The Economy of Iceland

ECONOMY OF ICELAND

2006

Contents

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Icelandic letters:

ð/Ð (pronounced like th in English this)
þ/Þ (pronounced like th in English think)

Symbols:

*	Preliminary or estimated data.
0	Less than half of the unit used.
-	Nil.
...	Not available.
.	Not applicable.

Republic of Iceland

People

Population	299,891 (December 31, 2005)
Capital	Reykjavík, population 114,968 (December 31, 2005)
Language	Icelandic; belongs to the Nordic group of Germanic languages
Main religion	Evangelical Lutheran (84.1%)
Life expectancy	Females: 83 years, Males: 79 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 10, 2003

Economy

Monetary unit	Króna (plural: krónur); currency code: ISK
Gross domestic product	€12.8 billion (996.0 billion krónur, US$15.9 billion) in 2005
International trade	Exports of goods and services 32% and imports of goods and services 45% of GDP in 2005
Per capita GDP	€43.1 thousand in 2005 (3.3 million krónur, US$ 35.8 thousand in terms of PPP)

Land

Geographic size	103,000 km^2 (39,768 sq.m.)
Highest point	2,110 m (6,923 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*		
	Affirmed	*Long-term*	*Short-term*	*Long-ter m*	*Short-term*	*Outlook*
Moody's	August 2006	Aaa	P-1	Aaa	P-1	Stable
Standard & Poor's	June 2006	AA-	A-1+	AA+	A-1+	Negative
Fitch	February 2006	AA-	F1+	AAA		Negative

Central Bank of Iceland publications in English

Annual Report
Monetary Bulletin
Financial Stability
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 Economic Indicators, a monthly snapshot of the Icelandic economy in charts and tables.

Useful websites

Central Bank of Iceland	www.sedlabanki.is
Parliament of Iceland (Althingi)	www.althingi.is
Government of Iceland	www.government.is
Statistics Iceland	www.statice.is
Iceland Stock Exchange	www.icex.is
National Debt Management Agency	www.bonds.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
Financial Supervisory Authority	www.fme.is
Icelandic New Energy	www.newenergy.is

Introduction

The Economy of Iceland has been published by the Central Bank of Iceland since 1987. It is mainly intended for an international readership. This includes international institutions which deal with Icelandic economic matters on a regular basis, rating agencies, financial institutions, foreign investors, embassies and more generally everyone who is interested to find out more about the Icelandic economy. We also hope that Icelandic readers will find this survey useful. It is published annually.

This publication focuses on the structure of the Icelandic economy. It is intended to serve as background material for understanding the evolution of the economy, but does not provide a detailed account of recent developments. A more up-to-date analysis of recent developments, particularly from a monetary policy point of view, is provided in the Central Bank's *Monetary Bulletin*. The Bank's Annual Report also gives an overview of economic developments each year.

The outline of this booklet is as follows: Chapter 1 provides a short summary of recent economic developments. Chapter 2 presents basic facts about Icelandic geography, population and society. Chapter 3 describes how Iceland evolved from one of the poorest economies in Europe in the beginning of the 20th century to become one of the more affluent in the 21st. It explains sources of volatility and growth and how, over the past two decades, the emergence of a modern market economy has served to overcome the legacy of high inflation. Recent overseas expansion by Icelandic businesses is covered as well. Chapter 4 deals with the structure of the economy. It discusses size and income levels, the composition of GDP, foreign trade, main industries and the labour market. It also describes the three pillars of the Icelandic pension system. Chapter 5 provides an account of the financial system, asset markets, institutions and supervision. Chapter 6 surveys the public sector, including its size, division of tasks, expenditure structure and the tax system. It also describes the structure and management of the foreign debt of the Republic of Iceland, and sovereign credit ratings. Chapter 7 addresses monetary policy. It covers the framework of monetary policy, its instruments and the role of the Central Bank. Chapter 8 discusses foreign debt, foreign exchange reserves and credit ratings of financial institutions. A number of tables are provided in an appendix.

We are constantly making efforts to improve this publication. Hence, we would be grateful for any comments and suggestions that might increase the usefulness of this booklet. If you feel that important information is missing and should be added, or see other scope for improving this publication, please e-mail your suggestions to:
publish@centbk.is

1 Economic developments and prospects

Market liberalisation, fiscal consolidation, privatisation and other structural reforms were implemented in the late 1980s and 1990s. Membership of the European Economic Area (EEA) in 1994 integrated Iceland into the internal market of the European Union (EU). In this period the Icelandic economy was characterised by slow or negative output growth. This was mainly due to a decline in fish catches, in conjunction with a downturn in the global economy and restrictive economic policies aimed at curbing inflation and restoring the fiscal balance to a more sustainable long-term position.

Economic growth started to gain momentum by the middle of the 1990s, rekindled by favourable fish prices, a global economic recovery, a rise in exports and a new wave of investment in the aluminium sector. During the second half of the 1990s, the liberalisation process continued, competition increased, the Icelandic financial markets and financial institutions were restructured and the exchange rate policy became more flexible. Iceland experienced one of the highest growth rates of GDP among OECD countries. While initially the upswing was led by rising exports and foreign investment in the export sector, it became increasingly characterised by booming consumption and investment in the non-traded goods sector, which was to a large extent financed by foreign credit.

In 1998 signs of overheating became increasingly visible. Inflation took off and reached 6% in the spring of 2000. These imbalances were the underlying reason for a sharp depreciation of the króna in the latter half of 2000 and in 2001, with inflation rising to above 9% in January 2002. The economy then underwent rapid adjustment, the current account deficit disappeared in the space of two years and inflation fell rapidly.

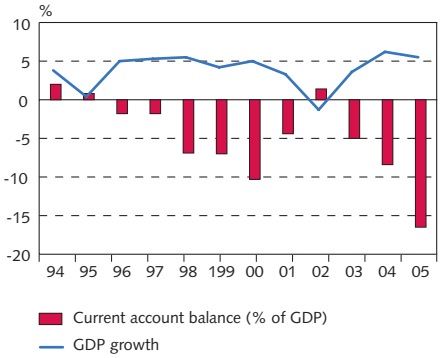
Mounting imbalances

In 2003 economic recovery began and gained momentum in 2004, initially fed by investments in the aluminium and power sectors. Macroeconomic imbalances resurfaced and became increasingly pronounced in 2005, in the wake of liberalisation of housing finance which greatly enhanced household access to credit. After expanding at a rate of 8.4% in 2004, GDP growth was still strong in 2005 at 5.6% and is forecast to be around 5% in 2006.

As growth has outstripped the increase in potential output, it has contributed to substantial pressures in the domestic goods and labour markets. Structural changes in the credit market have fuelled housing investment and private consumption.

Chart 1.1

Economic growth and current account balance 1994-2005



Sources: Statistics Iceland, Central Bank of Iceland.

The most extensive investments in Icelandic history

The large-scale investment projects in the aluminium and power sectors which commenced in 2003 are nearing completion. When these projects are completed in 2008, the total production capacity of aluminium smelters in Iceland will be 800 thousand tonnes per year (tpy), up from 270 thousand tpy in 2005. Power capacity needs to be stepped up by 75%

to accommodate the increase. The long-term impact of these investments will strengthen the export base, increasing the share of aluminium in total merchandise exports from 20% in 2005 to 40% in 2009.

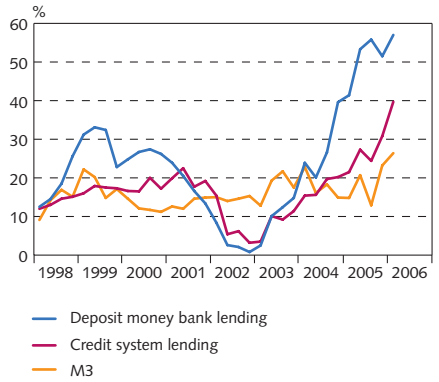
In combination, these investments are equivalent to more than one-third of 2003 GDP, and entail a greater macroeconomic shock than any other country with a comparable monetary framework has had to tackle, thus posing important challenges for macroeconomic policy. Projects of such scope are accompanied by a considerable widening of the current account deficit, mostly due to imports of capital equipment but also through induced general demand.

Unforeseen structural changes in the credit market

The second driver of macroeconomic imbalances has been the sweeping change that took place in the mortgage market in the second half of 2004. In late summer 2004 the banks raised their profile in the mortgage market by engaging in head-on competition with the state-run Housing Financing Fund (HFF). The banks began to offer mortgage loans with lower interest rates, longer maturities and unprecedented high mortgage amounts, and unlike the HFF, they did not set a housing purchase as a precondition for a loan, which facilitated refinancing and mortgage equity withdrawal. The banks have since tightened their mortgage lending terms somewhat, however.

This massive increase in credit supply led to a surge in housing prices that has been the root of CPI inflation since 2004 and also the main driver of private consumption growth.

Chart 1.2
Growth of credit and monetary aggregates Q1/1998 - Q1/2006



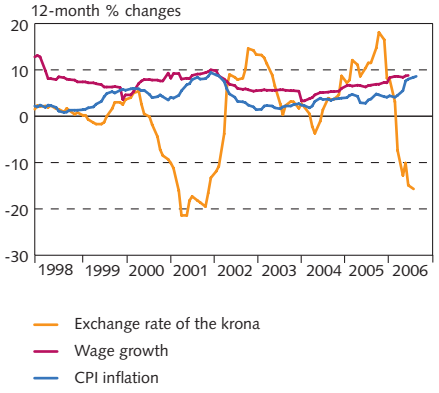
Source: Central Bank of Iceland.

Widening current account deficit

Driven by inflows of capital due to the large investment projects and widening interest rate differential between Iceland and abroad, the króna appreciated by 21% from December 2003 to November 2005 (monthly averages), but subsequently depreciated by mid-2006 to broadly the level it was at before this episode. The strong króna, buoyant private consumption and growing pace of aluminium-related and other investment have induced a surge in imports. Export growth, on the other hand, slowed down in 2005 and amounted to 3.5%, after having increased by 8.4% in 2004.

The current account deficit almost doubled year-on-year in 2005 to reach roughly the equivalent of 16.5% of GDP and is projected to be at least the same in 2006. Imports in connection with investments in the aluminium and power sectors are estimated to account for a third of the deficit in 2005 and 2006.

Chart 1.3
CPI inflation, wage growth and exchange rate of the króna, January 1998 - August 2006



Sources: Statistics Iceland, Central Bank of Iceland.

Growing labour market pressures

Import of labour has enhanced the resilience and flexibility of the Icelandic labour market. In spite of a vigorous recovery of GDP growth in 2003 and 2004, wage drift has been muted in historical terms, even in sectors that have experienced labour shortages.

In 2005 the effects of excess demand for labour intensified. Unemployment fell by 1.2 percentage points during 2005 to an average of 2.1%. Wage drift increased when employers, unable to meet all domestic labour shortages with imported staff, needed increasingly to

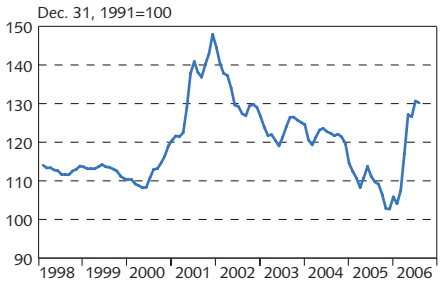
compete for labour with wage-bidding, which resulted in a rise in the wage-index by 6.8% between annual averages for 2004 and 2005.

The fiscal stance

In the last twelve years or so, the fiscal balance has followed the domestic cycle quite closely. A thirteen-year string of general government deficits came to an end in 1997 after economic growth picked up. During 1997-2001 there was a return to surplus. As the economy cooled down in 2002-2003 the surplus turned into deficit.

Renewed growth brought back a slight surplus in 2004, which strengthened to 3-4% of GDP in 2005 in spite of a cut in personal income taxes. In 2006, further cuts in income and wealth taxes are reducing revenues, but will be mostly counterbalanced by strengthening revenues from corporate income taxes.

Chart 1.4
Nominal effective exchange rate,
January 1998 - July 2006



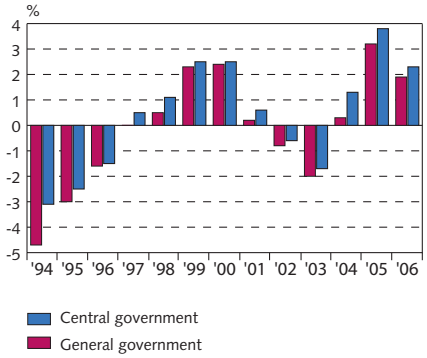
Source: Central Bank of Iceland.

Demand drives inflation

A new monetary policy framework of inflation targeting was adopted in March 2001. The target was defined as a twelve-month rate of change in the CPI of 2.5%. After a spike in inflation caused by a substantial depreciation of the króna, as imbalances built up during the preceding fixed exchange-rate regime were corrected, the inflation target was reached in November 2002. Inflation was at or below the target until mid 2004 when it started to rise, mounting further in 2005 to 4.4% over the year. Excluding the housing component, the CPI rose by only 0.7% over the year.

The recent rise in inflation has been the result of rapid expansion of domestic demand brought about by the combined effect of the investment projects and enhanced access to credit at lower interest rates. The demand-driven nature of inflation is most evident in rising prices of non-traded goods and services and housing, where foreign competition is minimal. The appreciation of the króna to an unsustainably high level constrained inflation in 2005 but its depreciation in the first half of 2006 caused an increase in annual inflation, which measured 8.4% in August of that year.

Chart 1.5
Treasury and public sector financial balance
as % of GDP 1995-2006



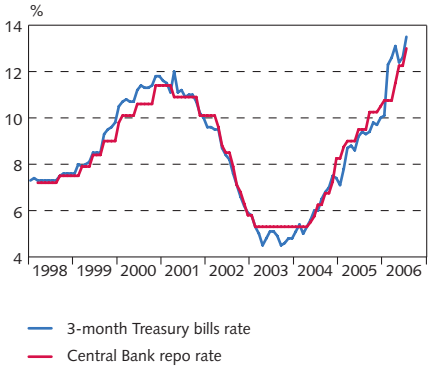
Source: Ministry of Finance.

Monetary policy

Given the long lag in the transmission of monetary policy measures and the considerable uncertainty concerning both the current state and future course of a very small open economy, monetary policy setting in Iceland is particularly challenging. In retrospect, monetary policy appears not to have responded sufficiently strongly to the combined impact of the large investment projects and structural changes in the credit market. The Central Bank began to tighten monetary policy in May 2004 and by August 2006 it had raised its policy rate by 8.2 percentage points to 13.5%.

Given the inflation prospects in summer 2006, the inflation target is unlikely to be met until 2008. The Central Bank has nevertheless reiterated its continued determination to achieve the 2½% target within a realistic period of time. External and internal imbalances are also expected to diminish rapidly in 2007 and 2008, in line with Iceland's repeatedly demonstrated resilience and adaptability.

Chart 1.6
Central Bank repo rate and Treasury
bill interest rate
January 1998 - July 2006
At end of month



Source: Central Bank of Iceland.

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 a 200-nautical-mile exclusive economic zone (EEZ) 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 12°C in July and just below zero in January.

Iceland is mostly mountainous and of volcanic origin, with the highest peak reaching 2,110 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 200-mile EEZ. Furthermore, Iceland has abundant hydroelectric and geothermal energy resources, which are still a long way from being fully harnessed.

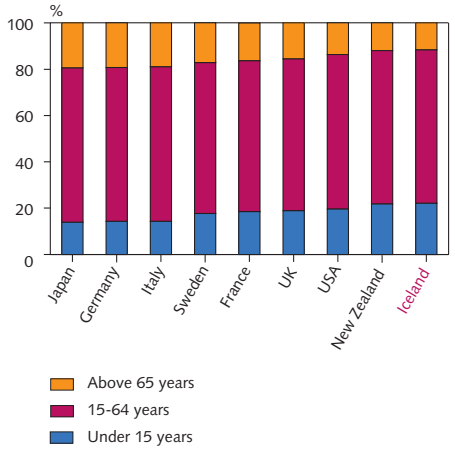
With only 2.9 inhabitants per square kilometre, Iceland is one of the least densely populated countries in Europe. On December 31, 2005, the population of Iceland was 299,891. The annual rate of population growth 1994-2004 was 1.0%. Around 62% of the population (nearly 190 thousand) live in the capital city of Reykjavík and its surrounding municipalities. The largest town outside the capital area is Akureyri, in the north, with a population of 16,756. 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 entered into 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.

Chart 2.1

Age structure of the population in selected countries 2004[1]



1. Ranked by share of population 65 and over.
Source: OECD (OECD in figures, 2005).

Iceland has experienced substantial net immigration in recent years, causing the share of citizens of foreign origin to rise to 4.6% of the total population at the end of 2005. Compared to most other developed countries this 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 2004, notwithstanding high life expectancy, the ratio of the total population aged over 65 to the population of working age was lower in only five OECD countries: Ireland, Korea, Mexico, the Slovak Republic and Turkey.

Society and the welfare state

Iceland is a modern welfare state, which guarantees access for 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 just over a quarter of GDP in 2003.

Life expectancy which is among the highest in the world and one of the lowest infant mortality rates (3.3 per 1000 live births in 2005) 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 had legal residence 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 2004, 15% of total employment was in health care and social work, and expenditures on health care amounted to 10% 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 ten years of compulsory education at the primary level (age 6-16). Second, there are four years at the upper secondary level, which provides general education and vocational training in a wide range of fields. Finally, higher education is offered at several universities. In 2003, 20.5% 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 of those completing secondary education has increased substantially in Iceland in recent years. In 2003 the rate was around 84%, which is the highest among the OECD countries. By comparison the enrolment rate among the OECD countries was 53% on average. The ratio of pre-school enrolment is also one of the highest among OECD countries.

Political structure

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 six 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 have been successive coalition governments of the Independence Party and the Progressive Party.

The results of the 2003 elections were as follows: The Independence Party obtained 33.7% of votes and 22 seats, the Social Alliance 31.0% and 20 seats, the Progressive Party 17.7% and 12 seats, the Left-Green Movement 8.8% and 5 seats, and the Liberal Party 7.4% and 4 seats. Others obtained 1.5% and no seats with 1.2% of ballots void or blank. The next general election is to be held in 2007.

External relations

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 in which the Baltic States have increasingly been taking an active part. 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) and of the European Bank for Reconstruction and Development (EBRD). 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 (GATT), the predecessor to the World Trade Organisation (WTO). Iceland joined the European Free Trade Association (EFTA) in 1970 and entered into a free-trade agreement with the European Economic Community in 1972. In May 1992, the member countries of EFTA and the European Union signed an agreement to establish a zone for the free movement of goods, services, capital and persons, the European Economic Area (EEA), which took effect on January 1, 1994. Iceland participates in numerous Free Trade Agreements (FTAs) through its EFTA membership with countries including Bulgaria, Chile, Israel, Jordan, Croatia, Macedonia, Morocco, Mexico, Palestine, Romania, Turkey, Tunisia and Singapore. Agreements have also been made with South Korea and Lebanon but await implementation. Negotiations on an FTA with the South African Customs Union

have been finalised but await confirmation. Work is in progress on FTAs with Canada, Egypt, the Gulf Cooperation Council and Thailand. There is also work in preparation on making FTAs with Albania, Algeria, MERCOSUR, Serbia and Montenegro, the Ukraine and Indonesia. Iceland has enacted bilateral Free Trade Agreements with Greenland and the Faroe Islands.

Iceland is a founding member of the North Atlantic Treaty Organisation (NATO), established in 1949. A defence treaty with the United States was concluded in 1951. A NATO military base, staffed by United States military personnel, has been operating at Keflavík in the southwest of Iceland. In March 2006 the United States authorities announced the withdrawal of most of their personnel along with the US fighter aircraft at the Keflavík base no later than by the end of September 2006, thereby ending the permanent US military presence in 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 Organisation (NATO)	1949
Organisation 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
Organisation for Security and Cooperation in Europe (OSCE)	1975
European Bank for Reconstruction and Development (EBRD)	1990
Western European Union (WEU)	1992
European Economic Area (EEA)	1994
World Trade Organisation (WTO)	1995

3 Economic history

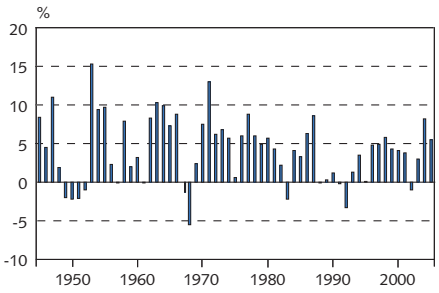
A century of high but volatile growth

In the course of the 20th century Iceland was transformed from one of Europe's poorest economies, with almost 2/3 of the labour force employed in agriculture, to a prosperous modern economy employing 2/3 of its labour force in services. For most of the century economic growth was led by the fisheries. Consequently, swings in the fish catch and export prices of marine products were the leading source of fluctuations in output growth.

