,499	13,111	20,067	26,827
Merchandise imports f.o.b.	-87,657	-103,251	-186,752	-202,517
Investment goods	-16,215	-21,994	-44,204	-44,233
Transport equipment	-15,972	-12,836	-31,824	-28,180
Fuels and lubricants	-8,678	-7,293	-17,250	-17,676
Industrial supplies	-23,034	-28,750	-43,236	-55,429
Consumer goods	-23,758	-32,378	-50,238	-56,999
Balance on services	182	3,169	-9,525	2,275
Exports of services, total	32,484	44,643	82,360	107,050
Transportation	12,932	17,340	40,833	50,879
Air transport	6,958	10,847	30,194	37,783
Sea transport	5,974	6,493	10,639	13,096
Travel	8,806	12,004	17,967	22,881
Other receipts	10,746	15,299	23,560	33,290
Communications services	885	1,476	820	2,337
Insurance services	377	338	435	577
Government services	7,026	6,657	8,457	8,091
Other services	2,458	6,828	13,848	22,285
Imports of services, total	-32,302	-41,474	-91,885	-104,775
Transportation	-9,785	-13,371	-32,697	-39,855
Travel	-16,635	-18,194	-37,082	-36,401
Other expenditures	-5,882	-9,909	-22,106	-28,519
Communications services	-693	-1,192	-155	-2,742
Insurance services	-883	-1,304	-432	-714
Government services	-487	-746	-1,205	-1,560
Other services	-3,819	-6,667	-20,314	-23,503
Balance on income	-12,486	-12,829	-20,238	-27,387
Receipts	4,839	5,277	11,584	15,482
Compensation of employees	2,658	3,260	5,516	5,772
Investment income	2,181	2,017	6,068	9,710
Dividends and reinvested earnings	377	-45	2,559	6,348
Interest payments	1,804	2,062	3,509	3,362
Expenditures	-17,325	-18,106	-31,822	-42,869
Compensation of employees	-682	-365	-844	-533
Investment income	-16,643	-17,741	-30,978	-42,336
Dividends and reinvested earnings	-489	-1,047	-2,459	-609
Interest payments	-16,154	-16,694	-28,519	-41,727
Current transfer, net	-200	-306	-762	-959
Public transfer, net	-358	-562	-813	-1,169
Private transfer, net	158	256	51	210
Exchange rate indices (1994=100)	87.0	98.9	96.1	115.3

Table A7 (continued) **Balance of payments 1990-2001**

Millions of krónur	*1990*	*1995*	*2000*	*2001*[1]
Capital and Financial Account	9,370	-392	71,776	37,810
Capital transfer, net	157	-286	-222	362
Financial account[2]	9,213	-106	71,998	37,448
Financial account excl. reserves	13,449	140	66,690	33,088
Direct investment, net	613	-2,205	-17,504	-8,404
Abroad	-674	-1,606	-30,949	-25,323
Equity capital	-314	-367	-31,714	-27,417
Reinvested earnings	-365	187	-399	-3,287
Other capital	5	-1,426	1,164	5,381
In Iceland	1,287	-599	13,445	16,919
Equity capital	52	445	16,665	20,565
Reinvested earnings	-762	160	-168	-1,102
Other capital	1,997	-1,204	-3,052	-2,544
Portfolio investment, net	1,515	10,017	39,421	57,798
Assets	0	-4,134	-50,369	-5,643
Equities	0	-2,814	-49,947	-5,812
Debt securities	0	-1,320	-422	169
Bonds and notes	0	-1,145	639	-2,182
Money-market instruments	0	-175	-1,061	2,351
Liabilities	1,515	14,151	89,790	63,441
Equities	0	10	-3,350	4,266
Debt securities	1,515	14,141	93,140	59,175
Bonds and notes	-57	12,135	88,932	30,167
Money-market instruments	1,572	2,006	4,208	29,008
Financial derivatives, net	-44	-38	-93	0
Assets	-44	-1,073	1,218	0
Liabilities	0	1,035	-1,311	0
Other investment, net	11,365	-7,634	44,866	-16,306
Assets	-3,007	1,645	-7,112	-34,655
Deposits and loan	-1,529	2,392	-5,681	-33,929
Trade credits	-1,478	-643	-1,431	-726
Other capital	0	-104	0	0
Liabilities	14,372	-9,279	51,978	18,349
Deposits and loan	13,788	-9,878	49,270	24,004
Long-term borrowing	14,847	-15,686	28,087	30,115
Short-term borrowing	-1,059	5,808	21,183	-6,111
Trade credits	1,030	125	79	-3,102
Other capital	-446	474	2,629	-2,553
Reserve assets	-4,236	-246	5,308	4,360
Net errors and omissions	-1,662	-2,998	-3,771	-5,616
Memorandum items:				
Debt securities, loans, etc., net	15,887	5,897	145,118	77,524
Long-term borrowing, net	14,790	-3,551	117,019	60,282
Monetary authorities	-59	0	0	0
General government	1,003	12,517	4,712	41,451
Deposit banks	-870	-8,254	76,053	-5,093
Other sectors	14,716	-7,814	36,254	23,924
Short-term borrowing, net	1,097	9,448	28,099	17,242
Monetary authorities	-48	2,365	10,740	-5,800
General government	1,572	2,006	11,456	720
Deposit banks	-563	4,763	-2,105	17,984
Other sectors	136	314	8,008	4,338
Average exchange rate: ISK per USD	58.29	64.67	78.65	97.57
Average exchange rate: ISK per SDR	79.01	98.03	103.55	124.08

1. Preliminary figures. 2. Positive number represents inflow of capital due to foreign borrowing or decrease in assets. Negative number accounts for outflow of capital, debt repayments or increase in assets. *Source*: Central Bank of Iceland.

Table A8 **Projected external debt service**[1]

Billions of krónur		2002	2003	2004	2005	2006	2007	Thereafter	Principal total
General government									
	Principal	23.2	18.3	24.2	45.7	31.7	24.0	63.7	194.2
	Interest[2]	9.8	8.4	6.4	5.2	3.2	1.8		
	Total	32.9	26.8	30.6	50.9	34.8	25.8		
Financial institutions									
	Principal	89.6	144.1	58.4	47.0	17.0	1.7	18.3	376.1
	Interest[2]	13.5	8.6	4.8	3.0	1.2	0.7		
	Total	103.1	152.7	63.3	50.0	18.3	2.3		
Other sectors									
	Principal	13.1	40.5	28.0	34.4	13.1	4.6	11.6	181.9
	Interest[2]	8.1	7.1	5.6	4.3	3.0	2.5		
	Total	21.2	47.6	33.6	38.7	16.0	7.1		
Total payments									
	Principal	125.8	202.9	110.7	127.1	61.8	30.3	93.7	752.2
	Interest[2]	31.4	24.1	16.8	12.5	7.4	5.0		
	Total	157.2	227.0	127.5	139.6	69.1	35.2		

1. Based on debt outstanding at the end of year
2. Floating rate, LIBOR-USD is assumed at 3.8% per year.

Source: The Central Bank of Iceland.