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 2005 was about 4%. Studies have shown that the Icelandic business cycle has been largely independent of the business cycle in other industrialised countries. This can be explained by the natural resource-based export sector and external supply shocks. However, the volatility of growth declined markedly towards the end of the century, which may be attributed to the rising share of the services sector, diversification of exports and more solid economic policies.

Volatility may also be attributed to deficient economic policies and structural rigidities. Like most other advanced economies, Iceland became highly regulated towards the middle of the 20th century and only started to liberalise markedly in the 1960s. Gradual deregulation culminated in membership of the European Economic Area (EEA) in 1994 and liberalisation of the bulk of cross-border capital flows by 1995. It was only by the final decade of the 20th century that all the main pillars of a modern market economy were essentially in place.

Chart 3.1
Growth of GDP 1945-2005
Annual percent changes



Source: Statistics Iceland.

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

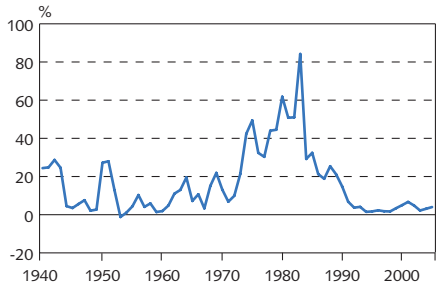
The first three decades of the last century were characterised by rapid growth, interrupted only by WWI. This growth occurred in the context of fairly liberal economic policies. In the wake of the Depression and WWII, however, Iceland, like many other countries, became entangled in a web of trade barriers, capital controls and a complex system of multiple exchange rates which 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 EEA in 1994, which integrated Iceland and other EFTA member countries (except Switzerland) into the internal market of the European Union (EU).

Episodes of inflation and disinflation

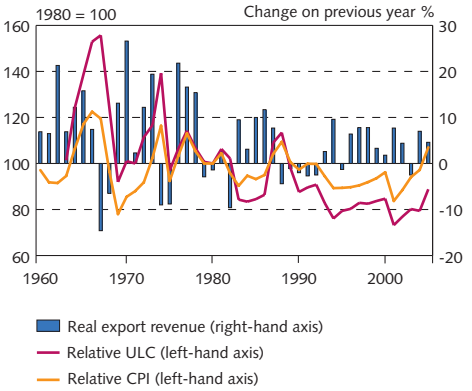
A distinguishing feature of Iceland's economic development in the post-WWII era was the high and variable rate of inflation. Inflation

Chart 3.2
CPI inflation 1940-2005
Percent change between annual averages



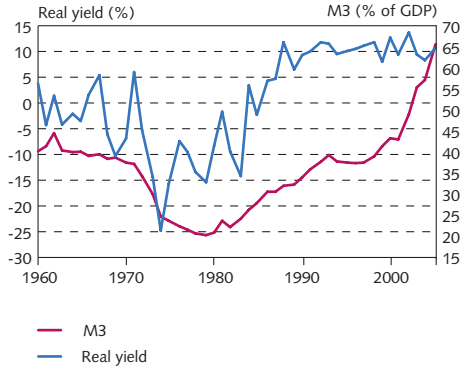
Source: Central Bank of Iceland.

Chart 3.3
Real effective exchange rate of the króna[1] and real export revenue 1960-2005



1. Based on relative consumer prices (CPI) or relative unit labour cost (ULC).
Sources: Statistics Iceland, Central Bank of Iceland.

Chart 3.4
Real yield and broad money 1960-2005[1]
Real yield on non-indexed bank loans and M3 as percent of GDP



1. Latest data are preliminary.
Source: Central Bank of Iceland.

surged in the 1970s, reaching a peak in 1983, when the 12-month rate briefly exceeded 100%. The inflationary tendencies were explained by the combination of structural features of the economy, which generally made attaining price stability a difficult task, and excessively accommodative policies.

While Iceland for a while had one of the highest inflation rates among OECD countries, it also provides one of the more remarkable examples of a successful disinflation strategy. Through a combination of tighter 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 in the early 1990s to the rate prevailing in major trading partner countries.

A market-based economy

Over the past two decades, significant structural reforms have taken place in the Icelandic economy and financial markets. These reforms have aimed to enhance allocative efficiency by increasing the role of market forces through deregulation and integration into the world economy. Policies of market liberalisation, fiscal consolidation, privatisation and other structural reforms were implemented in the late 1980s and early 1990s. This process was accelerated by the need to align the Icelandic legislative and regulatory framework to that prevailing in the European Union when Iceland became one of the founding members of the EEA in 1994.

Government interference with the allocation of credit was gradually reduced following the deregulation of interest rates. A legacy of the regulated economy of the post-WWII years was that substantial segments of the economy became owned by either central or local governments. Most of these have been privatised in recent years, the most notable recent addition being Iceland Telecom. The commercial banks began competing with the state Housing Financing Fund in the summer of 2004, which had totally dominated the mortgage market. The energy sector is still publicly owned. An exception to the trend towards liberalisation has been agriculture, which is still widely supported by government subsidies, import protection and a system of production quotas.

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. Liberalisation of capital movements also made monetary and exchange rate policies in some respects more challenging. In order to cope with those challenges, exchange rate policy became gradually more flexible, until the króna was officially floated in March 2001, under a new framework of monetary policy based on inflation targeting. By the turn of the century Iceland had become an advanced economy, thoroughly integrated into the European market, with most of the features of a modern market economy.

Increased participation in a global economy

In recent years foreign expansion of Icelandic companies has rapidly gained pace, largely through acquisition of companies abroad. The to-

tal stock of foreign direct investment (FDI) by Icelandic residents grew by 161% year-on-year in 2005, to €8.6 billion (643 b.kr.), and has grown by over 45% per year on average over the past ten years.

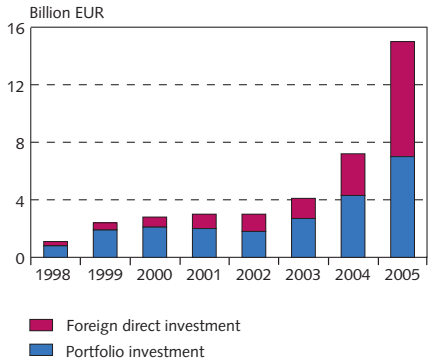
The most common means of expanding abroad has been through FDI. The Icelandic market is small and companies in markets such as pharmaceuticals, financial services, food production, retail commerce, property development, aviation and shipping have acquired subsidiaries abroad in similar sectors to broaden their base and increase their revenues and profit. Foreign investments have mostly been focused on the UK and Scandinavia but to a lesser extent continental Europe and elsewhere.

Investment in foreign equities has also grown substantially over the past decade. Before full liberalisation of cross-border capital movements in 1995, residents owned only approximately €77.9 million (6.5 b.kr.) in foreign capital equities. Over the eleven years to 2005 the stock had increased to €7.3 billion (545 b.kr.).

Foreign direct investment in Iceland has also been growing over the past few years. In 2005, FDI in Iceland amounted to nearly €2 billion (153 b.kr.) and the stock of FDI investment in Iceland increased by €1.6 billion (125 b.kr.). This increase must though be interpreted with caution as it is to a large extent a pass-through investment of Icelandic residents via foreign holding companies. Over the past few years non-resident funds have been investing in companies which are listed on Iceland Stock Exchange (ICEX). Also, franchising has been increasing in Iceland, especially in retail, consulting, auditing and accounting.

Chart 3.5

Foreign direct investment and portfolio capital owned abroad by residents (at year-end) 1998-2005



Source: Central Bank of Iceland.

Inward and outward investment

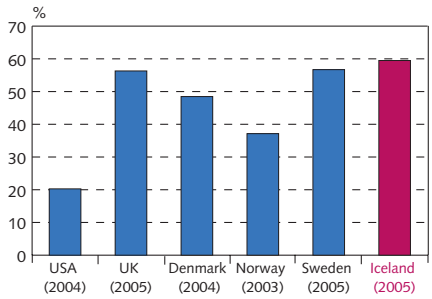
Since 1995, the only restrictions on investment by non-residents in Iceland apply to foreign direct investments in fisheries and fish processing, energy production and distribution, and aviation companies. Restrictions on investment in the fisheries sector are the only ones that apply to EEA residents and have the purpose of protecting the nation's exclusive rights to the fishing grounds around Iceland. Direct foreign ownership in fisheries companies is prohibited but companies that are up to 25% foreign-owned (33% in certain circumstances) may own fisheries companies. Combined direct and indirect ownership up to 49% is possible, however. 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.

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 €156 million (13 b.kr) in foreign securities but this figure had increased to €8.6 billion (648 b.kr) by the end of 2005, the equivalent of 65% of GDP.

Chart 3.6

Direct investment abroad: outward position

As percentage of GDP



Sources: OECD, Trends and recent development in foreign direct investment, June 2006.

4 Structure of the economy

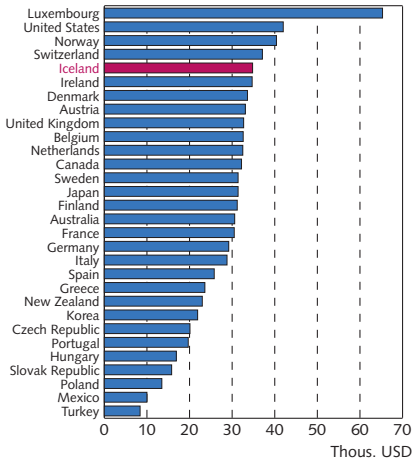
Size and income level

The Icelandic economy is the smallest within the OECD, generating GDP of €12.8 billion in 2005. This was less than 1/1000 of the US economy, 1/20 of the Danish economy and 1/3 of the economy of Luxembourg but ten times larger than the economy of Malta. The small size of the Icelandic economy mainly reflects the small size of the population, which reached 300 thousand at the beginning of 2006.

Iceland's small population has not inhibited economic growth and prosperity. The country has all the characteristics of a modern welfare state. GNI per capita measured in terms of Purchasing Power Parities (PPP) amounted to 35.8 thousand USD in 2005, the eighth highest in the world and the fifth highest among the OECD countries. In comparison to the Nordic countries, Iceland's GNI per capita is lower than in Norway, but higher than in Denmark, Finland and Sweden, and somewhat above the EU average.

This prosperity has largely been built on Iceland's comparative advantages in abundant marine and land-based natural resources, as well as human capital. The location and geology of Iceland determine its main resources which are fish from some of the richest and cleanest waters in the world, and hydro and geothermal energy. Both these resources are essentially renewable and non-polluting and are self-sustainable for the long term under scientific management. Iceland is the 12th largest fishing nation in the world, exporting nearly all its catch as domestic consumption is relatively small. Even when the ongoing phase of investment in power-intensive industry is completed in 2008, only around 31% of economically harnessable hydro and geothermal power will have been harnessed. Iceland's unspoiled natural environment represents a third major resource, reflected in a large and growing tourist industry. High labour force participation by women and the young and elderly – with 82% of the population aged 16 to 74 employed – as well as long working hours by international comparison, also contribute to Iceland's robust growth.

Chart 4.1
Gross national income per capita in OECD countries 2005[1]

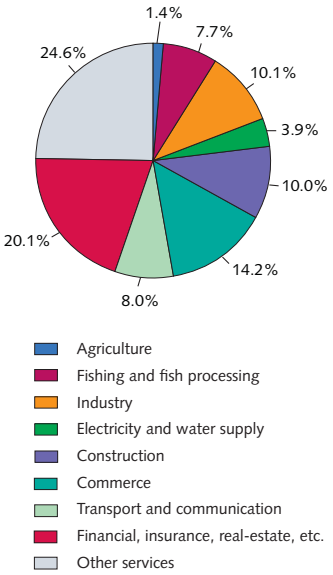


1. Based on PPP.
Source: World Bank.

Composition of output and expenditures

As in other developed economies, largely non-tradable services form the bulk of economic activity, accounting for approximately 67% of GDP in 2005. While the marine sector is the most important source of export revenue, its share of GDP has declined considerably in recent years, from 16% in 1980 to around 8% in 2005. Agriculture contributes only 1.4% of the country's GDP.[1]

Chart 4.2
Breakdown of GDP by sector 2005



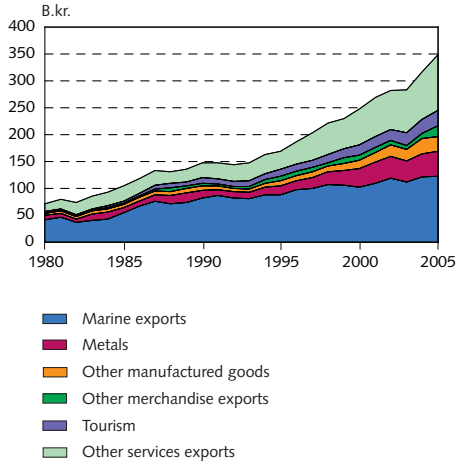
Source: Statistics Iceland.

1. Agriculture and fisheries are treated as separate sectors in Iceland, although they are often bracketed together in international statistics.

Chart 4.3

Exports of goods and services 1980-2005

At constant average exchange rates, based on a trade-weighted basket of currencies



Sources: Statistics Iceland, Central Bank of Iceland.

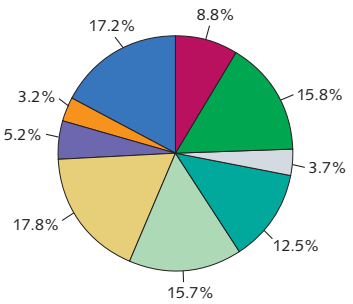
Table 4.1 Output and expenditure

Percentage distribution (period average) *% of GDP*	*1971-1975*	*2001-2005*
Private consumption	57.6	57.5
Public consumption	14.7	24.8
Gross fixed investment	32.0	22.2
Changes in stock	0.8	-0.1
National expenditure	105.1	104.4
Exports of goods and services	35.7	35,7
Goods, fob	23.5	23.0
Services	12.2	12.7
Less: Imports of goods and services	40.8	40.0
Goods, fob	30.2	25.8
Services	10.6	14.2
GDP	100.0	100.0
Current account balance	-6.5	-6.7

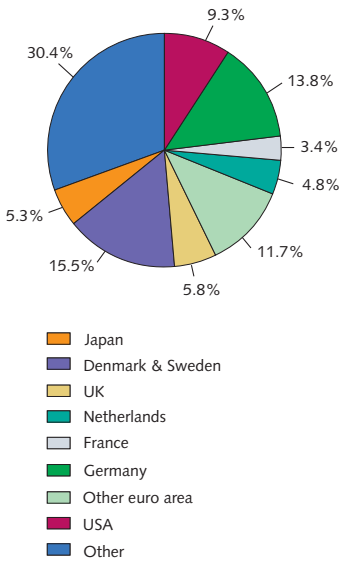
Chart 4.4

Geographical division of merchandise trade 2005

Percentage of total exports



Percentage of total imports



Source: Statistics Iceland.

These developments reflect a transformation in the utilisation of natural and human resources. Scope for expanding marine harvesting has been limited in recent years, while the utilisation of hydroelectric and geothermal power potential has intensified. At the same time, the growth of service industries such as tourism and knowledge-based activities such as information technology and communications (ITC) and financial services has continued unabated. Significant advances have been made in technology niches such as medical equipment, technical solutions for food processing, fisheries equipment, biotechnology and pharmaceutical products.

Private consumption contributed on average to about 58% of GDP in 2000-2005 and public consumption and gross fixed investment 25% and 23% respectively. The investment-to-GDP ratio has risen substantially in recent years on average, after falling below 1/5 in the mid-1990s. The ratio of public consumption has also risen somewhat over the past five years, after remaining broadly stable through most of the 1990s.

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 and a small share of intra-industry trade. Nevertheless, the diversity of exports has increased significantly in recent years. In 2005, imports and exports of goods and services amounted to 45% and 32% of GDP respectively. Although Iceland can be seen as a fairly open economy, reflecting the small size of GDP, many larger economies have a considerably higher ratio. To some extent Iceland's lower ratio than many larger economies can be explained by geographic distance from major population centres, but other factors may also be at work, such as limited intra-industry and transit trade, a natural resource-based export sector with high value added, and extensive protection of domestic agriculture.

The mainstay of merchandise exports is still fish and other marine products although, as a share of total exports, this category has been declining during the past four decades. In 2005, fish and other marine products accounted for 57% of merchandise exports and 34% of total exports, down from 82% and 60% respectively in 1991. Exports of manufactured products have been growing rapidly in importance, and accounted for 34% of merchandise exports in 2005. This is mainly the result of growth in aluminium smelting and in medical and pharmaceutical products. Export of services grew rapidly over the past decade, as the economy became more service-oriented. Services now account for 39% of total export revenues while in 1990 the share was 26%.

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 31% of total merchandise imports in 2005. Industrial supplies and consumer goods are around one-third of imports each.

Iceland is the westernmost outpost of Europe and therefore strategically located for business between Europe and North America, enhanced by membership of EFTA (the European Free Trade Association) since 1970 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. EEA membership implies that business legislation has been adapted to that of the EU, guaranteeing the free flow of goods, services, capital and labour.

Free trade arrangements with Europe have stimulated Iceland's trade with the region, causing the share of North America to fall. In 2005, 77% of merchandise exports went to the member countries of the EEA, which also were the source of 69% of imports. Currently, the largest trading partner countries are Germany, the UK, the Netherlands and the Nordic countries. In terms of currency, the euro area constitutes the largest trading area, accounting for 45% of imports and 52% of exports. Iceland has in recent years generally had a trade surplus with the UK, Germany, the Netherlands and the Iberian countries, but a deficit with the USA, Japan and its Nordic neighbours.

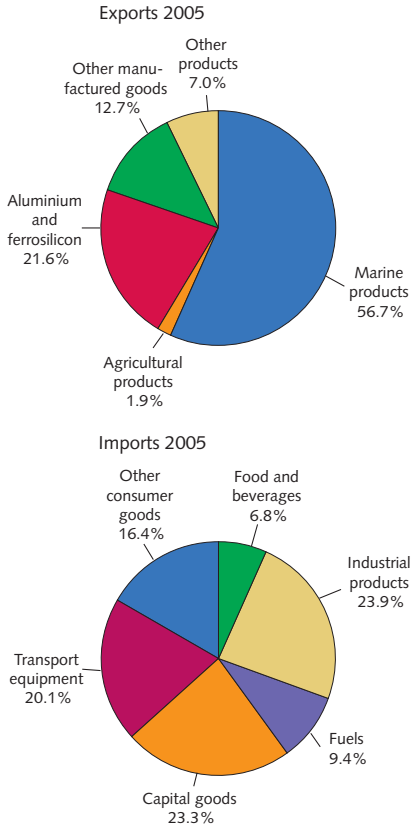
Iceland's ratio of services to total trade is one of the highest among OECD countries. Data on the direction of services trade are not as reliable as merchandise trade data. However, 1/4 of Iceland's services exports in 2005 used the euro and just over 2/5 used the USD as the vehicle currency.

Marine sector

The marine sector is still one of the main economic sectors and the backbone of export activities in Iceland although its importance has diminished over the past four decades. In 2005, fishing and fish processing contributed 57% of total merchandise exports, compared with around 90% in the early 1960s. Likewise, the sector's contribution to GDP has fallen from 13-17% in the 1960s to 7.7% over the same period. The marine sector is highly diversified in terms of species, modes of processing and markets.

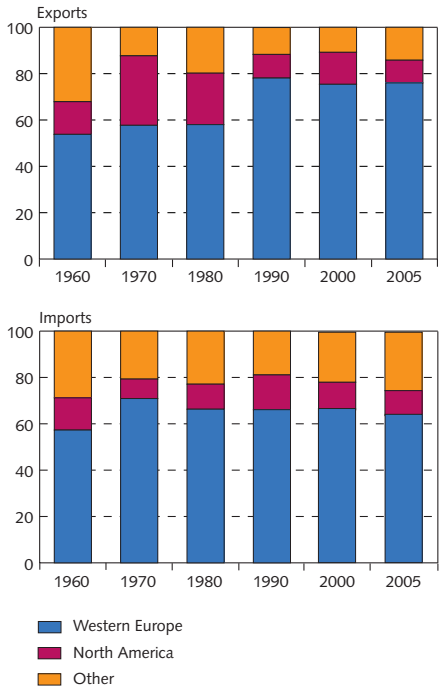
Fishing and processing of groundfish, mainly cod but also haddock, saithe and redfish, are the principal part of the Icelandic marine

Chart 4.5
Merchandise trade by category 2005



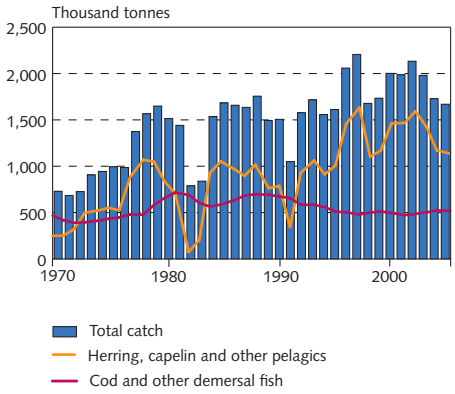
Source: Statistics Iceland.

Chart 4.6
Regional division of trade 1960-2005



Source: Statistics Iceland.

Chart 4.7
Fish catch by Icelandic vessels 1970-2005



Source: Statistics Iceland.

sector. The catch of these and other demersals accounted for 77% of landed value of fish in 2005. Conservation measures led to substantial cuts in total allowable catch (TAC) in the 1990s, mainly in cod quotas. Cod is the most valuable species in Icelandic waters in terms of total value of the catch, accounting for 37%. The decline in the cod catch has been offset by increased harvesting of other species such as capelin, haddock, saithe, redfish, flatfish, 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 to a large degree succeeded in offsetting lower total catch volumes in recent years. Efficiency in the fishing and fish processing industry has increased substantially. The industry is increasingly relying on ITC, automation and modern management techniques to increase productivity and value. A growing emphasis on processing of fresh fish products instead of frozen or salted products from groundfish species has considerably increased the value of fish and seafood products. The most important step in the value-added strategy has been in processing of pelagics, mainly herring and capelin over the past 2-3 years. The mode of processing has undergone a radical change from relatively low-value fish oil and meal for animal feed and aquaculture towards filleted and frozen food products. This has led to a large increase in value by moving these products up the value chain.

The ITQ system

All commercially important species are regulated within the individual transferable quota (ITQ) system. Quotas represent shares in the annual TAC and are allocated to individual fishing vessels. The present quota system is built on the following factors:

- Each year a TAC is set by the Minister of Fisheries on the basis of a biological assessment of the fish stocks and forecasts for their development in the near future.
- Fishing vessels are allocated a fixed quota share of each species subject to a TAC.
- The individual quota share is multiplied by the TAC to give the quantity which each vessel is authorised to catch during the fishing year.
- Permanent quota shares and annual quotas are transferable and can be traded on the quota market.

The law prescribes maximum holdings of quotas by individual fishing companies. Regulations cover both holdings of quotas for individual species and aggregate holdings of quotas.

In 1995 a refinement to the management system introduced a "catch rule" setting the TAC for the next consecutive quota year at 25% of the mean of the fishable biomass in the assessment year and the year after. Annual fishing quotas are allocated against an annual fee for fisheries inspection and enforcement purposes. Owners of fishing vessels holding harvesting rights now also pay a fishing fee to the state. The fee is calculated as a percentage of the aggregated value of the total catch of the fishing fleet minus operating expenses, divided by the catch quantity. In a transition period the percentage will increase from 6.5% in 2004 to 9.5% in 2009. This fee will still remain well below the market price of annual quotas.

In 2000, only 20% of the export value of herring and capelin was accounted for by food products, but in 2005 this ratio had risen to nearly three-quarters.

A comprehensive fisheries management system based on individual transferable quotas (the ITQ system) has been developed to manage fish stocks and promote conservation, sustainability and efficient utilisation of the marine resources.

In addition to the fisheries management system there are a number of other explicit and direct measures to support its aims and reinforce the conservation measures. Direct measures consist of rules on permitted fishing gear, closure of areas for bottom trawls, obligatory small fish grids to prevent juvenile fish catches and temporary closures of fishing grounds to protect spawning fish and limit by-catch of undersized fish.

In the last 5-7 years, fisheries companies have actively been seeking to enhance efficiency and benefit from economies of scale through mergers and acquisitions. Consequently, the largest companies have increased in size and the concentration of quota holdings has risen. The 10 largest fisheries companies in terms of quota holdings owned 55% of the total in June 2006.

Fisheries companies were among the first to be listed on Iceland Stock Exchange (ICEX) in the 1990s. At one time there were 25 listed fisheries companies on ICEX, but due to mergers and acquisitions and management buy-outs, only two companies are left. Besides the two listed fisheries companies, there are two listed seafood production and marketing companies, which both are leaders in the European seafood markets.

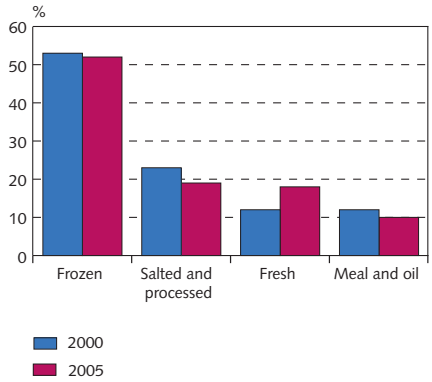
Manufacturing and power-intensive industries

The largest manufacturing industries in Iceland are the aluminium smelters which produce exclusively for export. There has also been a considerable increase in other manufacturing exports in recent years. In 2005, manufactured products accounted for 35% of total merchandise exports, up from 22% in 1997. Power-intensive products (mainly aluminium) amounted to 22% of total merchandise exports in 2005 but 12% in 1997.

A number of small and medium-size enterprises (SMEs) have emerged in export-oriented manufacturing in recent years. Some have grown to become key international players in their fields – for example medical equipment, pharmaceuticals and capital goods for fisheries and food processing. Most of these companies are founded on product innovation, R&D, strategic marketing and ITC. These industries now account for approximately 1/3 of manufactured goods exports.

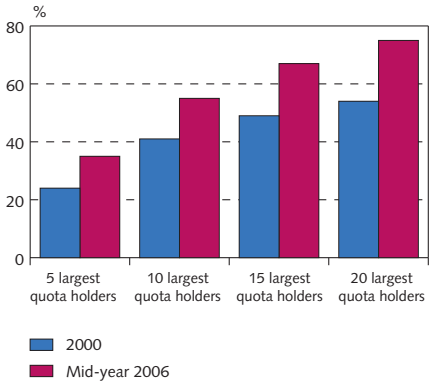
The largest manufacturing industries in Iceland, the aluminium smelters, are mainly based on competitive energy costs and an educated and skilled labour force. The government has actively encouraged foreign direct investment in power-intensive industries. The largest manufacturing facility at present is the Alcan Iceland aluminium smelter located near Reykjavík, owned and operated by Alcan Inc. Its total capacity is now 180 thousand tonnes per year (tpy). Another smelter is operated by Norðurál at Grundartangi (Century Aluminum)

Chart 4.8
Value of marine products for export, percentage breakdown 2000 and 2005



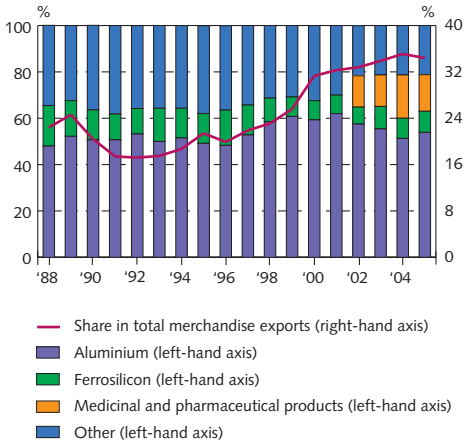
Source: Statistics Iceland.

Chart 4.9
Concentration of quota holdings by number of companies as share of total quota



Source: Directorate of Fisheries.

Chart 4.10
Composition of manufacturing exports and share in total merchandise exports 1988-2005



Source: Statistics Iceland.

with a capacity of 180 thousand tpy. Icelandic Alloys (Elkem ASA) is a ferrosilicon plant with an annual capacity of 120 thousand tpy.

A new aluminium smelter, owned by Alcoa, is being built on the east coast of Iceland. It is due to go on stream in late 2007, producing 346 thousand tpy at full capacity in 2008. The Norðurál plant is also being expanded from 92 thousand tpy in 2005 to 260 thousand tpy by 2008. When both these projects materialise, the total production capacity of the aluminium industry in Iceland will be 800 thousand tpy, or nearly three times the present level. This will make Iceland one of the ten largest aluminium producers in the world with roughly 2.5% of world production.

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. Electricity consumption per capita is the highest in the world at some 29,100 kWh per capita in 2005. The proportion of energy consumption provided by renewable energy sources is greater in Iceland than in any other country. Notwithstanding its large electricity consumption, only 20% of Iceland's energy potential for generating electricity has been tapped but will have increased to 31% in 2008.

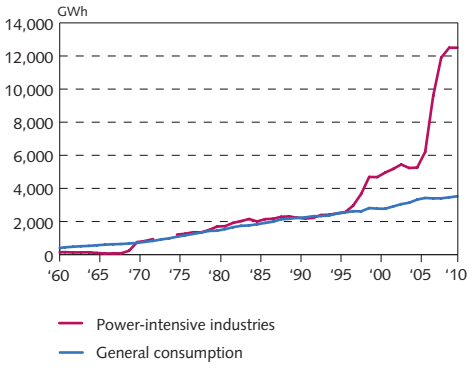
Electric power potential from hydro and geothermal sources is now estimated to be 50 thousand GWh/year (50 TWh per year), taking into account economic, technical, cost-efficiency and environmental considerations. The commonly quoted estimates are 30 TWh per year for hydropower potential and 20 TWh per year from geothermal resources. Only 10,000 GWh/year of this power will be harnessed in 2006.

In 2005, total installed hydropower was 1,160 MW in 31 power plants with a capacity of 7,015 GWh per year (4/5 of generated electricity). Installed geothermal power in six steam turbine plants now amounts to 232 MW or 1,856 GWh/year. The largest single hydropower plant has an installed power capacity of 270 MW and the largest geothermal plant 120 MW. In 2008, the largest hydro plant will have a capacity of 690 MW and the largest geothermal plant 210 MW.

Iceland is a world leader in the use of geothermal energy for domestic and industrial purposes other than generating electricity. Some 90% of all homes are heated by geothermal energy, at less than one-third of the comparable cost of fossil fuels or electrical heating. Current utilisation of geothermal energy for heating and other industrial and commercial uses is considered to be only a small fraction of what this resource can sustain.

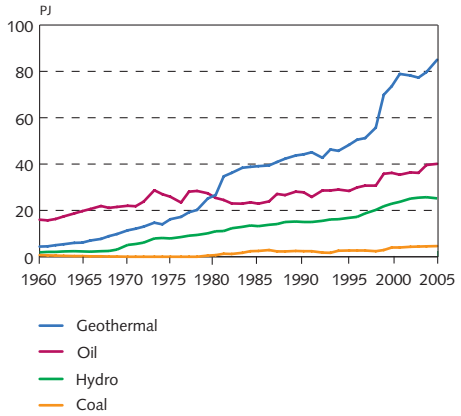
Three large-scale power stations are now under construction and will be in full production in 2008. Landsvirkjun (the National Power Company) is building a hydropower plant at Kárahnjúkar in east Iceland with a capacity of 690 MW to supply energy to the new Alcoa aluminium smelter at Reyðarfjörður. Reykjavík Energy (Orkuveita Reykjavíkur) and Sudurnes Heating (Hitaveita Suðurnesja) have three geothermal power stations under construction and are expanding one plant in southwest Iceland, to give a total additional capacity of 360

Chart 4.11
Electricity production in Iceland 1960-2010[1]



1. Estimates for 2006-2010.
Source: National Energy Authority.

Chart 4.12
Primary energy consumption in Iceland 1960-2005



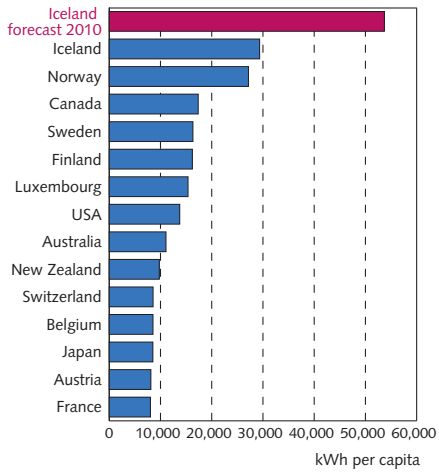
Source: National Energy Authority.

MW. Landsvirkjun is jointly owned by the Icelandic state, the City of Reykjavík and the Town of Akureyri, while Reykjavik Energy and Sudurnes Heating are owned by City of Reykjavík and the Reykjanes municipalities respectively. Over the next two years until 2008, an additional 1,070 MW will be available, boosting total production from 1,390 MW in 2005 to 2,415 MW in 2008.

Iceland is phasing in deregulation under an EU directive relating to the separation of transmission, generation, distribution and sales of electricity. Landsnet hf. (IceGrid) was launched in 2005 with the main role of transmitting electricity from producers to consumers (municipal distribution utilities and end-users such as the aluminium smelters). Under the principal ownership of Landsvirkjun and Rarik (Iceland State Electricity), IceGrid is also responsible for network administration, supervision and operation. New legislation does not call for incorporation of the power companies or any changes with regard to the state and/or municipal guarantees they currently enjoy.

Iceland currently provides a testing ground for the feasibility of using hydrogen in transport systems. The idea is to take advantage of Iceland's ample geothermal and hydropower resources to produce hydrogen for powering cars and ships. The first project is called the Ecological City Transport System (ECTOS) and involves a fuel station for fuel-cell buses which will run on emission-free hydrogen for two years. These buses are already in operation in the City of Reykjavík. The project is run by Icelandic New Energy Ltd., which is owned by Icelandic energy companies, DaimlerChrysler, Norsk Hydro, Shell International Hydrogen and others.

Chart 4.13
Electricity consumption per capita in selected countries 2005



Source: IEA 2005.

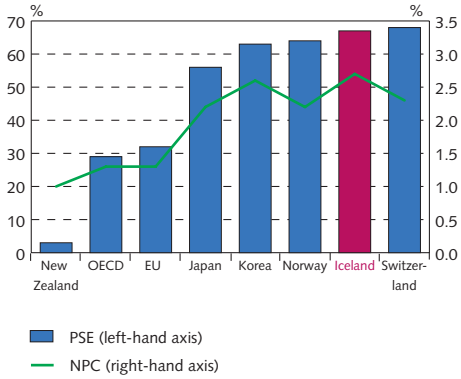
Agriculture and farming

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 have been hay, potatoes and other root vegetables. Cultivation of other crops, such as barley and oats, has increased rapidly in the last 10 years and they are now becoming one of the staples. Vegetables and flowers are mainly cultivated in greenhouses heated with geothermal water and steam. An ambitious forestry programme is ongoing.

The agricultural sector has undergone structural changes in recent years. Demand for traditional products, especially lamb meat, beef and root vegetables, has declined or remained constant 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.

Icelandic agriculture is one of the most heavily supported and subsidised in the world. However, the support is very uneven and nearly all goes to the dairy and sheep segments. In 2005, direct payments from the state amounted to an estimated 53% of farmers' income in lamb and mutton production and 41% of the producers' price for milk

Chart 4.14
Support to agriculture[1]



1. %PSE measures the transfers as a share of gross farm receipts. NPC is the ratio between the average price received by producers and the border price.
Sources: Agricultural Policies in OECD Countries 2006.

production. Total on-budget transfers to farmers amounted to about 1% of GDP in 2005, although the share of agriculture was only 1.3% of GDP that year. In comparison, on-budget payments amounted to 0.6% of GDP in the EU, 0.9% in Switzerland and 0.7% in Norway. According to the Total Support Estimate[2] (TSE) assessment by OECD, total agricultural support in Iceland amounted to 1.62% of GDP in 2005, compared to 1.14% in the EU, 1.1% in Norway and 1.68% in Switzerland. In terms of Producer Support Estimate (PSE), which is the most common indicator of agricultural support, Iceland was outpaced only by Switzerland in 2005 with a PSE of 67; Switzerland recorded 68 and Norway came third with 64. Producers' support in 2005 amounts to 32 on average in the EU and 29 in the OECD countries.

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.

Transport

The domestic transportation network consists of roads, air transportation and coastal shipping. Car ownership is widespread. In 2005, Iceland had 625 passenger cars per 1,000 inhabitants.

The road system totals 13,000 km, of which 4,300 km are primary roads. Some 4,600 km of the road network is paved and nearly 30 km of road tunnels have been built, with 11 km scheduled to be added in 2006.

Three international airlines operate in Iceland, all fully privately owned. Two of them offer direct passenger services to and from Iceland – both serve a number of cities in Europe and one has several gateways in the US as well. The third airline operates charter and air cargo services worldwide. Domestic air travel is an important mode of transport, with 772,000 passengers in 2005. The international airlines have been investing in foreign subsidiaries and other airlines in recent years, mainly in Scandinavia and in the UK.

Iceland has numerous harbours large enough to handle international ship traffic, which are without exception free of ice throughout the year. The two main shipping lines operate regular liner services to the major ports of Europe and the US. Both have been building transport networks on land and sea in Europe and North America by investing in foreign subsidiaries and other transport companies. A weekly ferry connection operates between two Nordic countries and east Iceland for passengers, cars and cargo.

Communications

The telecom market in Iceland is characterised by one of the world's highest penetrations of broadband, Internet and mobile phones. Broadband penetration per 100 inhabitants was the highest in the OECD in 2005. The same year, Iceland had the second-highest mobile telephone penetration in the world, after Luxembourg, with 101 wireless subscribers per 100 inhabitants. In 2006, 90% of Icelandic

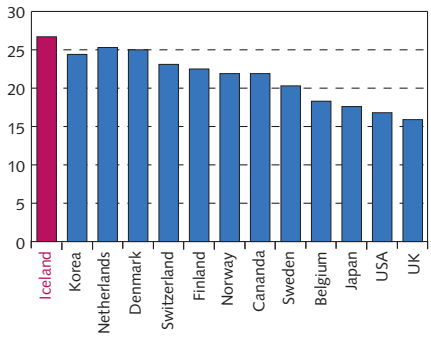
2. The sum of on-budget payments, market price support and general services support.

households own a computer and 88% have access to the Internet. The percentage of households with an ADSL, SDSL or other xDSL connection has increased steadily in recent years to 85% in 2006.

Iceland's telecommunication infrastructure is both extensive and modern, with satellite earth stations, optical fibre cables, broadband networks and a wide-reaching cellular mobile phone system. There are two major players on the telecommunication market, Iceland Telecom (the former state-owned Landssíminn, privatised in July 2005) and Og Vodafone, the telecommunication arm of the Dagsbrún media group. In 2006 two smaller companies have been entering the telecommunication market.

Three companies operate in the broadcasting market: two privately owned and the third under public ownership. Taken together, these companies operate 8 radio channels and 7 TV channels. In addition, a large number of foreign TV channels are widely received via satellite, cable or UHF relay.

Chart 4.15
Broadband subscribers per 100 inhabitants in December 2005



Sources: Broadband Statistics December 2005, OECD.

Service industries

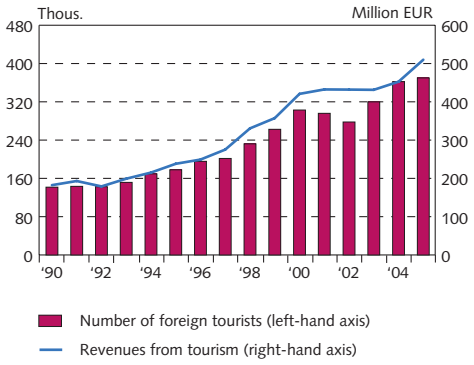
Iceland's financial services sector has experienced meteoric growth in recent years, catalysed by deregulation in the 1990s and, in particular, privatisation in 2002 of two commercial banks. International acquisitions have swollen the banks' combined balance sheets from €8.6 billion (681 b.kr.) in 2000 to €71.5 billion (5,420 b.kr.) in 2005 (see Chapter 5). The three commercial banks rank among the largest in the Nordic region with subsidiaries and affiliates in the UK, Scandinavia, Luxembourg and France.

Tourism has been one of the fastest-growing industries in recent years. The number of visitors from abroad in 2005 is estimated at 370 thousand, compared to 140 thousand in 1990. Foreign exchange revenues generated by tourism in 2005 amounted to approximately €510 million (40 b.kr.), equivalent to 12.5% of export revenues.

The technological sector of the services industry has also been rapidly diversifying. Iceland's software industry has extensive know-how and long practical experience in the 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. In 2005, exports of software products amounted to €55 million (4.3 b.kr), an increase of more than 88% since 2000. In 2005, 1.6% of the total workforce was engaged in the production of software for export.

Chart 4.16
Number of foreign tourists and revenues from tourism 1990-2005

At current euro exchange rates



Sources: Statistics Iceland, Central Bank of Iceland.

The environment

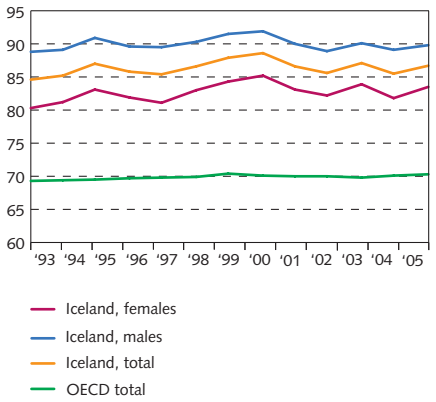
Compared to other industrial countries, Iceland is relatively unpolluted and faces few immediate environmental problems. Soil erosion, however, has been a longstanding problem, as a result of the combined effects of climatic changes, volcanic activity and overgrazing. The intensity of grazing has fallen 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 hydro-

electric power, however, requires the building of dams and large reservoirs that affect the landscape.

Acid disposition over Iceland is very low, due to its geographic location and limited emissions of pollutants. 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 and are not included in the above set limit. Emission of greenhouse gases from Iceland in 2004 was 3% lower than in 1990. If emissions from new power-intensive industries are included, emissions in 2004 were 11% higher than the 1990 level. The largest emissions stem from industrial processes, followed by the fishing industry and the transport sector. The marine environment around Iceland is relatively unpolluted.

Chart 4.17
Labour force participation rate
in Iceland and OECD countries 1993-2005



Sources: OECD, Statistics Iceland.

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 2005, female participation was in fact one of the highest in the OECD countries, with women accounting for 47% of the labour force. Participation rates among the young and the elderly have also been quite high. Furthermore, Icelanders tend to work long hours. The participation rate and number of hours worked are positively correlated with economic growth, thereby dampening cyclical movements in unemployment.

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. Moreover, even in the case of significant shifts in sectoral or regional employment, a high degree of labour mobility between them prevents large differences in regional unemployment from emerging.

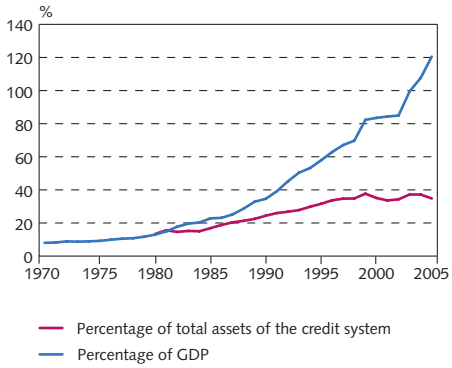
The influx of foreign labour has increased substantially in recent years, both from within and outside the EEA area. Nevertheless, as this is a rather recent phenomenon, the share of foreign nationals in the labour force remains at a modest level. In 2005 approximately 5.5% of the labour force was foreign.

The wage bargaining process in Iceland is highly centralised and usually leads to more or less nationwide settlements. Some 85% 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 transfers or with legislative acts aiming to accomplish moderate settlements. In addition, tailoring of national framework pay deals in sectoral and firm-level negotiations enables specific local conditions to be taken into account.

Notwithstanding its high degree of centralisation, the Icelandic labour market appears to be quite flexible compared to those within the rest of the EEA. 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, which reduces their employment effect, although the measured flexibility may to some extent be the result of high historical inflation.

Chart 4.18
Net assets of pension funds 1970-2005



Source: Central Bank of Iceland.

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. First, the population 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 2005, somewhat lower than in the US (21%) but far less than the average in the EU (36%). Second, 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 33% of 65- to 74-year-olds worked at least one hour a week in 2004. Third, 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 13% of the average earnings of unskilled workers but the maximum total old age pension to around 64% of the same earnings. Occupational pension funds have been increasing their share in pensions relative to the public system as they approach maturity and means testing reduces the public pension. Payments totalled €878 million (66 b.kr.) – almost 7% of GDP – in 2005, when the pension funds surpassed the public pension system for the first time.

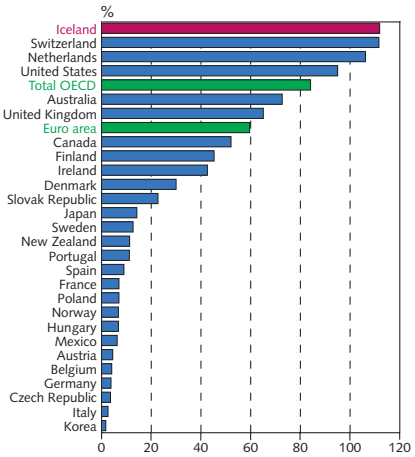
It is mandatory to pay at least 11% of total wages and salaries to pension funds. Formally this 11% is split between a 4% contribution from the employee and a 7% contribution from the employer. Wage settlements made in 2004 raise the employer's mandatory fund contribution to 9% by 2007. Many of the funds 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 over the past two decades as their coverage has become almost total and the return on their assets was strong during the 1980s and the 1990s. Assets were equivalent to over 122% of GDP at the end of 2005. Pension funds in Iceland are large relative to GDP by international comparison as Iceland ranked first in 2004 among OECD countries on this criterion.

At the end of 2004 there were 46 fully operational pension funds in Iceland, thereof 12 with employer guarantees from the govern-

Chart 4.19

Size of pension funds in selected OECD countries 2004

As percentage of GDP



Source: OECD.

ment, municipalities or banks. Funds without employer guarantee are required under current legislation to be fully funded. The ten largest pension funds held about 75% of the net assets of all pension funds in 2005, and the two largest ones accounted for 34%. The average fund had net assets of around €355 million (26 b.kr.), while the biggest had assets of a little over €3 billion (227 b.kr.).

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 borne collectively by the members of each fund and there are no individual accounts as in pure defined contribution plans (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 must match the supplementary contribution up to a limit of 2%. 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 60% of wage earners were paying into such schemes in 2005.

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 35% in 2005. The share of foreign assets went up from less than 2% in 1995 to almost 25% at the end of 2005. Current legislation sets upper limits on the share of equities in a pension fund's portfolio at 60% and restricts exposure to exchange rate risk to 50% of net assets.

The build-up 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 35% of the size of the credit system in 2005. The funds held 15% of the stock of marketable bonds in the same year and 38% of the stock of housing bonds. At the end of 2005 the funds owned domestic equities and shares in equity funds that amounted to around 11% of the size of the organised equity market. This figure really underestimates their scope, 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 nearly 46% of all foreign portfolio assets of Icelandic residents at the end of 2004 and over 12% of total foreign assets as recorded in the international investment position.

5 The financial system

Overview and recent developments

Structural and legislative reforms, along with the massive expansion in financial services and activity that they have engendered, have made Iceland's financial system more international in character and broadly on a par with European norms. Under its obligation to transpose into national law all existing and future EU legislation in the field of financial services, Iceland has implemented all the EC directives on banking, insurance and securities trading whose general objective is to accomplish an integrated European market for financial services, in particular with respect to the right of establishment, provision of services, prudential rules and capital movements. Furthermore, the Icelandic authorities, in close cooperation with market participants, have been implementing policy objectives and specific measures on the basis of the EU's Financial Services Action Plan aimed at enhancing harmonisation, competition and effectiveness of financial services, payment systems and electronic commerce throughout Europe.

Table 5.1 Financial market liberalisation in Iceland: some important steps

Event	*Year*
Financial indexation permitted	1979
Liberalisation of domestic bank rates	1984-86
Iceland Stock Exchange established	1985
Interest Rate Act – Interest rates fully liberalised	1987
Stepwise liberalisation of capital movement begins	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	1993
Iceland becomes a founding member of the EEA	1994
Long-term capital movements fully liberalised	1994
Short-term capital movements fully liberalised	1995
Foreign direct investment liberalised in accordance with EEA agreement	1995
Interbank money market	1998
Interbank FX swap market	2001
Privatisation of state-owned banks completed	2003

A new Act on the Central Bank of Iceland entered into force in 2001 (see Chapter 7). It simplified and clarified the objectives of the Central Bank, provided full independence for applying its monetary instruments and increased its financial independence. The Central Bank of Iceland is committed to modern central banking principles such as transparency, accountability and independence. It pursues an inflation-targeting monetary policy and promotes financial stability.

Table 5.2 Selected legislation in the field of financial services

Act on the Central Bank, No. 36/2001
Act on Activities of Stock Exchanges and Regulated OTC markets, No. 34/1998
Act on Electronic Registration of Title to Securities, with Amendments, No. 131/1997
Act on Official Supervision of Financial Operations, with Amendments, No. 87/1998
Act on Financial Undertakings, No. 161/2002
Act on Securities Transactions, No. 33/2003
Act on Undertakings for Collective Investment in Transferable Securities (UCITS) and Investment Funds, No. 30/2003
Act on Insurance Activities, with Amendments, No. 60/1994
Act on Insurance Contracts, with Amendments, No. 30/2004
Act on the Mandatory Guarantee of Pension Rights and the Operation of Pension Funds, No. 129/1997
Act on Deposit Guarantees and Investor-Compensation Scheme, No. 98/1999
Act on Cooperative Societies, No. 22/1991
Act on Housing Affairs, No. 44/1998
Act on the New Business Venture Fund, No. 61/1997
Act on Measures against Money Laundering and Terrorist Financing, No. 64/2006

Iceland Stock Exchange and the Icelandic Securities Depository

There is currently one authorised stock exchange operating in Iceland where public listing of securities and securities trading are carried out, i.e. Iceland Stock Exchange (ICEX). ICEX is also licensed to operate a regulated OTC market. The Stock Exchange Act of 1998, modelled on EU legislation, furthermore regulates listing, takeover bids, disclosures and flagging in the event of the acquisition of major shareholdings and accompanying rights. Nordic stock exchanges have been cooperating for many years on various aspects of exchange operations, sharing their experience and addressing a variety of common interests together. This cooperation evolved into the Nordic Stock Exchanges (NOREX) alliance, which adopted a single trading system and a harmonised regulatory framework. Today, all the Nordic and Baltic exchanges (Copenhagen Stock Exchange, Oslo Børs, Stockholmsbörsen, HEX in Finland, the three stock exchanges in the Baltic countries and ICEX) are members of the NOREX alliance and share a joint trading system, SAXESS.

Electronic issue of securities and registration of titles to electronic securities can only be carried out by a licensed securities depository. The Icelandic Securities Depository is a registry, depository and clearing house for securities in dematerialised (electronic) form. Iceland Stock Exchange and the Icelandic Securities Depository are both owned by the same holding company as of June 2002. Settlement of securities and equities takes place on a T+1 basis.

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 ICEX. Icelandic bond issues can be broadly divided into four categories:

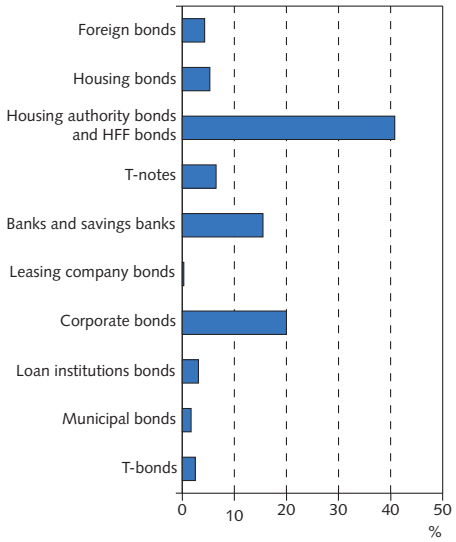
1. Government bonds, issued by the Treasury, are indexed against inflation and paid up with accrued interest at maturity date.
2. Treasury notes and Treasury bills, which are non-indexed, zero-coupon bonds.

3. Housing Financing Fund (HFF) bonds, housing authority bonds and housing bonds which are indexed, interest-bearing bonds in an annuity format.
4. Bonds that are issued by government agencies, private firms or institutions such as banks.

An active market-making programme on the stock exchange ensures sufficient liquidity in the market for benchmark government bonds, HFF bonds, housing bonds and housing authority bonds. A primary dealer system is also in place for Treasury notes and bills. Most new issues are registered in the Icelandic Securities Depository and trading is conducted on a payment versus delivery basis. Several categories of bonds are registered in Clearstream. HFF bonds are registered in Euroclear, but a large share are sub-registered in the Icelandic Securities Depository.

The Icelandic bond market has several features which set it apart from those in other countries. First, indexed bonds dominate the market. The bulk of issues of maturity exceeding 5 years are linked to the CPI. Second, the majority of bonds carry a state guarantee, including HFF bonds, which are the market's most liquid issues. Third, yields on the Icelandic bond market have been high by international comparison. Over the past decade real yields of indexed housing and government bonds have fluctuated in the range 3.5% to 8%. At the end of June 2006 they were around 4.5%. At the end of June 2006 there were 442 listed bonds and their market value amounted to €12.3 billion (1,200 b.kr). Turnover on the bond market in 2005 was €16.9 billion (1,322 b.kr.) and from January to June 2006 €12.6 billion (1.076 b.kr.)

Chart 5.1
The Icelandic bond market at the end of 2005, percentage breakdown of market value



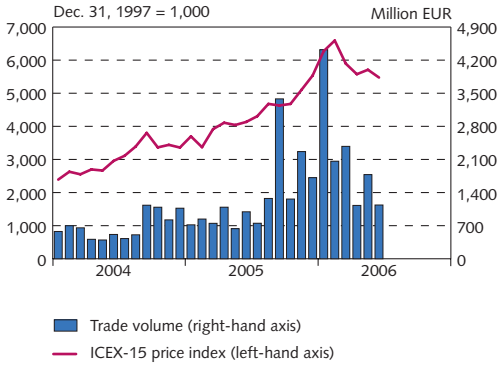
Source: Iceland Stock Exchange.

Equity market

Market capitalisation of Icelandic equities has increased in recent years as equity prices rose from October 2001 to 2005. In the beginning of July 2006, a total of 22 companies were listed on the ICEX main list, one company on the alternative market which is an organised but not officially recognised market, and one company on the new ısec (small cap) securities market which opened July 3 2006, where securities are officially listed and traded. Market capitalisation of listed companies at the end of June 2006 was €19.6 billion (1,905 b.kr), or 196% of 2005 GDP.

From 1998 to 2002, Icelandic share prices 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 was reversed and Icelandic share prices gained 56% in 2003 and 59% in 2004. In 2005 the ICEX-15 index rose more than ever before and it well outstripped other markets, increasing by 64.7% during the year. Early in 2006, however, share prices began to drop, partly after international reports focusing on underlying economic and financial uncertainties, but they climbed back to leave the ICEX-15 index only 1.08% lower at the end of June than at the beginning of the year. Turnover in shares was €15.3 billion (1,202 b.kr.) in 2005 and €12.7 billion (1,080 b.kr.) over the first six months of 2006.

Chart 5.2
Equity market: Monthly trade volume and prices at month-end 2004-2006[1]



1. To June 2006.
Source: Iceland Stock Exchange (ICEX).

Money market

The money market consists of a 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 ICEX in 2005 was €1.9 billion (146 b.kr.) and from January to June 2006 €259 million (22 b.kr.) The interbank market is operated by the Central Bank of Iceland and trading involves unsecured loans between the members of the market. Members must display indicative bid and ask yields on various maturities, ranging from overnight to 12-month loans. Trades must be reported to the Central Bank. Once a day, the Central Bank fixes REIBID and REIBOR rates for the market. Turnover on the interbank market for domestic currency amounted to €20.2 billion (1,579 b.kr.) in 2005 and €8.4 billion (716 b.kr.) over January-June 2006.

Foreign exchange market

The foreign exchange market is an interbank market run by the Central Bank of Iceland, operating since 1993. Market participants are the three largest commercial banks. The Central Bank of Iceland is the fourth participant but has not been an active market maker for a number of years. The Central Bank has purchased foreign exchange in the interbank market on behalf of the Treasury and to boost its own reserves for the past four years. Market makers are subject to rules issued by the Central Bank, which were last changed in the beginning of 2003.

Activity on the market is highly variable. Total turnover in 2005 was €26.6 billion (2,077 b.kr.) and in the first six months of 2006 it had already reached €28.1 billion (2,393 b.kr.).

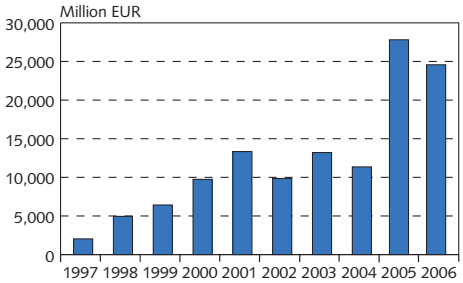
One of the reasons for increasing volume in the foreign exchange interbank market is that in August 2005, non-residents, for the first time, issued króna-denominated Eurobonds, later referred to as glacier bonds.[1] In mid-2006 outstanding glacier bonds amounted to 234.1 b.kr., equivalent to €2.4 billion. Most glacier bonds mature in 1-2 years but the longest issue spans 5 years. The bulk of issuance was in the period from August 2005 to February 2006. The first glacier bonds mature in mid-September 2006, amounting to 40 b.kr., equivalent to €411 million. A further 11 b.kr., equivalent to €113 million, mature in October and November 2006. Issuance has been decreasing since the króna started to weaken at the end of February 2006.

Volatility in the exchange rate of the króna, measured as the standard deviation of daily changes of the exchange rate index, has increased in the last two years. The reason is the widening interest-rate differential between Iceland and abroad and the growing appetite of foreign investors for profiting from it. Volatility increased substantially in February 2006 when certain foreign analysts claimed that Iceland's economy was heading for a hard landing. The Icelandic economic environment is now more stable. Exchange rate volatility has since diminished and conditions in August 2006 were similar to the year-end situation in 2005.

1. See further Ólafsson, Thorvardur Tjörvi: Króna-denominated Eurobond issues, *Monetary Bulletin* 2005/4, 55-83.

In November 2001 an informal FX swap interbank market was launched, for which the Central Bank of Iceland issued rules in March 2002. Turnover in the swap market was USD 552.5 million in 2005 and USD 95 million from January to June 2006. Other derivative instruments are used in Iceland but not in a formal market.

Chart 5.3
Volume traded in the interbank market for foreign exchange 1997-2006[1]



1. To June 2006.
Source: Central Bank of Iceland.

Credit institutions

As in other areas of financial services, the legislative framework for credit institutions is comparable to other corresponding European legislation and international banking standards. Act No. 161/2002 on Financial Undertakings includes provisions on the establishment, authorised activities, management and holdings of banks, own funds requirements, annual accounts and mergers, as well as activities of foreign banks in Iceland. Regulations adopted on the basis of this Act cover areas such as annual accounts and capital adequacy requirements, which are consistent with European requirements.

There are currently four commercial banks in Iceland. The three largest – Glitnir Bank (formerly Íslandsbanki), Kaupthing Bank and Landsbanki – provide all conventional banking and securities services. Total assets of the largest commercial bank groups amounted to €72.5 billion (5,419 b.kr.) at the end of 2005.

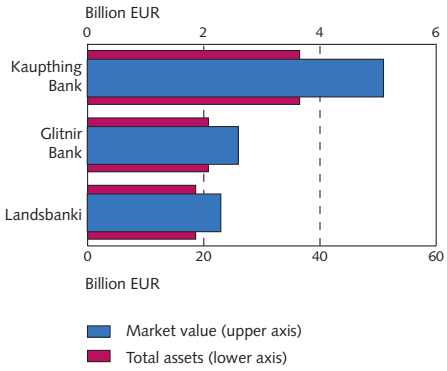
There are 24 savings banks in Iceland and the fourth commercial bank, Sparisjóðabanki Íslands (Icebank), serves as a banking institution for most of them. Total assets of the savings banks and Icebank amounted to €4.7 billion (349.1 b.kr.) at the end of 2005.[2]

Glitnir Bank, Kaupthing Bank and Landsbanki are privately held. In recent years they have expanded their operations abroad by acquiring subsidiaries in commercial banking and security brokerage. At the end of 2005, almost half of total assets of the largest commercial bank groups were accounted for by foreign subsidiaries, most of them located in northern Europe. In 2006 it is estimated that about 50% of their overall income will be generated abroad. The three largest commercial banks are rated by international rating agencies.

Eleven other credit institutions currently operate in Iceland, comprising four investment banks, two payment card companies, two investment funds and three leasing companies, plus the Housing Financing Fund.

The HFF is a state-owned investment fund with a considerable share in household mortgage lending in Iceland. Until mid-year 2004 it operated the housing bond system, which was not a traditional mortgage loan system, but a bond swap system. In mid-2004, the HFF discontinued the housing bond system and issued HFF bonds to finance its new cash loans to households. The new HFF bonds are linked to the CPI, have no call option and mature in 2014, 2024, 2034 and 2044 respectively. HFF bonds are listed on ICEX and registered with Euroclear. At the end of June 2006, bonds issued by the HFF represented 83% of the Icelandic government bond market.

Chart 5.4
Market value and total assets of the three largest commercial banks as of June 2006[1]



1. Consolidated figures.
Source: Central Bank of Iceland.

2. Parent company basis.

Table 5.3 Commercial banks' credit ratings

	Moody's ratings for foreign-currency obligation			
	Affirmed	*Long-term*	*Short-term*	*Financial strength*
Kaupthing Bank	April 2006	A1	P-1	C+
Glitnir	April 2006	A1	P-1	C+
Landsbanki	April 2006	A2	P-1	C

	Fitch's ratings for foreign-currency obligation				
	Affirmed	*Long-term*	*Short-term*	*Induvitual rating*	*Support rating*
Kaupthing Bank	August 2006	A	F1	B/C	2
Glitnir	August 2006	A	F1	B/C	2
Landsbanki	Nov. 2005	A	F1	B/C	2

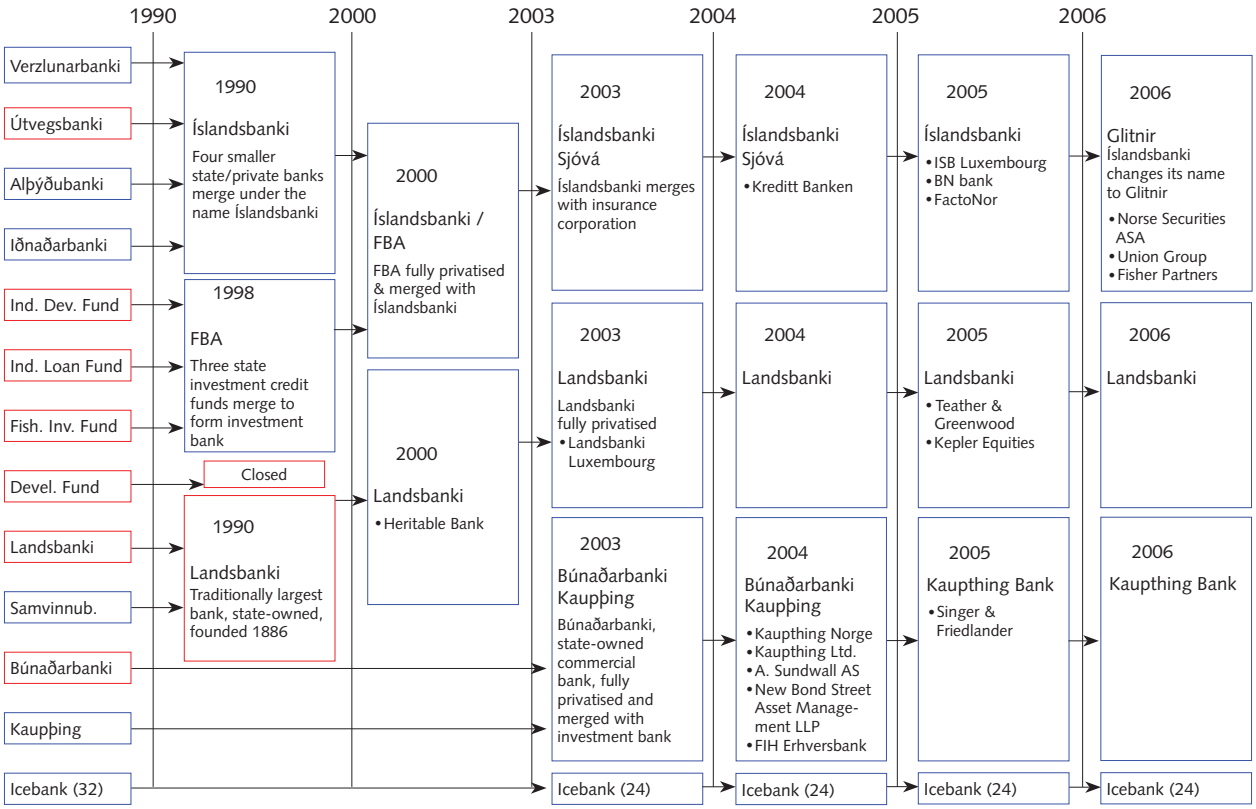
	S&P's ratings for foreign-currency obligations			
	Affirmed	*Long-term*	*Short-term*	*Financial strength*
Glitnir	April 2006	A-		A-2

Table 5.4 The Housing Financing Fund's credit ratings

		Foreign currency		*Domestic currency*		
	Affirmed	*Long-term*	*Short-term*	*Long-term*	*Short-term*	*Outlook*
Moody's Investors Service	April 2006	Aaa				Stable
Standard & Poor's	July 2006	AA-		A-1+		Stable/ negative[1]

1. The outlook for the foreign currency rating is negative.

Chart 5.5
Consolidation of the banking system



Securities firms and brokerages

Icelandic laws on securities firms and securities brokerages from 2003 are based on the corresponding European framework legislation. The Act on Securities Transactions covers 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 it. The Act on Undertakings for Collective Investment in Transferable Securities (UCITS) and Investment Funds provides for rules on, among other things, authorisation, registration and articles of association of UCITS, management and depository companies, investment policy, management, annual accounts and supervision. At year-end 2005, eight securities firms and three securities brokerages had operating licences. Also, credit institutions are licensed to trade and provide services with financial instruments.

Six management companies of UCITS and investment funds had operating licences at year-end 2005. Between them they managed 15 UCITS and 16 investment funds. Four of the UCITS were umbrella funds in 24 individual funds and four of the investment funds were umbrella funds in 13 individual funds. UCITS are licensed to operate across the European Economic Area (EEA).

Insurance companies

Under Icelandic law, an insurance company must conduct only 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 EU framework legislation.

There are 12 insurance companies authorised to operate in Iceland, with total assets of around €1.87 billion (140 b.kr.) at year-end 2005. Sjóvá, VÍS and TM are by far the largest. Life insurance companies represent only 8.7% of total assets of insurance companies. In addition, 249 foreign insurance companies have licences to provide services in Iceland, but only two have established a branch in the country so far.

Financial stability and the Central Bank

Article 4 of the Central Bank Act stipulates that it shall undertake such tasks as are consistent with its role as a central bank, such as to maintain external reserves and promote an efficient and safe financial system, including payment systems domestically and with foreign countries.

In performing its important role of promoting an efficient and safe financial system, the Central Bank of Iceland focuses on assessing the risk of liquidity problems among financial companies and problems in payment and securities settlement systems which could be systemically important. It also promotes efficiency and positive development of the financial system. Financial stability is an important precondition for economic stability, and vice versa. Central Bank activity in this field needs to be undertaken in such a way that markets and decision-makers take the Bank's views into account so as to contribute to an effective and safe financial system. One important way to achieve this is with the annual publication of the Central Bank's *Financial Stability* report. The main findings of the Central Bank's analysis in *Financial Stability*

2005 was that in spite of rapid expansion and the macroeconomic imbalances that need to be addressed in the coming years, the Icelandic financial system was broadly sound. In the latest *Financial Stability* Report published in May 2006 this overall finding was unchanged, but more challenging waters were said to lie ahead. Also, the report stated that adjustment to changed conditions had already begun and it was important to keep a firm course and exercise caution in all respects.

In its work on financial stability the Central Bank has taken into account international agreements and other standards for best practices along with the work of leading foreign central banks in this field. In light of the increasing prevalence of banks with cross-border establishments, in 2003 the central banks of the five Nordic countries signed a memorandum of understanding (MoU) on managing financial crises. In 2006, the Office of the Prime Minister, Ministry of Finance, Ministry of Commerce, Financial Supervisory Authority and Central Bank of Iceland published an MoU on consultation concerning financial stability and contingency plans.

Supervision and deposit insurance

The Financial Supervisory Authority (Fjármálaeftirlitið, FME) has since 1999 handled supervisory tasks formerly assigned to the now-disbanded Bank Inspectorate of the Central Bank and the Insurance Supervisory Authority. The Central Bank's role is in oversight and prudential regulation.

The FME 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 FME also supervises other activities as authorised in accordance with specific laws.

The main task of the FME 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 FME to facilitate statutory supervision of their activities.

In 2003 the FME was given authority to raise the minimum capital adequacy ratio of an individual institution to a level in excess of 8% if its financial position is viewed as unsatisfactory with regard to its risk profile. In assessing the risk profile, the FME has developed a risk assessment system built on CAMELS and stress tests. The FME stress test assumes a reduction in the share and marketable bond portfolio, a weakening of the króna and increased loan losses. In 2006, the commercial banks and largest savings banks all passed the FME stress test.

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 FME. 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. Limits are stipulated for the balance of foreign-denominated assets and liabilities. First, exposure in individual currencies is restricted to 20% of equity. Second, total foreign exchange exposure is limited to 30% of equity.

A Cooperation Agreement between the FME and Central Bank of Iceland is in place. The main aim of the Cooperation Agreement is to make clear the responsibility of each party and the division of tasks between them, both with respect to each other and vis-à-vis companies in financial markets and the general public.

A deposit insurance scheme is in force in Iceland. 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). Since the beginning of 2000, the Insurance Fund of the commercial banks and the savings banks has been a private institution. A separate department of the fund provides insurance for securities investors.

In June 2003 the IMF updated its financial stability assessment of 2001. The report assessed that most of the earlier problems – low capital adequacy, insufficient provisioning, high borrowing and lending in foreign exchange, and the understaffing of the FME – have been addressed and that the overall quality of supervision in Iceland has improved considerably. The assessment was published on the IMF's and the Central Bank's websites in August 2003.

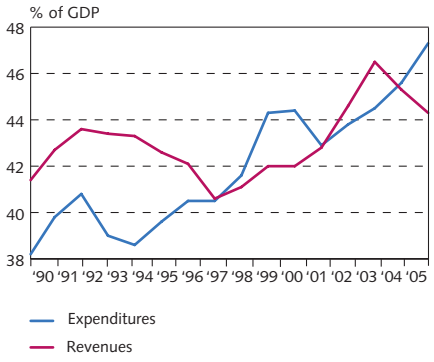
6 The public sector

The size of the government sector

Compared to its neighbours, Iceland has a relatively small public sector, with expenditures of around 44½% of GDP in 2005. This is lower than in the Nordic countries (51%) and the mainland countries of the European Union (43%), but higher than for the US, Japan or South Korea. Despite mostly balanced budgets, the expenditure ratio has risen significantly in the last few years. The rise from 40½% in 1997 to 44½% in 2005 is mostly due to increased expenditures on health, education and social protection. As a sidenote, the expenditure ratio tends to get an extra boost during booms, as it mainly reflects domestic spending. The relative price of such spending follows the real exchange rate, which is noticeably procyclical, creating an even stronger revenue boost.

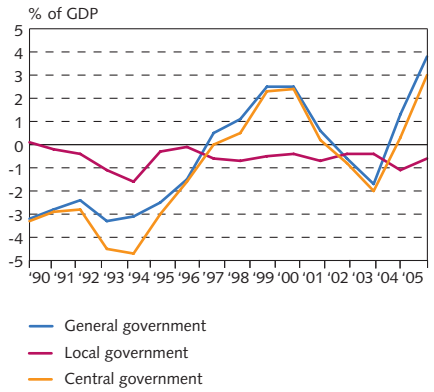
Several factors should allow Icelanders to get by with a relatively small government sector: the historical absence of defence expenditure (although this may change with the withdrawal of the US military in September 2006), historically low unemployment and comparatively low spending on social affairs. Furthermore, occupational fully funded pension funds have become just as important measured in terms of benefit payouts as the public pay-as-you-go system, while the latter is the dominant pillar in many other OECD countries (see Chapter 4). The relatively young population and high retirement age also help to lower overall pension expenditures. Compared to either the EU (before the latest accessions) or the Nordic countries, the latest available figures from 2003 on government expenditures by function show that low expenditures on social affairs are to a large degree counterbalanced by greater spending on general services, health care, education and economic affairs.

Chart 6.1
General government revenues and expenditures 1990-2005



Sources: Statistics Iceland, Treasury projections.

Chart 6.2
Government fiscal balance 1990-2005



Sources: Statistics Iceland, Treasury projections.

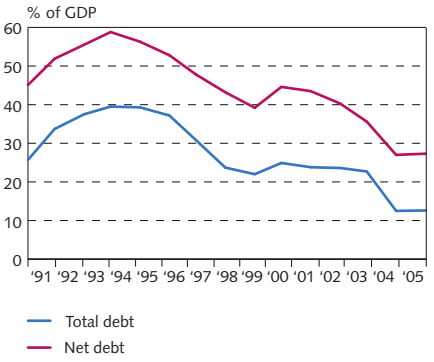
General government finances

Iceland, like many other OECD countries, ran up a relatively large public sector deficit in the late 1980s and early 1990s, with deficits averaging 3% of GDP in 1985 to 1995. To some extent the early 1990s deficit was the result of a prolonged slowdown which depressed revenues and increased social spending.

General government finances consolidated after the mid-1990s and recorded surpluses during a boom from 1998-2001. Since the mid-1990s the public sector fiscal balance has been significantly above the OECD average. There was a brief return to slight deficits as spending rose and the economy cooled in 2002-2003, while 2004-2005 once again saw surpluses reaching 3% of GDP in 2005.

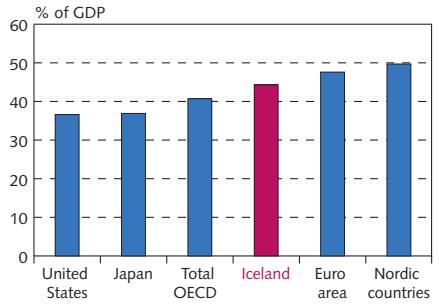
According to Treasury plans current in June 2006, the general government is expected to show a surplus amounting to 2% of GDP in 2006, before turning to a deficit in 2007 as the aluminium and hydropower sector investment projects now under way draw to a close. The revenue ratio is expected to fall from 45% to 43% because of a weaker economy and the final step in a series of tax cuts, while increased spending, mainly on transfers and fixed investment, is pro-

Chart 6.3
General government debt 1991-2005



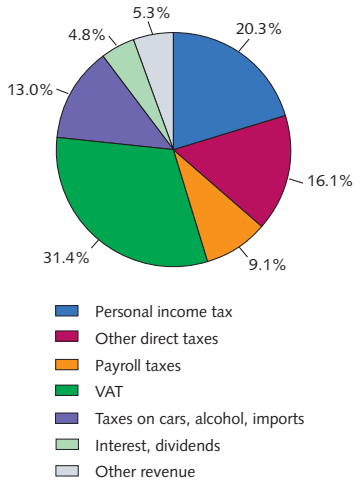
Sources: Treasury accounts, Treasury projections.

Chart 6.4
General government expenditures 2005



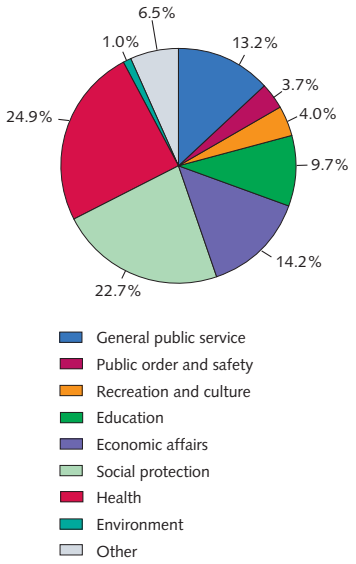
Sources: OECD, Statistics Iceland.

Chart 6.5
Treasury revenues by source 2005



Source: Treasury accounts.

Chart 6.6
Treasury expenditures by function 2005



Source: Treasury accounts.

jected to push general government outlays up to 44½% of GDP. The investment plans are, however, targeted for cuts according to the government declaration of June 2006 on anti-inflation policy.

General government debt rose significantly during the recession from the late 1980s to mid-1990s. Net debt peaked in 1995 at 40% of GDP. With stronger growth and improving government finances it fell to around 23% by the end of 2004 and is expected to fall to around 10% of GDP at the end of 2006.

Division of responsibilities

The government sector in Iceland is organised on two levels, the central government as described in the Treasury accounts, and municipal or local governments. Separate sets of social security accounts are maintained, but their expenditures and revenues are authorised through the Treasury budget. Since the early 1990s local government expenditures have been climbing from around 10% of GDP to around 13% as against a central government budget of around 35% 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. It also administers and finances the social security sector of government.

The central government is responsible for the police, courts, foreign affairs, upper secondary and higher education, 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 particular municipalities. It administers basic benefit programmes for elderly and disabled persons and the bulk of supplementary old-age and disability pensions, unemployment benefits, rebates on mortgage interest payments for owner-occupied housing and benefits to families with dependent children. Most of these programmes are means-tested.

Local governments are responsible for local planning, most local infrastructure, day care and education from pre-school through the lower secondary level, and welfare services of various kinds, in particular services for the elderly except for health care. They are also responsible for solving the housing needs of low-income households. Local governments provide supplementary assistance to general programmes of pensions and income support run by the central government.

Central government finances

Central government regular revenues as presented in the Treasury's accounts amounted to 35% of GDP in 2005. The composition of Treasury revenues is shown in Chart 6.5. The noticeably large share of taxes on goods and services is what puts Iceland in third place among OECD countries for indirect taxes relative to total taxes and first in terms of such taxes as a percentage of GDP.

Discretionary expenditures of the central government are quite low and have been falling. In particular, expenditure on fixed capital and capital transfers has decreased considerably in recent years relative to GDP. The Government has outlined a medium-term programme

where the aim is to keep real growth in public consumption below 2% a year and income transfers below 2.5%.

Central government revenues respond quite strongly to swings in the economy for two main reasons: First, bracket creep causes personal income tax revenue to increase disproportionately to incomes during an upswing when legislated rises in tax-exempt income lag behind income growth. Second, the composition of consumption seems to tilt towards higher-taxed items during upswings, mainly because of the strong procyclicality of the real exchange rate. These factors, along with a smaller boost from corporate income and payroll taxes and, as of its introduction in 1997, a tax on personal capital income, helped transform the Treasury balance from -2½% of GDP in 1995 to +2½% at the height of the 1999-2000 upswing. With the boom turning into a mild contraction and the GDP share of Treasury expenditures rising from 31½% in 2001 to 35% in 2003, the surplus turned into a 1½% deficit. Many of these expenditure increases were temporary and the return to higher growth strengthened revenues, resulting in a surplus of 1½% of GDP in 2004 which rose to almost 4% in 2005.

Treasury surpluses, privatisation revenues, reduced lending activity and strong economic growth contributed to a fall in gross Treasury debt from 51% of GDP in 1995 to an estimated 20% in 2004, while net debt, including Treasury deposits with the Central Bank, fell from 33% of GDP to an estimated -3%. Besides, since 1999 the Treasury has made an effort to pre-fund civil service pension liabilities, which are not classified as debt in international comparisons. These liabilities rose from 13% of GDP in 1989 to 21% in 1998, but have since been kept in check through increased contributions in spite of sizeable upwards revisions because of real wage increases and lengthening lifespans. At the end of 2004, these liabilities were estimated to be 20% of GDP.

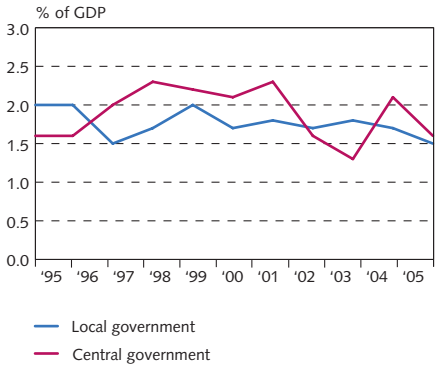
Local government finances

The local government sector has run deficits for 15 years in a row, by 1.1% of GDP in 2004 and 0.6% in 2005. Local government budgets have run at 12-13% of GDP in the past five years. They have grown from an average of 7% of GDP in the early 1980s, mainly because of new and expanded tasks in the area of primary education and day care.

The latest available figures show that in 2003, education and day care accounted for 37% of local government expenditures, followed by 17% for social affairs, 15% for culture and recreation, 15% for general services and 8% for roadworks and traffic. On the revenue side, 2005 estimates derive 59% from municipal income taxes, 12% from real estate taxes and other indirect taxes, 6½% from the Treasury-financed Municipal Equalisation Fund and 14% from the sale of services.

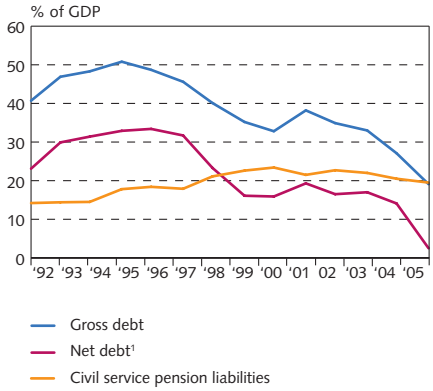
In spite of persistent deficits, gross local government debt hovered around 7% of GDP and net debt around 5% in the period 1994-2005. The seeming contradiction is explained by asset sales, economic growth and a 35% appreciation of the króna in 2002-2005.

Chart 6.7
Government fixed investment 1995-2005



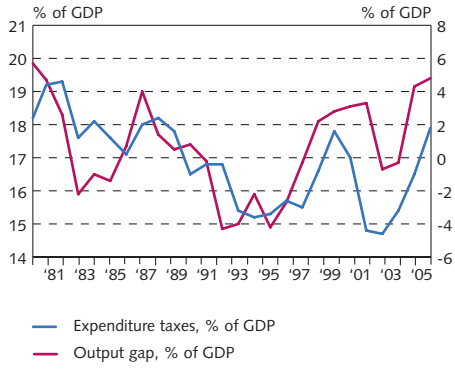
Source: Statistics Iceland.

Chart 6.8
Central government debt 1992-2005



1. Including cash position but excluding pension liabilities.
Sources: Ministry of Finance, Central Bank projections..

Chart 6.9
Cyclicality of indirect taxes 1980-2005



Sources: Treasury accounts, Statistics Iceland.

The tax system

The central government or Treasury derived around 90% of revenues from taxes in 2005 according to preliminary estimates which omit one-off privatisation revenues. The comparable ratio at the local government level was 72%. Of Treasury revenue, 33% came from direct taxes on income and wealth, 9% from payroll taxes, 32% from a value-added tax and 15% from various excise taxes on imports, production and consumption.

A 23.75% tax is levied on personal income over €10.5 thousand (0.95 m.kr.) for individuals. The rate will fall to 22.75% at the end of 2006, and the tax-exempt level of income will rise by almost 11%. A 2% tax is levied on incomes above €47 thousand for the last time in 2006, when the relevant law expires. In addition to the state income tax, a municipal tax is levied on personal income. It ranges from 11.2% to 13% depending on locality. The state and local government taxes are levied jointly and the state pays local governments the tax for persons whose income is below the tax-exempt level. Pension fund contributions and certain public income support payments are exempt.

Table 6.1 Main features of the tax system in Iceland

State income tax[1]	23.75%
on incomes > €46.5 thousand	2.00%
Municipal income tax[2]	11.2% to 13%
State tax on financial income[3]	10%
Corporate income tax	18%
Payroll taxes	5.73%
Value-added tax	
General rate	24.50%
Low rate[4]	14.0%

1. Incomes up to €10.5 thousand per person p.a. are exempt from income taxes. Pension fund contributions are exempt up to a point. The rate is set to fall to 22.75% in 2007. 2. The 2% surcharge expires in 2006. 3. Interest, dividends, realised capital gains and rental income of persons. 4. Food, hotel rooms, heating, books, newsprint, television and radio subscriptions are the main exceptions.

Sources: Association of Local Authorities, Internal Revenue Directorate.

Interest, dividends, rental income and personal capital gains are taxed at a lower rate of 10%. A net wealth tax on individuals and corporations expired at the end of 2005. The top marginal rates had been lowered in steps since 1989, when they stood at 2.95% for individuals and 1.5% for corporations. 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. Local governments collect real estate taxes at a maximum rate of 0.625% of assessed value for residential property and 1.65% for commercial property.

The corporate income tax was lowered from 50% in 1991 to the current 18%. in 2002. Capital income of corporations is treated like other revenue for tax purposes. A payroll tax of 5.79% is charged on wages.

The largest single source of Treasury revenue is the 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

categories are exempt, notably financial services, education, health services and passenger transportation. This tax is also targeted for cuts in the government's manifesto of 2003.

A general excise tax is levied on a range of goods at three rates of 15-25% while unit fees are charged on some goods. Customs duties range from 0 to 30% of cif value; most imports from the EU as well as Iceland's EFTA partners, Norway, Switzerland and Liechtenstein, are exempt. Revenue from general excise taxes and import duties has fallen from around 20% of Treasury revenues in the early 1980s to around 2% in 2005. Taxes on imports and ownership of motor vehicles, and excise taxes on motor fuel made up 8% of Treasury revenues in 2005, while around 3% derived from charges on the sale of alcohol and tobacco.

In total, the Treasury and local government taxes described above accounted for 84% of general government revenues and 97% of tax revenues in 2005. Non-tax revenue accounted for 13% of general government revenue, consisting mostly of service charges, interest income and dividends. Privatisation proceeds are not counted as revenue under national accounts definitions. The ratio of total general government revenue to GDP jumped by 2 percentage points in 2005 to 47.3%, compared to a weighted average of 38% for the OECD as a whole, 45% for the euro area and 57% for the Nordic countries in 2005.

Government holdings in the business sector

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

Table 6.2 Highlights of recent privatisation

Years	*Company sold*	*Million EUR*
1998-2002	Icelandic Alloys (ferrosilicon)	16
1998-2003	IAV (contractors)	28
1998-1999	FBA (investment bank)	184
1999-2002	Landsbanki (commercial bank)	251
1999-2003	Búnaðarbanki (commercial bank)	199
2001-2005	Iceland Telecom	864
1998-2005	Other	62
	Total	1,568
	Percentage of GDP	17

Sources: Executive Committee on Privatisation, Central Bank of Iceland.

Over the last 20 years the central government has pursued an extensive programme of privatisation. After the most recent sales, the state's most important business holdings are in the production and distribution of electricity, as well in the Housing Financing Fund, the Student Loan Fund and a few smaller financial institutions, altogether responsible for around 15% of credit in the economy. Iceland Telecom has now been fully privatised and the government's monopoly on broadcasting has been abolished and its competitive advantage diluted with new entrants, as has the postal service, which still remains in government hands. The latest enterprise to go was a dedicated agricultural loan fund which was auctioned off in late 2005.

Local governments 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.

Government guarantees

Besides debt on the books of government entities, the state and local governments guarantee certain debts of various enterprises. State guarantees must now be authorised explicitly in budget legislation and in recent years have been confined to government enterprises and institutions related to government. Local governments are now legally prohibited from granting loan guarantees except to their own subsidiary institutions.

Table 6.3 Treasury guarantees at the end of 2005

	Million EUR	*% of total*
Housing Financing Fund	6,310	81,6
National Power Company	737	9,5
Landsbanki ltd.	289	3,7
Regional Development Fund	138	1,8
Other	264	3,4
Total Treasury guarantees	7,737	100,0

Source: Treasury Accounts 2005.

The Treasury accounts for 2005 show that the government has outstanding guarantees of around €7.7 billion (578 b.kr.), equivalent to 60% of GDP. Of these guarantees, 82% represents government backing of residential mortgages. Another 9.5% represents its guarantees for 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 around €1.6 billion (122 b.kr.) at the end of 2005, or 13½% of GDP. Both the company's debt and the guarantees are on the rise with the construction of a large new power plant in east Iceland at an estimated total cost of €1.1 billion (90 b.kr.).

Treasury foreign debt

The Republic of Iceland has been a modest borrower in international markets. In recent years, the balance on government finances has led to reductions in total outstanding debt. The ratio of Treasury foreign debt to GDP fell from 28% in 2001 to 9.3% at the end of June 2006. The Treasury surplus and the use of proceeds from the privatisation of the banking system and of the state telecommunication company to pay down debt contributed to this significant reduction in debt in the past years.

Table 6.4 Republic of Iceland foreign bond issues 1995-2005

Currency	*Amount*	*Issue date*	*Maturity*
JPY	15,000,000,000	31.1.1995	31.1.2005
DEM	250,000,000	11.4.1996	11.4.2001
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
EUR	250,000,000	10.4.2002	10.4.2012
EUR	150,000,000	30.9.2002	30.9.2009
EUR	150,000,000	12.5.2003	12.5.2008
USD	200,000,000	10.3.2004	10.3.2014

A primary aim in debt management is to spread the amortisation of foreign debt evenly over coming years as well as to maintain a balanced composition in regard to interest rates, maturity and currency denomination. Interest rate and currency swaps are also used to achieve debt and risk management objectives. At the end of June 2006, the Treasury's long-term foreign debt amounted to USD 1.1 billion (84 b.kr.) and short-term foreign debt amounted to USD 114 million (8.8 b.kr.). Around 28.5% of the Treasury's foreign obligations were denominated in US dollars, 48% in euros, 3.5% in Japanese yen, 13.5% in sterling and 6.5% in Swiss francs.

Currently, 64% of the Treasury's total foreign debt carries fixed interest rates. The average maturity of foreign long-term debt was approximately 4 years and the average duration 3.1 years at the end of June 2006.

The Republic of Iceland has established three financial programmes to facilitate its financing requirements. These are a Euro-Commercial Paper (ECP) programme amounting to USD 500 million, a United States Commercial Paper (USCP) programme amounting to USD 1 billion and a Medium-Term Note (MTN) programme amounting to USD 2 billion. The ECP programme was originally established in 1985 and the MTN and USCP programmes were introduced in 2001. The Treasury also has a committed credit facility under a five-year agreement in the amount of USD 250 m. This is a syndicated bank facility from 2005.

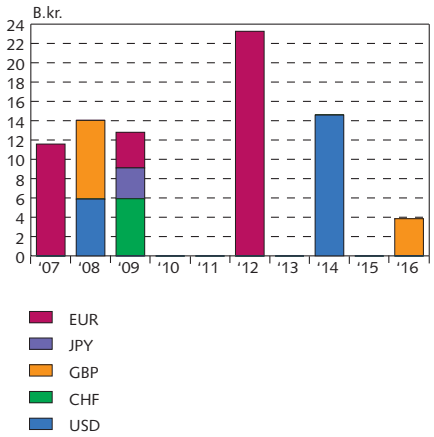
The National Debt Management Agency (Lánasýsla ríkisins, NDMA) is assigned the borrowing and debt management functions of the Treasury, and the issue of government guarantees. Under a special agreement with the Minister of Finance, the Central Bank is responsible for the implementation of foreign borrowing for the Treasury.

The Republic of Iceland has never defaulted on its debt and always paid when due the full amount required in respect of principal, interest and sinking fund instalments for all internal and external obligations.

Chart 6.10

Maturity profile of Treasury external long-term debt

July 2006



Source: Central Bank of Iceland.

Credit rating history

In February 2005 Standard & Poor's Ratings Services raised its long-term foreign currency sovereign credit rating on the Republic of Iceland to AA- from A+, and affirmed the AA+ long-term local currency and the A-1+ short-term foreign and local ratings. The main arguments for the upgrade were significant and sustained improvements in the resilience and structure of the Icelandic banking sector, as well as strong public finances. In June 2006 the rating agency changed the outlook from stable to negative on hard landing risks. In February 2006, Fitch Ratings revised the outlook to negative from stable on widening macro imbalances. Moody's Investors Service confirmed previous ratings with a stable outlook in August 2006. 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, a more diversified export base and robust GDP growth in recent years. However, the rating agencies have expressed concerns about the imbalances in the economy, escalating asset prices and growing net external indebtedness. By the same token they have also underlined the flexibility of the Icelandic economy and its proven capacity to sort out imbalances.

Table 6.5 Ratings for Icelandic Treasury bonds 2005

		Foreign currency		*Domestic currency*		
	Affirmed	*Long-term*	*Short-term*	*Long-term*	*Short-term*	*Outlook*
Moody's	Aug. 2006	Aaa	P-1	Aaa	P-1	Stable
Standard & Poor's	June 2006	AA-	A-1+	AA+	A-1+	Negative
Fitch	Febr. 2006	AA-	F1+	AAA		Negative

Iceland's relationship with the rating agencies started in 1986 when Standard & Poor's assigned an indicative rating for the Republic of Iceland. At first the rating was outside the traditional letter ratings structure until 1989, when an indicative Ai rating was assigned to the Republic. Moody's followed in 1989 by assigning an indicative A2 rating. These ratings actions were unsolicited. Iceland's formal ratings history began when the Republic requested a short-term rating from Standard & Poor's in 1989 and later from Moody's in 1990. The respective short-term ratings formally assigned to the Republic at the time were A-1 and P-1. In connection with preparations for the Republic's initial bond issue in the US public market in 1994, Moody's and Standard & Poor's were formally asked to provide long-term credit ratings for Iceland. Standard & Poor's awarded an A for long-term debt in January 1994. Moody's announced an A2 long-term rating for Iceland the same month. The agencies thereby affirmed earlier, informal ratings which they had issued for Iceland.

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 September 1998 Standard and Poor's changed the outlook of their rating from stable to positive. In February 2000 Fitch entered the field by assigning 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 March 2001, Standard & Poor's amended its previous positive outlook to stable and in October the same year changed the outlook to negative. Fitch changed its outlook on the rating in February 2002 from stable to negative.

One of the most important rating actions for the Republic of Iceland occurred in October 2002 when Moody's upgraded the foreign currency rating to Aaa in connection with a revision of its ratings methodology. Shortly after this Standard & Poor's confirmed its A+ rating but moved the outlook back to stable in November 2002. In March 2003 Fitch changed the outlook for the rating from negative to stable. Standard & Poor's again revised its outlook on foreign long-term credit in December 2003 from stable to positive and in February 2005 raised its rating, as mentioned above.

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 granted the Central Bank of Iceland full independence to implement monetary policy in accordance with the inflation target, and formally closed any direct access by the government to Central Bank financing. At the same time it aimed to improve the transparency of monetary policy and make the Bank more accountable towards the government and the public at large. Monetary policy decision-making authority continued 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 controls, for example, were removed with the liberalisation of capital flows in the early 1990s and the supervisory responsibilities of the Bank were moved to a separate Financial Supervisory Authority (FME) at the beginning of 1999 (see Chapter 5). In recent years the Central Bank, like its counterparts in many other countries, has put increasing emphasis on monitoring financial stability.

Inflation targeting

In 2001, Iceland joined a growing number of countries that have adopted a formal inflation target as a framework for monetary policy. 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). The aim is to keep the rate of inflation on average as close to the target as possible. If it deviates by more than 1½% in either direction, the Central 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. Three such reports have been compiled and published to date, in July 2001, February 2005 and September 2005.

By defining the role of the Central Bank in the formulation of monetary policy, the current legislation has brought the Bank into line with best practice around the world. It 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 insofar as the Central Bank deems this to be consistent with the inflation target.

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 exchange rate target was abolished in March 2001 and an inflation target adopted. The target requires approval by the Prime Minister but the Central Bank has 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* 2001/2, available on its website (www.sedlabanki.is).

The Central Bank publishes forecasts three times a year, projecting inflation and other key economic variables two years ahead. In addition to a baseline forecast, which assumes a policy rate path based on market expectations, the Bank publishes two alternative forecasts. The first one assumes an unchanged policy rate throughout the forecasting horizon. The second assumes a policy rate path that ensures that the inflation target is reached at the end of the forecasting horizon, based on a simple monetary policy rule and the Bank's macroeconomic model. These forecasts serve as an important guide to monetary policy decisions and are also an important part of the communication of monetary policy outside the Bank.

The inflation targeting regime represents a significant departure from previous monetary policy regimes of different types of currency pegs. Iceland has a long history of using the exchange rate as a monetary anchor, although with a varying degree of commitment, as can be inferred from table 7.1.

Under the current regime of inflation targeting, the currency floats freely without Central Bank interventions. Under provisions in the Act, the Bank may temporarily limit or halt trading in the domestic foreign exchange market, and temporarily suspend its own quotation of the rate of exchange of the króna. However, these authorisations have not been exercised.

Monetary instruments

The main monetary instrument of the Central Bank of Iceland is the interest rate in its weekly repurchase auction – the policy interest rate. Usually the Bank auctions one-week agreements. So far the auctions have been fixed-price, with unlimited access subject to collateral. No reverse repurchase agreements have been issued, although there is scope for them within the rules. Repurchase agreements are secured with collateral in the form of listed securities that the Bank approves. Since year-end 2003 the Central Bank has offered weekly certificates of deposit (CDs) with a maturity of one week.

The Central Bank offers an overnight loan facility to the banks, subject to collateral requirements. Central Bank CDs can be pledged as collateral against repurchase agreements and overnight loans. Banks are subject to reserve requirements and may 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.

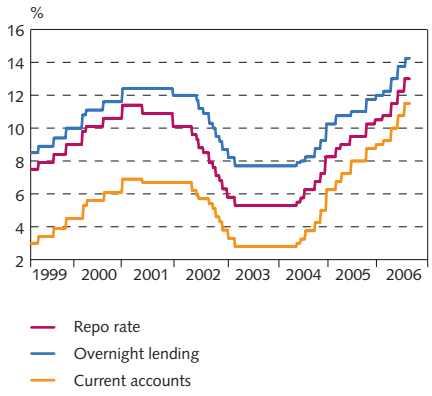
The required reserves ratios are in line with those of the European Central Bank, i.e. 2% of specific bank liabilities with a maturity of less than two years, and 0% of other liabilities.

The Central Bank of Iceland may also intervene in the interbank foreign exchange market and participate in the interbank FX swap market.

Chart 7.1

Central Bank of Iceland interest rate corridor, January 5, 1999 - July 25, 2006

Weekly data



Source: Central Bank of Iceland.

Foreign exchange reserves

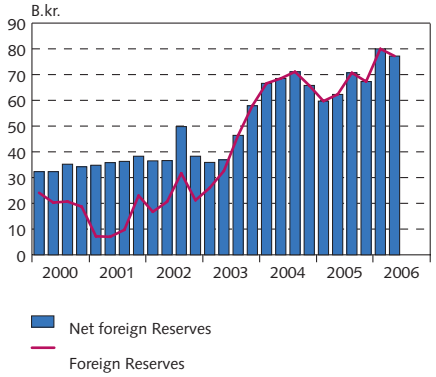
One of the functions of the Central Bank is to manage Iceland's foreign exchange reserves. Investment guidelines for the reserves are laid out in a resolution by the Board of Governors. The resolution prescribes the minimum amount of reserves, their currency composition and the investment categories of the portfolio. Currently the size of the reserves should not be smaller than the value of 3 months' merchandise imports. The portfolio consists mainly of deposits and investment grade bonds. The Central Bank holds a small position of gold reserves amounting to about 64 thousand ounces and Iceland has a quota of SDR 117.6 million at the International Monetary Fund.

At the end of June 2006 the foreign exchange reserves amounted to about 77 b.kr., the equivalent of 7.7% of 2005 GDP. The reserves are supplemented by committed credit lines amounting to USD 275 million. Thus, the reserves and committed credit lines will together equal roughly 9.8% of GDP in 2005. The Central Bank also has access to uncommitted interbank lines with a number of international banks.

Chart 7.2

The foreign exchange reserves of the Central Bank of Iceland

At end of quarter March 2000 - June 2006



Source: Central Bank of Iceland.

8 Domestic and foreign debt

External debt

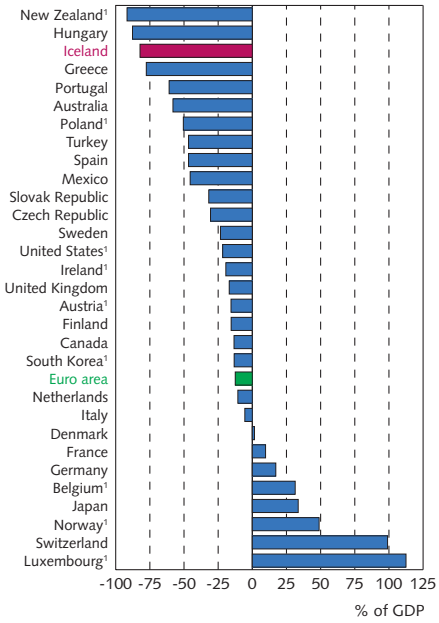
Iceland's external indebtedness is high by international comparison and has risen sharply since the mid-1990s. As can be seen from Chart 8.1, Iceland has one of the highest ratios of indebtedness of the OECD countries; only New Zealand, Hungary and Greece have a level of debt in the same range.

Total external debt of the Icelandic economy, private as well as public, amounted to €39 billion (2,901 b.kr), the equivalent of 296.4% of GDP, by end-2005 and net external debt amounted to 160.8% of GDP. The international investment position (net external position of the Icelandic economy) was negative by €10.8 billion (804.2 b.kr.), or -82.2% of GDP, at the end of 2005 compared to -48% in 1996 when gross external debt was 62.5% of GDP. The main explanation for Iceland's negative net IIP is undoubtedly its wide and persistent current account deficit.

Total general government debt is low compared to other OECD countries and thus can not explain Iceland's high external indebtedness (see Chapter 6). Explanations for indebtedness apply mainly to the private sector.

Chart 8.1

International investment position of OECD countries 2005



1. Figures are for 2004.
Sources: IMF and various central bank and statistics office websites.

Private debt

Of total external debt, the private sector was responsible for some 94%, or 274% of GDP, by the end of 2005, having increased from 30% of GDP in 1995. This entails a considerable increase from 2004 since balance sheets of both households and corporations swelled enormously in 2005.

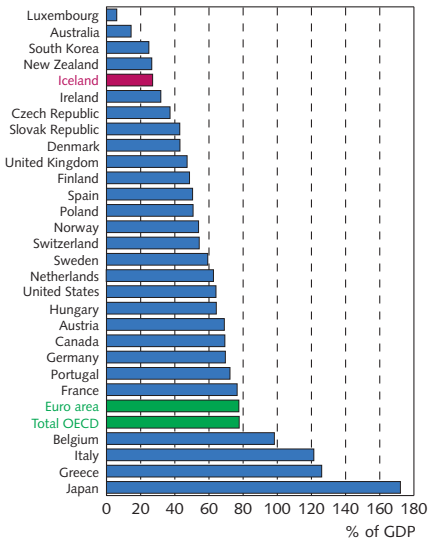
The main force driving the growth of debt is foreign borrowing by Icelandic banks to finance lending for domestic and foreign investment. The banking sector's external debt rose from 6% of GDP in 1995 to 242% at the end of 2005.

Low private sector savings and the financial liberalisation of the mid-1990s account for the rapid increase in external debt in recent years. The robust economic expansion over the last ten years and strong demand for credit raised domestic interest rates, which induced companies, especially those with income in foreign currency, to borrow abroad. Over half of Icelandic corporate debt is external, either direct or intermediated by banks, but most of it is intrinsically hedged, namely, matched by export revenues.

High levels of external indebtedness by international comparison and its increase in recent years must be seen in the light of country-specific factors such as high domestic and foreign investments, as well as changes in the balance sheets of households and companies over the past decade.

Chart 8.2

General government gross debt in OECD countries 2005

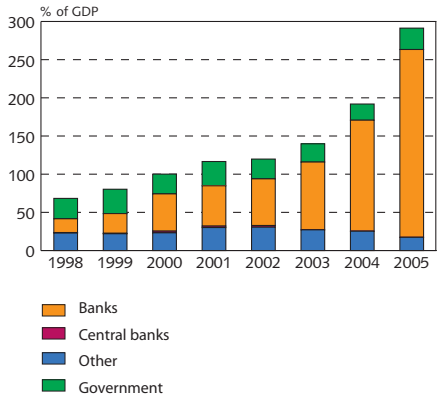


Source: OECD Economic Outlook No. 79 (June 2006).

The household balance sheet

Households in Iceland rank among the most indebted in the world. According to OECD data (see Table 8.1), only British, Danish and Dutch households have higher ratios of indebtedness to GDP. A major reason

Chart 8.3
Estimated external debt by sector
1998-2005



Source: Central Bank of Iceland.

for the rise in household debt over the past two decades is improved access to credit. It was not until the 1980s that widespread credit rationing was lifted and interest rates became increasingly market-determined. When real interest rates turned positive with the widespread indexation of financial instruments in the 1980s, banks became more willing to lend. A major overhaul of the public housing fund in 1990 towards a market-based system greatly improved access to housing financing. At the end of summer 2004 the banks entered into competition with the Housing Financing Fund (HFF), offering mortgage loans and refinancing without limits on maximum loan and at lower interest rates than before – and not requiring a property transaction to take place when they grant mortgages, so some mortgage equity withdrawal for consumption has taken place. The long maturity and terms of preferential household credit imply that the debt service burden is lower than it would otherwise be.

The future role of the HFF is currently under consideration since market conditions have changed radically after the banks entered the mortgage market, although they have since tightened their lending policies somewhat. According to the IMF the HFF needs immediate reform in order to allow for healthy competition among the banks in the mortgage market.[1]

Table 8.1 Household liabilities 2004

	Household liabilities as:	
	% of GDP	*% of assets*
Austria	50	84
Belgium	43	73
Canada	72	124
Denmark	118	259
Finland	71	108
France	45	89
Germany	50	80
Iceland	98	185
Italy	34	51
Japan[1]	78	132
Netherlands	105	224
Norway	81	166
Portugal	92	135
Spain	69	112
Sweden	64	126
United Kingdom[1]	103	155
United States	91	124

1. Figures for Japan and the United Kingdom are from OECD Economic Outlook No. 79 (June 2006)

Sources: OECD Financial Accounts, Central Bank of Iceland.

At the beginning of the 1980s household debt was around 20% of disposable income and 14% of GDP, but by the end of 2005 debt to financial institutions had reached 110% of GDP and 207% of disposable income. In pace with its rising debt, the asset position of the household sector has strengthened and, if pension funds assets are included (see Chapter 4), so has its net worth. While debt rose from

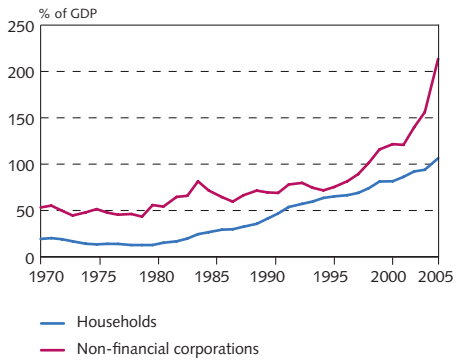
1. IMF: Iceland – Staff Report for the 2006 Article IV Consultation, July 14 2006.

80% of disposable income in 1990 to 207% in 2005, the value of the households' stake in pension funds showed similar growth, from 60% of disposable income to 228%. Therefore, in spite of a large increase in indebtedness, the net equity of households has improved, especially when pension fund reserves are taken into account. Increasing household debt is also to some extent a question of terminology, since it encompasses only debt for which bodies within the monetary system are creditors. Before the introduction of the housing bond system, some housing debt was between buyers and sellers, so that a lower level of debt to the monetary system was recorded. Furthermore, inflationary effects decreased the real value of household debt before general indexation of loans was introduced in 1979.

Data on financial assets are not as reliable as data on real assets. The main sources of information are tax returns for dwellings and automobiles, insurance assessments for household furnishings and financial sector series collected by the Central Bank. The total value of these household assets is estimated at just under sixfold disposable income, valued at the end of 2005. Equity holdings represent a peculiar problem, since Icelandic tax returns report a monetary face value (equivalent to the number of shares) rather than market value. The Icelandic securities depository reports direct household ownership of registered shares equivalent to around 40% of disposable income at the end of 2005, but a realistic figure could easily be double or even quadruple that amount. Finally, note must be taken of the very strong position of Icelandic pension funds, whose reserves are counted as household assets in the OECD financial accounts and whose existence clearly influences the need and demand for other kinds of household saving. Official reserves stood at 220% of disposable income at the end of 2005 and 260% if acknowledged claims on central and local government are counted.

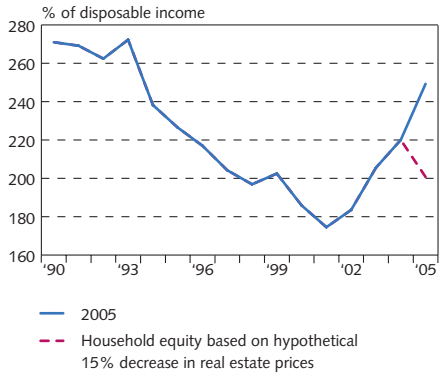
All in all, household debt equivalent to approximately 200% of disposble income is backed by assets amounting to 8.5 to 10.3 times disposable income, depending on how aggressively equity holdings and pension reserves are accounted for. This puts the net wealth of Icelandic households in the area of 6.4 to 8.3 times disposable income. The net wealth of Icelandic households is broadly in line within the range of the G7 countries if pension fund assets are included, but lower if they are excluded.[2] It must be acknowledged, however, that at the end of 2005 both real estate prices and share prices in Iceland were at an all-time high, which obviously boosts the asset side of household balance sheets.

Chart 8.4
Private sector debt 1970-2005



Source: Central Bank of Iceland.

Chart 8.5
Net wealth of households excluding pension reserves 1990-2005[1]



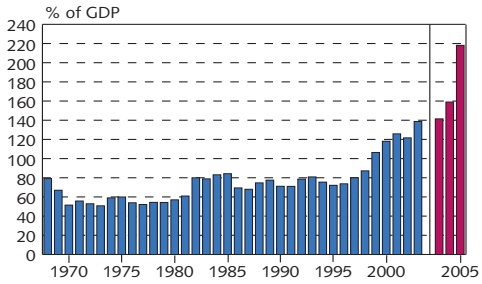
1. Excluding shareholdings. Data for 2005 are estimates.
Source: Central Bank of Iceland.

Corporate balance sheets

Icelandic corporate debt is also high compared with other countries for which data are available. At the end of 2005, debt of non-financial corporations was equivalent to about 218% of GDP, the highest figure for the Nordic countries both throughout recent years and across industries. There are various factors explaining the relatively high debt leverage among Icelandic corporations.

2. OECD Economic Outlook No. 79 (June 2006).

Chart 8.6
Corporate debt 1968-2005[1]



1. New classification of lending from 2003. Two columns are shown for that year: blue for the older classification and red for the new one.
Source: Central Bank of Iceland.

Just like households, Icelandic corporations were relatively debt-free at the end of the negative real interest era in the early 1980s. As real interest rates turned positive around that time, corporate debt rose relative to GDP, but then remained roughly stable for 15 years by this criterion. Liberalisation of the domestic financial markets in the late 1980s was followed by external liberalisation in the first half of the 1990s. With liberalisation of capital flows and the expansion of banking system balance sheets since 1997, the debt of Icelandic non-financial corporations has climbed from 80% of GDP to 214% in 2005.

A significant amount of increased corporate debt lies with companies that have been expanding their operations overseas through acquisition of foreign companies (FDI) and the formation of foreign subsidiaries. A large part of the 715 b.kr. increase in corporate debt in 2005 can be traced to overseas expansion. The funding of this considerable increase in outward investment by Icelandic residents has mainly been intermediated by domestic banks.

The stock market is young and not as well developed as the banking sector, which causes firms more difficulties in raising funds by issuing equity than by issuing debt. However, the stock market is fairly large relative to GDP and has grown rapidly in recent years.

Important sectors like fisheries, power generation and transport are very capital-intensive and high capital formation in these sectors has been ongoing in recent years. Small and medium-sized companies are the backbone of the Icelandic business sector and due to their small size they must be financed through the banking sector.

Corporate indebtedness has increased without a deterioration in net worth. The capital/asset ratio of publicly listed non-financial companies was about the same at the end of 2002 as at the onset of the debt increase in 1996, at around 36%, and the same general picture emerges through to 2005 in a larger sample of corporate accounts maintained by Statistics Iceland.

Other explanatory factors

Important underlying factors need to be highlighted that explain Iceland's relatively high levels of indebtedness by international comparison. The IMF pointed out in a recent report on Iceland that its "cross-country analyses supported the view that the deviation of Iceland's international investment position with respect to comparable economies was largely explained by demographic factors." Furthermore, that "private sector borrowing appears rooted in demographic trends and the build-up of substantial private assets – rather than weak public finances or market distortions."[3]

The age structure of Iceland's comparatively young population, which reduces aggregate saving due to life-cycle behaviour, has been estimated to account alone for 60% of its higher external liabilities relative to other industrial countries.[4]

3. IMF country report No.05/366: Iceland – selected issues: "Corporate leverage: How different is Iceland?"
4. IMF: Iceland – Staff Report for the 2003 Article IV Consultation, July 29, 2003.

9 Appendix

Table A1 Economic development[1]

	2005
Population size at year-end (thous.)	299.9
Average annual population growth (%)	
in last 10 yrs.	1.02
in last 20 yrs.	2.06
in last 30 yrs.	1.02
GDP in b.kr	996.0
GDP in billion EUR	12.7
GDP in billion USD	15.8
GDP/capita in thous. EUR	43.1
GDP/capita in thous. USD in terms of PPP (2004)	32.6
Rank among OECD countries (2004)	7
Average annual growth rate of GDP (%)	
in last 10 yrs.	4.3
in last 20 yrs.	3.0
in last 30 yrs.	3.4
Average annual inflation rate (%)	
in last 10 yrs.	3.5
in last 20 yrs.	7.4
in last 30 yrs.	18.8

	2005
Labour force participation rate, males (%)	86.0
Labour force participation rate, females (%)	77.8
Rate of unemployment (% of labour force)	2.6
Infant mortality (% of 1,000 live births)	2.3
Life expectancy (males) (2004)	79.2
Life expectancy (females) (2004)	82.7
Live births per 1,000 inhabitants (2004)	14.5
Energy consumption per 100,000 inhabitants (PJ) (2004)	146.9
Physicians per 1,000 inhabitants (2003)	3.6
Passenger cars per 1,000 inhabitants (2004)	598
Access to Internet (% of population, 16-75 yrs.) (2006)	88
Exports as a share of GDP	31.5
International investment position at year-end	-86.2
Government revenue as a share of GDP	47.0
Government expenditures as a share of GDP	44.0
General government gross debt as a share of GDP	28.0

1. Data refer to 2005 unless otherwise indicated.

Sources: Central Bank of Iceland, Ministry of Labour, OECD, Statistics Iceland.

Table A2 Structure of the economy

A Components of GDP	At current prices (million EUR) 1990	2000	2005	% of GDP 1990	2000	2005	Average volume change (%) 1965-2005	1985-2005
Private consumption	2,985	5,694	7,669	59.8	61.0	60.2	4.0	3.4
Public consumption	996	2,193	3,152	19.9	23.5	24.7	4.9	3.4
Gross capital formation	973	2,105	3,659	19.5	22.5	28.7	4.2	5.2
National expenditure	4,930	10,027	14,469	98.7	107.3	113.5	4.0	3.8
Exports of goods and services	1,682	3,162	4,018	33.7	33.8	31.5	3.9	3.2
Imports of goods and services	1,617	3,847	5,741	32.4	41.2	45.0	5.0	5.1
GDP	4,996	9,341	12,746	100.0	100.0	100.0	3.6	3.0
Current account balance	104	-956	-2,100	-2.1	-10.2	-16.5	.	.

B GDP by sectors	% of GDP 1973	1980	1990	2000	2005
Agriculture	5.2	4.8	2.6	1.8	1.4
Fishing	7.2	8.0	9.6	6.7	5.2
Mining and quarrying	0.1	0.1	0.2	0.1	0.1
Manufacturing	20.9	20.2	16.3	13.4	12.6
Fish processing	8.2	7.8	4.7	2.6	2.5
Electricity and water supply	2.9	4.2	3.9	3.4	3.9
Construction	12.0	8.7	8.4	8.2	10.0
Wholesale and retail trade	10.6	10.1	11.8	12.1	12.3
Hotels and restaurants	1.2	1.1	2.0	1.7	1.9
Transport, storage and communication	9.3	7.7	8.0	7.9	8.0
Finance, insurance, real estate, etc.	15.3	17.9	17.7	20.9	20.1
Other service activities	15.2	17.1	19.6	24.0	24.6
Total industries	100.0	100.0	100.0	100.0	100.0

C Employment by sectors	Thous. man-years 1997	Percentage breakdown[1] 1963	1970	1980	1990	1997	2000[1]	2005[1]
Agriculture	5,207	13.4	12.4	7.9	4.9	4.0	2.8	2.7
Fishing	6,115	6.6	6.4	5.3	5.7	4.7	4.0	3.5
Fish processing	7,598	9.7	7.8	9.1	6.1	5.9	4.3	4.1
Manufacturing industry	15,282	15.6	15.2	15.2	12.5	11.9	12.1	10.9
Construction, electricity and water	11,638	11.1	11.4	11.0	10.8	9.0	8.0	7.8
Wholesale & retail trade, restaurants & hotels	20,118	13.7	13.5	13.4	14.5	15.6	17.8	17.1
Transport, storage and communication	8,817	9.6	8.5	7.3	6.7	6.8	7.3	6.8
Finance, insurance, real estate, etc.	11,537	2.7	4.0	5.4	8.1	9.0	11.3	11.5
Providers of government services	25,300	9.5	12.4	15.7	18.2	19.6	6.8	6.8
Other services	9,202	7.0	6.9	7.2	7.4	7.1	5.9	6.9
Other	8,018	1.0	1.4	2.4	4.9	6.2	19.6	21.8
Total number of employed	128,832	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1. Figures for the period 1963-1997 show number of man-years by industry. Since 2000, data have been compiled from PAYE returns and show number of employed persons by industry.

Sources: Statistics Iceland, Central Bank of Iceland.

Table A3 Structure of foreign trade

A Exports and imports by basic categories 1990-2005

	At current prices (million EUR)				% of total exports or imports			
	1990	*1995*	*2000*	*2005*	*1990*	*1995*	*2000*	*2005*
Exports of goods and services	1,684	1,925	3,161	4,095	100.0	100.0	100.0	100.0
Imports of goods and services	1,615	1,728	3,837	5,733	100.0	100.0	100.0	100.0
Merchandise exports (fob value)	1,247	1,392	2,056	2,487	74.0	72.3	65.0	60.7
Marine products	941	1,001	1,301	1,409	55.9	52.0	41.2	34.4
Manufacturing goods	255	298	643	855	15.1	15.5	20.3	20.9
Other goods	51	92	112	223	3.0	4.8	3.5	5.5
Merchandise imports (fob value)	1,180	1,233	2,572	3,686	73.1	71.3	67.0	64.3
Consumption goods	.	418	817	988	.	24.2	21.3	17.2
Capital goods	.	321	795	852	.	18.6	20.7	14.9
Industrial supplies	.	493	960	1,846	.	28.6	25.0	32.2
Services exports	437	533	1,105	1,608	26.0	27.7	35.0	39.3
Transportation	174	207	533	835	10.3	10.8	16.9	20.4
Travel	119	143	247	330	7.0	7.4	7.8	8.0
Other services	145	183	324	443	8.6	9.5	10.3	10.8
Services imports	435	495	1,265	2,047	26.9	28.7	33.0	35.7
Transportation	132	160	450	711	8.2	9.2	11.7	12.4
Travel	224	217	511	784	13.9	12.6	13.3	13.7
Other services	79	118	304	553	4.9	6.8	7.9	9.6

B Merchandise exports by commodity groups (fob value) 1990-2005

	At current prices (million EUR)				% of total merchandise exports			
	1990	*1995*	*2000*	*2005*	*1990*	*1995*	*2000*	*2005*
Total merchandise exports	1,247	1,392	2,056	2,487	100.0	100.0	100.0	100.0
Marine products	941	1,001	1,301	1,409	75.5	71.9	63.3	56.7
Salted and dried fish	177	161	280	254	14.2	11.6	13.6	10.2
Fresh fish	161	81	151	253	12.9	5.9	7.3	10.2
Whole-frozen fish	70	149	130	152	5.6	10.7	6.3	6.1
Frozen fish fillets	349	278	376	375	28.0	20.0	18.3	15.1
Frozen shrimp	60	184	137	101	4.8	13.2	6.7	4.1
Fish meal	42	56	128	110	3.4	4.0	6.2	4.4
Fish oil	14	29	26	34	1.1	2.1	1.3	1.4
Other marine products	67	63	73	131	5.4	4.6	3.5	5.3
Agricultural products	24	25	35	48	1.9	1.8	1.7	1.9
Manufacturing products	255	298	643	855	20.4	21.4	31.3	34.4
Aluminium	129	147	381	461	10.4	10.6	18.6	18.5
Ferrosilicon	33	38	53	78	2.6	2.8	2.6	3.1
Other manufacturing products	93	113	208	316	7.4	8.1	10.1	12.7
Other products	27	68	76	175	2.2	4.9	3.7	7.0
Ships and aircraft	16	49	43	123	1.3	3.5	2.1	5.0
Other products	11	19	33	52	0.9	1.3	1.6	2.1

Sources: Statistics Iceland, Central Bank of Iceland.

Table A3 (continued) Structure of foreign trade

C Merchandise imports by economic category (fob value) 1990-2005

	At current prices (million EUR)				% of total merchandise exports			
	1990	*1995*	*2000*	*2005*	*1990*	*1995*	*2000*	*2005*
Total merchandise imports	1,186	1,236	2,579	3,697	100.0	100.0	100.0	100.0
Food and beverages	90	123	207	252	7.6	10.0	8.0	6.8
Primary, mainly for industry	4	29	64	62	0.4	2.4	2.5	1.7
Primary, mainly for household consumption	25	16	21	37	2.1	1.3	0.8	1.0
Processed, mainly for industry	10	11	12	13	0.8	0.9	0.5	0.4
Processed, mainly for household consumption	52	67	110	140	4.4	5.4	4.3	3.8
Industrial supplies not elsewhere specified	311	344	597	884	26.2	27.9	23.2	23.9
Primary	12	14	28	38	1.0	1.2	1.1	1.0
Processed	299	330	569	846	25.2	26.7	22.1	22.9
Fuels and lubricants	117	87	238	346	9.9	7.1	9.2	9.4
Primary	3	3	6	12	0.2	0.3	0.3	0.3
Motor fuel	25	18	50	70	2.1	1.4	1.9	1.9
Other	89	66	182	265	7.5	5.4	7.1	7.2
Capital goods (except transport), parts and accessories	219	264	611	860	18.5	21.3	23.7	23.3
Basic capital goods	136	169	417	568	11.5	13.7	16.2	15.4
Parts and accessories	83	94	193	292	7.0	7.6	7.5	7.9
Transport equipment	218	154	440	745	18.4	12.4	17.0	20.1
Passenger motor cars (excl. buses)	42	55	168	334	3.5	4.4	6.5	9.0
Transport equipment (excl. ships, aircraft)	24	17	67	141	2.1	1.4	2.6	3.8
Other, non-industrial	3	3	6	18	0.3	0.2	0.2	0.5
Parts and accessories	36	35	63	97	3.1	2.8	2.5	2.6
Ships	19	35	80	31	1.6	2.9	3.1	0.8
Aircraft	94	10	54	124	7.9	0.8	2.1	3.3
Consumer goods not elsewhere specified	229	261	484	606	19.3	21.1	18.8	16.4
Durable	51	54	117	174	4.3	4.3	4.5	4.7
Semi-durable	92	104	189	216	7.7	8.4	7.3	5.8
Non-durable	85	103	178	216	7.2	8.4	6.9	5.8
Goods not elsewhere specified	2	3	3	4	0.2	0.2	0.1	0.1

Sources: Statistics Iceland, Central Bank of Iceland.

Table A3 (continued) Structure of foreign trade

D Geographic distribution of foreign trade (fob value) 1970-2005[1]

	Share of total					Million EUR
Merchandise exports	*1970*	*1980*	*1990*	*2000*	*2005*	*2005*
European Union	52.8	52.3	70.7	67.4	74.6	1,854.5
Euro area	25.4	30.2	37.6	42.3	47.7	1,187.4
Other EU countries	27.4	22.0	33.1	25.1	26.8	667.1
United Kingdom	13.2	16.5	25.3	19.3	17.8	443.0
Other Western European countries	2.8	2.3	3.4	7.8	5.9	147.1
Eastern Europe and former Soviet Union	9.6	8.8	2.9	1.4	1.1	27.1
Russia	6.8	5.4	2.5	0.4	1.0	25.5
United States	30.0	21.6	9.9	12.2	8.8	219.3
Japan	0.1	1.5	6.0	5.2	3.2	80.1
Other OECD countries	0.5	0.6	0.5	2.0	1.5	37.3
Developing countries	4.2	12.9	5.5	3.0	4.4	110.6
Other countries	0.0	0.0	1.1	1.0	0.4	11.2
Total	100.0	100.0	100.0	100.0	100.0	2,487.3
Merchandise imports						
European Union	64.9	58.0	59.9	57.0	61.6	2,475.7
Euro area	32.0	33.2	35.5	33.5	33.7	1,354.4
Other EU countries	33.0	24.8	24.4	23.6	27.9	1,121.3
United Kingdom	14.3	9.5	8.1	9.0	5.8	231.2
Other Western European countries	5.4	8.1	5.2	9.7	9.5	380.5
Eastern Europe and former Soviet Union	10.4	10.9	6.5	5.7	0.9	37.3
Russia	7.2	9.7	5.0	1.8	0.5	19.2
United States	8.2	9.4	14.4	11.0	9.3	374.7
Japan	2.9	4.0	5.6	4.9	5.3	211.5
Other OECD countries	0.4	5.8	3.7	4.5	3.8	151.2
Developing countries	7.2	2.7	3.1	5.6	8.6	344.7
Other countries	0.6	1.1	1.4	1.5	1.0	40.8
Total	100	100	100	100	100.0	4,016.5

1. In data prior to 2000, country groups are based on the year 2000.

Sources: Statistics Iceland, Central Bank of Iceland.

Table A4 National accounts overview

	At current prices (million EUR)					Volume change on previous year (%)				
	2001	*2002*	*2003*	*2004*	*2005*	*2001*	*2002*	*2003*	*2004*	*2005*
Private consumption	4,939	5,169	5,499	6,034	7,669	-3.0	-1.6	5.9	7.2	11.8
Public consumption	2,037	2,345	2,462	2,620	3,152	3.1	5.0	1.7	2.8	3.2
Gross fixed capital formation	1,883	1,616	1,899	2,475	3,659	-3.0	-19.0	16.3	29.2	34.5
Industries	1,157	889	1,119	1,492	2,521	-10.0	-25.0	25.9	34.6	56.8
Housing	362	455	489	579	735	12.2	12.2	4.1	13.7	10.3
Public works and buildings	364	271	291	404	403	7.9	-30.6	5.2	34.6	-13.5
National expenditure	8,859	9,129	9,860	11,128	14,480	-2.3	-3.5	6.4	10.4	14.9
Exports of goods and services	3,423	3,545	3,327	3,636	4,018	7.4	3.7	1.7	8.4	3.5
Exports of goods	2,247	2,370	2,105	2,322	2,487	7.2	6.6	-1.1	9.2	-0.3
Exports of services	1,176	1,175	1,222	1,314	1,531	7.7	-1.7	7.3	7.0	10.4
Imports of goods and services	3,516	3,398	3,624	4,234	5,741	-9.1	-2.5	10.7	14.5	28.3
Imports of goods	2,315	2,206	2,289	2,742	3,678	-10.0	-3.3	7.2	15.8	25.0
Imports of services	1,201	1,191	1,336	1,492	2,063	-7.3	-1.0	17.2	12.1	34.7
Gross domestic production (GDP)	8,742	9,275	9,546	10,520	12,746	3.8	-1.1	3.0	8.2	5.5
Current account balance	-381	146	-473	-979	-1,092	.	.	.	.	.
Current account balance, % of GDP	.	.	.	.	.	-4.4	1.6	-5.0	-9.3	-16.5

Source: Statistics Iceland.

Table A5 Financial sector indicators

Financial institutions (number of, unless otherwise indicated)	*2000*	*2005*
Commercial banks	4	4
Savings banks	25	24
Number of employees in commercial banks and savings banks, year end[1]	3,046	3,683
Total assets of commercial and savings banks (billion EUR)[2]	9.6	51.6
Credit undertakings	12	11
UCITS	11	11
Pension funds	56	45
Insurance companies	12	12
Financial markets		
Listed companies on Iceland Stock Exchange (ICEX)	75	24
Market capitalisation of listed companies at end of period (billion EUR)	5.0	24.3
Market capitalisation of listed companies at end of period (% of GDP)	59.0	182.3
Annual turnover in listed equities (billion EUR)	2.7	15.2
Annual turnover in listed bonds (billion EUR)	4.6	16.7
Annual turnover on the Icelandic interbank market for foreign exchange (billion EUR)	10.6	26.3
Annual turnover on the interbank currency swap market[2] (billion EUR)	.	0.6
Annual turnover on the interbank market for krónur (billion EUR)	7.2	20.0

1. Parent company basis, number for year 2000 and 2004. 2. Parent company basis.

Sources: Financial Supervisory Authority (FME), Iceland Stock Exchange (ICEX), Central Bank of Iceland.

Table A6 Government sector indicators

General government revenues and expenditures *% of GDP*	*1960*	*1970*	*1980*	*1990*	*2000*	*2003*[4]	*2004*[4]	*2005*[4]
Revenues[1]	34.0	28.8	33.4	35.5	40.7	40.1	41.3	43.2
Taxes	*33.4*	*27.7*	*31.3*	*33.0*	*38.3*	*37.8*	*38.8*	*41.0*
on income and wealth	7.9	8.6	22.5	21.5	19.3	17.4	18.2	19.5
on production/imports/consumption	25.5	19.1	8.8	11.6	19.0	20.4	20.6	21.5
Interest	0.5	0.5	0.1	0.7	0.6	0.7	0.7	0.7
Other	0.1	0.6	2.0	1.7	1.7	1.6	1.8	1.5
Expenditures[2]	31.7	28.6	32.0	38.8	38.2	42.0	41.1	40.2
Public consumption	9.9	12.1	17.2	19.9	23.5	25.8	24.9	24.7
Interest	0.2	0.6	1.3	3.5	3.1	2.9	2.6	2.5
Subsidies	11.6	3.2	2.8	3.4	1.6	1.5	1.4	1.5
Current transfers	5.5	5.3	4.9	6.9	7.0	9.4	8.9	9.1
Fixed investment	2.8	4.4	3.5	4.3	3.8	3.1	3.8	3.2
Capital transfers	1.8	3.0	2.9	2.6	1.2	1.3	1.3	1.2
Financial balance	2.8	1.2	1.3	-3.3	2.4	-2.0	0.3	3.0

Government expenditure by function

General government, % of GDP	*1960*	*1970*	*1980*	*1990*	*2000*	*2003*[3]
Administration and safety	2.5	2.8	2.7	3.2	4.7	5.8
Education	2.7	4.1	4.3	4.8	7.1	8.3
Health services	2.0	3.1	5.4	6.8	8.0	8.9
Social security	5.4	6.0	5.5	7.7	8.4	10.2
Other social affairs	1.8	2.7	2.6	2.9	4.3	4.7
Economic services	16.7	8.6	9.2	8.4	6.8	7.0
Other expenditure	0.6	0.9	1.4	1.3	0.0	0.0
Interest expenditure	0.2	0.6	1.6	3.7	2.7	2.2
Sales and depreciation included in above	0.0	0.0	0.6	0.0	3.7	5.0
Expenditures excl. sales and depreciation	31.7	28.6	32.0	38.8	38.2	42.0

Central government, % of GDP	*1960*	*1970*	*1980*	*1990*	*2000*	*2003*[3]
Administration and safety	2.0	2.2	2.2	2.5	4.7	5.3
Education	2.3	3.2	3.4	3.7	2.8	3.3
Health services	2.1	3.1	5.0	6.7	7.9	8.9
Social security	5.2	3.9	4.8	6.3	6.6	7.9
Other social affairs	0.8	1.3	1.1	1.2	1.8	1.8
Economic services	8.2	6.7	7.7	7.2	5.2	5.8
Other expenditure	0.0	-0.3	1.1	1.2	0.0	0.0
Interest expenditure	0.1	0.3	1.3	3.3	2.2	1.8
Sales and depreciation included in above	0.0	0.0	0.4	0.0	2.4	2.6
Expenditures excl. sales and depreciation	20.7	20.5	27.0	31.9	28.8	32.2

Local government, % of GDP	*1960*	*1970*	*1980*	*1990*	*2000*	*2003*[3]
Administration and safety	0.5	0.6	0.5	0.7	1.0	1.9
Education	0.7	0.9	0.9	1.1	4.3	5.0
Health services	0.2	0.1	0.7	0.1	0.1	0.0
Social security	1.8	2.2	0.8	1.3	1.8	2.3
Other social affairs	1.0	1.4	1.5	1.7	2.6	2.8
Economic services	1.0	1.8	1.5	1.2	1.6	1.2
Interest expenditure	0.1	0.2	0.2	0.4	0.5	0.3
Other expenditure	0.2	0.2	0.3	0.5	0.0	0.0
Sales and depreciation included in above	0.0	0.0	0.1	1.6	1.4	1.8
Outlays excl. sales and depreciation	5.5	7.5	6.3	10.4	10.5	11.8

1. Excl. sale of goods and services. 2. Excl. cost of goods and services sold 3. Excl. depreciation and cost of goods and services sold 4. Preliminary. The table is a patchwork from less than fully comparable sources. Since 1990 cost of production for sale is included in the functional itemisation of expense. The high spending on economic services in 1960 reflects a multiple exchange rate arrangement.

Source: Various publications of Statistics Iceland.

Table A7 Balance of payments

Million EUR	*1990*	*1995*	*2000*	*2004*	*2005*[1]
Current account	-104	41	-959	-1,048	-2,089
Balance on goods, services and income	-101	44	-949	-1,034	-2,067
Exports	1,749	1,992	3,328	4,018	5,310
Imports	-1,851	-1,947	-4,277	-5,052	-7,377
Balance on goods and services	67	198	-679	-587	-1,596
Exports	1,684	1,928	3,171	3,640	4,153
Imports	-1,617	-1,731	-3,849	-4,226	-5,749
Balance on goods	65	160	-518	-421	-1,195
Merchandise exports fob	1,246	1,395	2,062	2,329	2,502
Marine products	942	1,003	1,305	1,401	1,418
Aluminium and ferrosilicon	162	186	436	491	542
Ships and aircraft	14	49	43	9	124
Other goods	128	157	277	428	418
Merchandise imports fob	-1,182	-1,235	-2,580	-2,749	-3,697
Investment goods	-219	-263	-611	-605	-860
Transport equipment	-215	-154	-440	-458	-745
Fuels and lubricants	-117	-87	-238	-250	-346
Industrial supplies	-310	-344	-597	-699	-884
Consumer goods	-320	-387	-694	-737	-862
Balance on services	2	38	-161	-166	-402
Exports of services, total	438	534	1,109	1,311	1,651
Transportation	174	207	535	728	876
Air transport	94	130	417	623	726
Sea transport	81	78	118	105	150
Travel	119	144	248	300	330
Other services	145	183	325	283	444
Communications services	12	18	11	8	7
Insurance services	5	4	6	7	7
Government services	95	80	117	77	69
Other not elsewhere specified	33	82	191	191	361
Imports of services, total	-435	-496	-1,269	-1,477	-2,053
Transportation	-132	-160	-452	-562	-713
Travel	-224	-218	-512	-558	-786
Other services	-79	-119	-305	-357	-554
Communications services	-9	-14	-2	-17	-35
Insurance services	-12	-16	-6	-16	-32
Government services	-7	-9	-17	-17	-18
Other not elsewhere specified	-51	-80	-281	-308	-470
Balance on income	-168	-153	-270	-448	-471
Receipts	65	63	158	378	1,157
Compensation of employees	36	39	76	65	60
Investment income	29	24	81	314	1,098
Dividends and reinvested earnings	5	-1	35	212	822
Interest payments	24	25	46	101	276
Expenditures	-234	-217	-428	-826	-1,628
Compensation of employees	-9	-4	-12	-9	-20
Investment income	-224	-212	-416	-817	-1,608
Dividends and reinvested earnings	-7	-13	-17	-408	-825
Interest payments	-218	-200	-399	-408	-784
Current transfer, net	-3	-4	-11	-14	-22
Public transfer, net	-5	-7	-11	-15	-20
Private transfer, net	2	3	1	2	-2

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 A7 (continued) Balance of payments

Million EUR	*1990*	*1995*	*2000*	*2004*	*2005*[1]
Capital and financial account	2	-5	1,208	1,336	1,318
Capital transfer, net	124	-3	-3	-3	-22
Financial account[2]	181	-1	1,211	1,338	1,340
Financial account excl. reserves	8	2	1,131	1,502	1,400
Direct investment, net	-9	-26	-242	-1,490	-3,732
Abroad	-4	-19	-428	-2,085	-5,701
Equity capital	-5	-4	-438	-1,658	-4,074
Reinvested earnings	0	2	-6	-110	-693
Other capital	17	-17	16	-318	-933
In Iceland	1	-7	186	595	1,968
Equity capital	-10	5	229	80	1,302
Reinvested earnings	27	2	-21	362	781
Other capital	20	-14	-21	153	-114
Portfolio investment, net	0	120	759	5,367	9,876
Assets	0	-49	-533	-1,329	-3,788
Equities	0	-34	-614	-1,278	-2,641
Debt securities	0	-16	81	-51	-1,147
Bonds and notes	0	-14	96	-54	-1,149
Money market instruments	20	-2	-15	3	1
Liabilities	0	169	1,292	6,696	13,665
Equities	20	0	-17	232	68
Debt securities	-1	169	1,309	6,463	13,597
Bonds and notes	21	145	1,251	6,202	13,497
Money market instruments	-1	24	58	261	100
Financial derivatives, net	-1	0	-1	0	0
Assets	0	-13	17	0	0
Liabilities	153	12	-18	0	0
Other investment, net	-41	-91	616	-2,375	-4,744
Assets	0	20	-98	-2,734	-8,824
Loans	-21	0	-44	-1,951	-7,473
Deposits	-20	29	-35	-739	-1,355
Trade credits	0	-8	-20	-43	1
Other capital	194	-1	0	0	3
Liabilities	180	-111	714	359	4,080
Loans	200	-121	715	163	3,670
Long-term borrowing	-20	-188	384	-247	2,058
Short-term borrowing	0	67	331	410	1,612
Deposits	14	3	-14	216	315
Trade credits	-1	1	1	-17	91
Other capital	-57	5	12	-3	3
Reserve assets	-22	-3	80	-164	-61
Net errors and omissions	0	-36	-249	-288	771
Memorandum items:					
Debt securities, loans, etc., net	199	58	2,023	6,822	17,677
Long-term borrowing, net	-1	-42	1,635	5,955	15,556
Monetary authorities	14	0	0	0	0
General government	-12	150	67	99	-252
Deposit banks	198	-99	1,051	5,837	14,527
Other sectors	15	-93	517	19	1,280
Short-term borrowing, net	-1	101	388	866	2,121
Monetary authorities	21	16	148	0	0
General government	-8	24	158	15	-162
Deposit banks	2	57	-29	871	2,189
Other sectors	1	4	111	-20	94
Conversion rate: ISK per EUR	74.18	83.61	72.39	86.90	77.92

Table A8 Projected external debt service[1]

Million EUR	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*Principal thereafter*	*Total*
General government								
Principal	361	244	195	181	54	54	595	1,684
Interest[2]	58	48	42	37	34	32		
Total	420	292	237	218	87	86		
Central government								
Principal	290	200	151	140	0	0	460	1,241
Interest[2]	45	37	32	29	27	27		
Total	335	237	184	169	27	27		
Local government								
Principal	72	44	44	41	54	54	134	443
Interest[2]	13	11	9	8	7	5		
Total	85	55	53	49	61	59		
Financial institutions								
Principal	2,247	7,711	3,695	3,472	5,185	832	3,245	26,388
Interest[2]	791	663	494	378	271	107		
Total	3,039	8,375	4,189	3,850	5,455	939		
Banks								
Principal	2,219	7,669	3,473	3,451	5,165	830	3,219	26,026
Interest[2]	781	654	485	376	269	106		
Total	3,000	8,323	3,959	3,827	5,433	936		
Other loan institutions								
Principal	28	42	222	21	20	3	26	362
Interest[2]	11	10	9	2	2	1		
Total	39	52	230	23	22	4		
Other sectors								
Principal	278	130	177	97	1,037	263	844	2,826
Interest[2]	110	102	95	89	84	35		
Total	388	231	272	185	1,121	298		
Total payments								
Principal	2,887	8,085	4,067	3,750	6,276	1,150	4,683	30,898
Interest[2]	960	813	631	504	389	174		
Total	3,847	8,898	4,698	4,254	6,664	1,324		

1. Based on debt outstanding at end of year 2005. Conversion rate: ISK per EUR = 83.28. 2. Floating interest rate, LIBOR-USD is assumed at 3% and EURIBOR at 3% per year.

Source: Central Bank of Iceland.

Tables and charts

Tables

Charts